WATERSHORE AND BEACH ADVISORY COMMITTEE

Five (5) vacancies with terms to 12-11-2023 representing the following preferred, but not required categories: 1 - CVB Representative, 1 - Engineer, 1 - Environmentalist and 2 - At-Large. (Staff recommends the realignment of Dr. Tissot to the Engineer category and Harrison McNeil to the Environmentalist category).

Duties

The Watershore and Beach Advisory Committee advises and makes recommendations regarding use or preservation of the following areas within the city limits: the waterfront, the beaches, and the natural bodies of water, including, but not limited to: Gulf of Mexico, bays, rivers, and creeks, excluding the Marina area as defined by Section 2-264.

Composition

Nine (9) members appointed by the City Council for two-year terms. Membership in one or more of the following categories is preferred but not required: Scientist, i.e., Marine Biologist, Engineer, Environmentalist, owner or representative of a hotel or condominium located on North Padre Island or Mustang Island, and a board member of the Corpus Christi Convention & Visitors Bureau. The Chairperson of the Watershore and Beach Advisory Committee shall act as an advisor to the Parks and Recreation Advisory Committee and vice versa.

Member size	Term length	Term limit
9	2 Years	6 Years

Name	District	Term	Appt. date	End date	Appointing Au	Position	Status	Category	Attendance
						Vice-	Seeking		
Meredith Darden	District 1	2	12/19/2017	12/11/2021	City Council	Chair	reappointment	CVB	10/10 meetings - 100%
							Seeking		7/10 meetings - 70%
Harrison A. McNeil	District 4	1	1/14/2020	12/11/2021	City Council		reappointment	At-Large	(2 excused absences)
							Seeking		
Dr. Philippe Tissot	District 2	2	12/19/2017	12/11/2021	City Council		reappointment	At-Large	9/10 meetings - 90 %
							Not seeking		
Daniel E. Mazoch	District 4	2	12/19/2017	12/11/2021	City Council		reappointment	Engineer	
							Met the six-year		
Mukesh Subedee	District 2	3	12/15/2015	12/11/2021	City Council		service limitation	Environmentalist	
Jyoti Patel	District 4	3	4/19/2016	12/11/2022	City Council		Active	Hotel/Condo Owner	
Dr. Larisa A. Ford	District 4	1	1/14/2020	12/11/2022	City Council		Active	At-Large	
Scott A. Lawson	District 5	Partial	8/31/2021	12/11/2022	City Council		Active	At-Large	
Terry A. Palmer	District 4	3	1/31/2017	12/11/2022	City Council	Chair	Active	Scientist	

WATERSHORE AND BEACH ADVISORY COMMITTEE

Applicants

Name	District	Status	Category
			Corpus Christi Convention and
Meredith Darden	District 2	Seeking reappointment	Visitors Bureau Member
Michael Edghill	District 4	Applied	At-Large
Robert Hyatt	District 4	Applied	At-Large
Ruben Macias	District 5	Applied	At-Large
			Scientist i.e., Marine Biologist
Harrison A. McNeil	District 4	Seeking reappointment	Environmentalist
Hershel Shoats	District 5	Applied	At-Large
			Scientist i.e., Marine Biologist
Philippe Tissot	District 2	Seeking reappointment	Engineer

Profile		,	
Meredith	Darden		
First Name	Last Name		
Email Address			
4206 Dody Street			
Street Address			
City Christi		TX State	78411 Postal Code
What district do you live in	?*		
District 2			
Current resident of the city	?		
r Yes r No			
If yes, how many years?			
7			
Mobile: (361) 537-3253 Primary Phone	Business: (361) 881-1818 Alternate Phone		
Visit Corpus Christi Employer	Vice President of Experience		
Work Address - Street Add	ress and Suite Number		
400 N. Mann St, Suite 1100			
Work Address - City			
Corpus Christi			
Work Address - State			
TX			
Work Address - Zip Code			
78401			

Work Phone

361-881-1818

Work E-mail address

meredith@visitcorpuschristi.com

Preferred Mailing Address

✓ Work Address

Which Boards would you like to apply for?

WATERSHORE AND BEACH ADVISORY COMMITTEE: Submitted

Interests & Experiences

Are you a registered voter?

F Yes C No

Do you currently serve on any other City board, commission or committee at this time? If so, please list:

Watershore & Beach Advisory Committee

Education, Professional and/or Community Activity (Present)

Meredith is an active member of the Texas tourism industry with over eight years serving in hospitality and has been with Visit Corpus Christi since 2014. In her role as Vice President of Experience, Meredith is tasked with improving the overall visitor experience in every stage of the process – from travel planning, to visiting, to returning home. In 2019, Meredith received her Certified Tourism Executive designation from the Texas Travel Industry Association. In 2020, Meredith was recognized as one of the top 25 Corpus Christi Under 40 professionals for her significant contributions in her professional field as well as service to the Corpus Christi community. "I recognize the impact and delicate balance of sustainable tourism development for Pacre and Mustang Islands. I look forward to advocating for Padre Island in everything we do at Visit Corpus Christi."

If you applied for multiple boards, which boards are you most interested in serving on, in order of preference? (Limit to top three)

Watershore & Beach Advisory

Why are you interested in serving on a City board, commission or committee?

I believe it is my responsibility to serve the community in which I live and represent the tourism industry on key local issues.

Are you an ex-Officio member of a City Board, commission or committee?

C Yes & No

board, commission, committee or corporation at the same time. If you currently serve as a voting member for a board, commission, committee or corporation are you willing to resign your current seat to serve on another board, commission, committee or corporation?
r Yes r No
Demographics
Gender
▼ Female
Code of Ethics - Rules of Conduct/Conflicts of Interest
Do you represent any person or organization in any claim or lawsuit or proceeding involving the City?
C Yes € No
Do you, your spouse, your business or your spouse's business have a City contract?
c Yes & No
Does your employer or your spouse's employer have a City contract?
e Yes c No
Are you involved with any activities or employment that would conflict with the official duties on the City boards for which you are applying?
c Yes c No
Are you, your spouse, your business or your spouse's business involved in any pending bid, proposal or negotiation in connection with a contract with the City?
C Yes € No
Do you or your spouse have a pending claim, lawsuit or proceeding against the City?
C Yes € No
If you answer "Yes" to any of the questions above, please explain or ask to speak with the City's Legal Department. If you answer "NO" to all questions above, please enter N/A.
I work for Visit Corpus Christi.

No person shall be appointed by the Mayor or Council Members to serve on more than one

Question applies to WATERSHORE AND BEACH ADVISORY COMMITTEE

The Watershore & Beach Advisory Committee must include members representing certain categories. Do you qualify for any of the following categories? *

Verification

City Code Requirement - Residency

As a board, commission, or committee member, you will be asked to adhere to City Code of Ordinances, Section 2-65, which states that all members of City boards and commissions, including ad hoc committees, appointed by the City, must be residents of the city. A move outside the city limits of the city by any member shall constitute automatic resignation from the particular board or commission on which such member served.

□ I Agree

City Code Requirement - Attendance

As a board, commission, or committee member, you will be asked to adhere to City Code of Ordinances, Section 2-61, which provides that absences from more than 25% of regularly scheduled meetings during a term year on the part of any board, commission, or committee member shall result in an automatic termination. An absence shall be deemed unexcused unless excused by the board, commission or committee for good cause no later than its next meeting after the absence.

□ I Agree

Consent for Release of Information

I understand that if any member of the public makes a request for information included in this application or in any attachment (e.g. resume or supporting documentation) for appointment it is subject to and must be disclosed under the Texas Public Information Act. I understand that under the Texas Public Information Act, my home address and home telephone number is subject to public disclosure unless I am elected or appointed to the position which I seek. I hereby consent to the release of my home address and home telephone number should it be requested under the Texas Public Information Act prior to my possible appointment or election. I hereby release the City of Corpus Christi, and its agents, employees and officers, from any and all liability whatsoever if the information must be released pursuant to the Texas Public Information Act.

□ Agree

Oath

I swear that all of the statements included in my application and attached documents, if any, are true and correct.

✓ I Agree

		The same of the sa		- Indiana
Profile				
Mr.	Michael	Edghill		
Prefix	First Name	Last Name		
Email Addre	SS			
400 Ch	Dr			
429 Cha			today-w-	
0	Obrioti		TV	70410
Corpus City	Christi		TX State	78412 Postal Code
	Part to the same Part to 0			
wnat d	listrict do you live in?	•		
₽ Dist	rict 4			
Curren	t resident of the city?			
r Yes	∩ No			
If yes,	how many years?			
2				
Mobile:	(817) 845-6566	Business: (361) 855-5744		
Primary Pho		Alternate Phone	_	
St Johr	Paul II High School	Principal		
Employer	TT au ITT igit ochool	Job Title		
Work A	Address - Street Addre	ess and Suite Number		
303 6 Sa	aratoga Blvd.			
Work A	Address - City			
Corpus	Christi			
Work A	Address - State			
TX				
Work A	Address - Zip Code			
78415				

Work E-mail address
medghill@jpiihighschool.org
Preferred Mailing Address
Which Boards would you like to apply for?
WATERSHORE AND BEACH ADVISORY COMMITTEE: Submitted
Interests & Experiences
Are you a registered voter?
€ Yes ← No
Do you currently serve on any other City board, commission or committee at this time? If so, please list:
No
Education, Professional and/or Community Activity (Present)
BA - History, University of North Texas MA - Government, Texas Woman's University
Why are you interested in serving on a City board, commission or committee?
I believe that it will allow me to learn more about my community, our local government, as well as offer my skills of questioning, analysis, and decision making that I regularly use in my job.
Are you an ex-Officio member of a City Board, commission or committee?
r Yes r No
Demographics
Gender
₩ Male
Code of Ethics - Rules of Conduct/Conflicts of Interest
Do you represent any person or organization in any claim or lawsuit or proceeding involving the City?

Mr Michael Edahill

Yes
 No

ity's Legal Der	questions (if applicable)
ity's Legal Der	partment. If you answer "NO" to all questions above, please enter N/A.
ity's Legal Der	partment. If you answer "NO" to all questions above, please enter N/A.
ity's Legal Dep	
•	
	Yes" to any of the questions above, please explain or ask to speak with the
o you or your	spouse have a pending claim, lawsuit or proceeding against the City?
Yes 6 No	
id, proposal or	pouse, your business or your spouse's business involved in any pending negotiation in connection with a contract with the City?
Yes © No	
uties on the Ci	d with any activities or employment that would conflict with the official ity boards for which you are applying?
Yes & No	
	loyer or your spouse's employer have a City contract?
oes your empl	
Yes & No	

Question applies to WATERSHORE AND BEACH ADVISORY COMMITTEE

The Watershore & Beach Advisory Committee must include members representing certain categories. Do you qualify for any of the following categories? *

None of the above

Verification

City Code Requirement - Residency

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✓ I Agree

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✓ I Agree

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▽ I Agree

Oath

I swear that all of the statements included in my application and attached documents, if any, are true and correct.

☑ I Agree

Profile			
Robert First Name	Hyatt		f
	Mario (Titalia)		
Email Address			
3306 Austin St			
Street Address			
Corpus Christi		TX	78411
City		State	Postal Code
What district do you live in	? *		
District 4			
Current resident of the city	?		
€ Yes € No			
If yes, how many years?			
8			
Mobile: (970) 443-2895	Business: (361) 993-9350		
Primary Phone	Alternate Phone	умполя	
Bobby Hyatt State Farm	Agent Owner	markinan	
Employer	Job Title		
Work Address - Street Add	ress and Suite Number		
3636 S Alameda St Suite K			
Work Address - City			
Corpus Christi			
Work Address - State			
TX	•		
Work Address - Zip Code			
78411			

Work Phone
3619939350
Work E-mail address
agent@bobbyhyatt.com
Preferred Mailing Address
Which Boards would you like to apply for?
WATERSHORE AND BEACH ADVISORY COMMITTEE: Submitted
Interests & Experiences
Are you a registered voter?
e Yes c No
Do you currently serve on any other City board, commission or committee at this time? If so, please list:
NO
Education, Professional and/or Community Activity (Present)
Graduated from Colorado State University in 2012 Taught High School Math for CCISD from 2013 to 2018 LCC class of 49 Board Member for Agape Ranch
If you applied for multiple boards, which boards are you most interested in serving on, in order of preference? (Limit to top three)
Corpus christi regional economic development corporation watershore advisory commitee capital improvements
Improvements
Why are you interested in serving on a City board, commission or committee?
Why are you interested in serving on a City board, commission or committee? After the Servant Leadership Session for Leadership Corpus Christi I realized the value in serving in our
Why are you interested in serving on a City board, commission or committee? After the Servant Leadership Session for Leadership Corpus Christi I realized the value in serving in our community by joining a board or committee. Hope that I can help steer our city in a positive direction.

voting member for a board, commission, committee or corporation are you willing to resign your current seat to serve on another board, commission, committee or corporation?
€ Yes € No
Demographics
Gender
▽ Male
Code of Ethics - Rules of Conduct/Conflicts of Interest
Do you represent any person or organization in any claim or lawsuit or proceeding involving the City?
C Yes € No
Do you, your spouse, your business or your spouse's business have a City contract?
r Yes € No
Does your employer or your spouse's employer have a City contract?
r Yes r No
Are you involved with any activities or employment that would conflict with the official duties on the City boards for which you are applying?
r Yes r No
Are you, your spouse, your business or your spouse's business involved in any pending bid, proposal or negotiation in connection with a contract with the City?
⊂ Yes ೯ No
Do you or your spouse have a pending claim, lawsuit or proceeding against the City?
⊂ Yes ☞ No
If you answer "Yes" to any of the questions above, please explain or ask to speak with the City's Legal Department. If you answer "NO" to all questions above, please enter N/A.
My wife works at the CVB I don't know if that's a conflict
Board-specific questions (if applicable)

No person shall be appointed by the Mayor or Council Members to serve on more than one board, commission, committee or corporation at the same time. If you currently serve as a

Question applies to CORPUS CHRISTI COMMUNITY IMPROVEMENT CORPORATION / LOAN REVIEW COMMITTEE The CCCIC/Loan Review Committee must include representatives from certain categories. Do you qualify for any of the following categories? * None of the above Question applies to WATERSHORE AND BEACH ADVISORY COMMITTEE The Watershore & Beach Advisory Committee must include members representing certain categories. Do you qualify for any of the following categories? * None of the above Question applies to CORPUS CHRISTI COMMISSION ON CHILDREN & YOUTH The Commission on Children & Youth preferred representatives for adult membership from certain categories. High school students must be a Junior or Senior at time of appointment. Do you qualify for any of the following categories? * Adult At-Large Question applies to CAPITAL IMPROVEMENTS ADVISORY COMMITTEE The Capital Improvement Advisory Committee must include representatives from certain industries. Do you qualify for any of the following industries? * None of the above\. Question applies to CAPITAL IMPROVEMENTS ADVISORY COMMITTEE

One member shall be a representative of the City's extraterritorial jurisdiction if impact fees

C Yes & No

are proposed. Do you quality?

Verification

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✓ I Agree

Oath

I swear that all of the statements included in my application and attached documents, if any, are true and correct.

✓ I Agree

Robert L. Hyatt III

(970) 443 - 2895

Education

Colorado State University Ft. Collins, CO

Fall 2012

College of Natural Sciences, Bachelor of Science in Mathematics

Major: Mathematics - Education

Experience

State Farm Insurance - Agent Owner

2018 - Present

- -Operating the agency and making all decisions regarding team, goals, and marketing strategy.
- -Local brand awareness, Community engagement, and Customer Care.

Corpus Christi ISD - Veterans Memorial High School 2016 to 2018

Mathematics Teacher - Algebra 1

- -Responsible for lesson plans, grading, teaching, and classroom management.
- Collaborate with colleagues by participating in team meetings, sharing ideas, contributing to team goals, and documenting progress toward reaching those goals.
- -Aligning curriculum to state standards and the STAAR exam as well as fostering students to become critical thinkers.

Waco ISD - GWAMA

2015

to 2016

Greater Waco Advanced Manufacturing Academy Mathematics Teacher

- -Geometry in Construction and Statistics and Risk Management teacher.
- -Responsible for lesson plans, grading, teaching, and classroom management.
- -Aligning class projects to real life and course curriculums.

Corpus Christi ISD - Roy Miller High School 2013 to 2015

Mathematics Teacher

-Calculus and Algebra 1 at a Title One School

- -Responsible for lesson plans, grading, teaching, and classroom management.
- -Aligning curriculum to state standards and the STAAR exam as well as the AP exam.

Community

Leadership Corpus Christi

Class of 49

Engagement

Younglife

2010 to

2015

Team Leader

- Team Leader at Fossil Ridge High School, and currently leading at TAMUCC.
- Responsible for two events a week with commitment of 12-15 hours a week.
- Responsible for building positive relationships with high school and college students.

RMR Backcountry (Young Life)

Summers 2011-2015

Guide & Basecamp Staff (2013)

- Backpacking Guide for four+ weeks taking high school kids on week long trips in the Rocky Mountains.
- Creating content for the week along with teaching campers outdoor living skills.
 - Wilderness First Aid Trained and Certified by NOLS/WMI.

Profile			
Ruben	Macias		
First Name	Last Name		
Foreit Address			
Email Address			
2109 Meadowwalk Dr			
Street Address			
Corpus Christi		TX	78414
City		State	Postal Code
What district do you live in? *			
District 5			
Current resident of the city?			
€ Yes ← No			
If yes, how many years?			
5			
Home: (361) 522-5895	Business: (361) 903-7215		
Primary Phone	Alternate Phone		
International Bank of Commerce	Commercial Lender / Bank Officer		
Employer	Job Title		
Work Address - Street Address	s and Suite Number	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
221 S Shoreline			
Work Address - City			
Corpus Christi			
Work Address - State			
тх			
Work Address - Zip Code			
78401			

Work Phone
361 888 4000
Work E-mail address
RubenMacias@ibc.com
Preferred Mailing Address
Which Boards would you like to apply for?
WATERSHORE AND BEACH ADVISORY COMMITTEE: Submitted
Interests & Experiences
Are you a registered voter?
€ Yes ⊂ No
Do you currently serve on any other City board, commission or committee at this time? If so please list:
No
Education, Professional and/or Community Activity (Present)
BS in Accouting from Texas A&M Uniiversity - Kingsville. Black Chamber of Commerce EDC
If you applied for multiple boards, which boards are you most interested in serving on, in order of preference? (Limit to top three)
Corpus Christi Regional Economic Development Corporation
Why are you interested in serving on a City board, commission or committee?
I show great leadership skills from my prior role as a manager the lead a team of 15 employees. Working with IBC also has sharpened my skill to see the big picutre and not focus on the small task.
Upload a Resume
Are you an ex-Officio member of a City Board, commission or committee?
C Yes & No

voting member for a board, commission, committee or corporation are you willing to resign your current seat to serve on another board, commission, committee or corporation?			
C Yes € No			
Demographics			
Gender			
₩ Male			
Code of Ethics - Rules of Conduct/Conflicts of Interest			
Do you represent any person or organization in any claim or lawsuit or proceeding involving the City?			
r Yes r No			
Do you, your spouse, your business or your spouse's business have a City contract?			
r Yes r No			
Does your employer or your spouse's employer have a City contract?			
r Yes € No			
Are you involved with any activities or employment that would conflict with the official duties on the City boards for which you are applying?			
C Yes € No			
Are you, your spouse, your business or your spouse's business involved in any pending bid, proposal or negotiation in connection with a contract with the City?			
c Yes c No			
Do you or your spouse have a pending claim, lawsuit or proceeding against the City?			
r Yes r No			
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N/A			

No person shall be appointed by the Mayor or Council Members to serve on more than one board, commission, committee or corporation at the same time. If you currently serve as a

Board-specific questions (if applicable)

Question applies to WATERSHORE AND BEACH ADVISORY COMMITTEE

The Watershore & Beach Advisory Committee must include members representing certain categories. Do you qualify for any of the following categories? *

✓ None of the above

Verification

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▼ I Agree

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✓ I Agree

Oath

I swear that all of the statements included in my application and attached documents, if any, are true and correct.

✓ I Agree

RUBEN MACIAS JR.

1514 Ennis Joslin Apt#1331Corpus Christi TX 78412

(361) 522-5895

OBJECTIVE

Dedicated professional with a diverse management and accounting experience, serving in progressively responsible leadership roles. Seeking to achieve CPA and its practices.

EDUCATION

Texas A&M University - Kingsville, Texas

Bachelor in Business Administration - Accounting

Graduated: May 2015

GPA: 3.0

PROFESSIONAL EXPERIENCE

IBC Bank - Shoreline

Corpus Christ, TX

Senior Loan Review Analyst

October 2017 – Present Day

- Evaluate all loan documents, obtain all approvals, ensure compliance to all lending guidelines, and maintain accuracy of all credit underwriting
- Analyze all borrower relationship for various loan portfolios and evaluate all loan quality for various team members and plan and implement all credit examinations
- Analyze all complex portfolio risk and recommend modification to all credit standards on monthly basis

IBC Bank - Shoreline

Corpus Christi, TX

Credit Analyst

August 2016 – October 2017

- Evaluate clients credit data and financial statements to determine degree of risk
- Analyzing clients records and using data to recommend payment plans
- Evaluate the financial status of clients by producing financial ratios through excel

IBC Bank - Service Center

San Antonio, TX

Staff Auditor

August 2015 – August 2016

- Assist Audit Committee in fulfillment of its duties and responsibilities
- Review bank practices and records for compliance with internal policies and procedures
- Report audit findings and recommendations to appropriate management and conduct follow-up reviews of financial and regulatory noted observations

Big House BBQ – Kingsville

Kingsville, TX

Manager

May 2013 -August 2015

- Audit POS sales at end of shift
- Balanced the book accurately by recording cost and month end accruals
- Achieved and maintained a 3% annual growth in profit through the management of controllable costs such as reducing unnecessary overtime and inventory waste

SKILLS

- Hyland
- Precision
- Horizon
- IMS
- Microsoft Office (Word, PowerPoint, Excel, Publisher, Outlook)
- AutoCAD
- Adobe Acrobat
- OPERATING SYSTEMS: Windows XP-2010, Mac OS X, Aloha

HONORS & ACTIVITIES

- Pledge Member, International Fraternity of Delta Sigma Pi
- Member, Institute of Internal Auditors
- Vita Program, Volunteer Work

Profile			
Harrison	A McNeil		
First Name	Middle Initial Last Name		
Email Address			
6501 Sahara Drive			
Street Address			
Corpus Christi		TX	78412
City		State	Postal Code
What district do you live in? *			
District 4			
Current resident of the city?			
€ Yes € No			
If yes, how many years?			
5			
Mobile: (361) 808-8355	Business: (361) 885-6672		
Primary Phone	Alternate Phone		
Port of Corpus Christi Authority Employer	Supervisor of Environmental Permitting Job Title		
Work Address - Street Address			
400 Harbor Drive			
Work Address - City			
Corpus Christi			
Work Address - State			
Texas			
Work Address - Zip Code			
78401	y , , , , , , , , , , , , , , , , , , ,		

Preterred Mailing Address
Which Boards would you like to apply for?
WATERSHORE AND BEACH ADVISORY COMMITTEE: Submitted
Interests & Experiences
Do you currently serve on any other City board, commission or committee at this time? If so please list:
Watershore and Beach Advisory Committee
Why are you interested in serving on a City board, commission or committee?
Continue involvement in City's management of beaches
Are you an ex-Officio member of a City Board, commission or committee?
c Yes r No
Demographics
Code of Ethics - Rules of Conduct/Conflicts of Interest
Do you represent any person or organization in any claim or lawsuit or proceeding involving the City?
r Yes € No
Do you, your spouse, your business or your spouse's business have a City contract?
r Yes ℯ No
Does your employer or your spouse's employer have a City contract?
c Yes r No
Are you involved with any activities or employment that would conflict with the official duties on the City boards for which you are applying?
r Yes r No

Are you, your spouse, your business or your spouse's business involved in any pending bid, proposal or negotiation in connection with a contract with the City?				
r Yes r No				
Oo you or your spouse have a pend	ding claim, lawsuit or proceeding against the City?			
r Yes r No				
	uestions above, please explain or ask to speak with the swer "NO" to all questions above, please enter N/A.			
N/A				
Board-specific questions (if appli	icable)			
Question applies to WATERSHORE AND BEACH AD The Watershore & Beach Advisory categories. Do you qualify for any o	Committee must include members representing certain			
 ✓ Scientist i.e., Marine Biologist) ✓ Environmentalist 				
1				

City Code Requirement - Residency

As a board, commission, or committee member, you will be asked to adhere to City Code of Ordinances, Section 2-65, which states that all members of City boards and commissions, including ad hoc committees, appointed by the City, must be residents of the city. A move outside the city limits of the city by any member shall constitute automatic resignation from the particular board or commission on which such member served.

✓ I Agree

City Code Requirement - Attendance

As a board, commission, or committee member, you will be asked to adhere to City Code of Ordinances, Section 2-61, which provides that absences from more than 25% of regularly scheduled meetings during a term year on the part of any board, commission, or committee member shall result in an automatic termination. An absence shall be deemed unexcused unless excused by the board, commission or committee for good cause no later than its next meeting after the absence.

✓ I Agree

Consent for Release of Information

I understand that if any member of the public makes a request for information included in this application or in any attachment (e.g. resume or supporting documentation) for appointment it is subject to and must be disclosed under the Texas Public Information Act. I understand that under the Texas Public Information Act, my home address and home telephone number is subject to public disclosure unless I am elected or appointed to the position which I seek. I hereby consent to the release of my home address and home telephone number should it be requested under the Texas Public Information Act prior to my possible appointment or election. I hereby release the City of Corpus Christi, and its agents, employees and officers, from any and all liability whatsoever if the information must be released pursuant to the Texas Public Information Act.

✓ I Agree

Oath

I swear that all of the statements included in my application and attached documents, if any, are true and correct.

□ I Agree

Profile			
Hershel	Shoats		
First Name	Last Name		
Email Address			
4426 Greensboro Drive			
Street Address			
Corpus Christi	•	TX	78413
City		State	Postal Code
What district do you live in? *			
District 5	·		
Current resident of the city?			
€ Yes ← No			
If yes, how many years?			
18			
Mobile: /261\ 060_0524	Mobile: (261) 221 1150		
Mobile: (361) 960-0534 Primary Phone	Mobile: (361) 331-1159 Alternate Phone		
FedEx Freight Employer	Forklift operator	*****	
Work Address - Street Addres			
246 S Navigation Blvd			
Preferred Mailing Address			
Which Boards would you like	to apply for?		
WATERSHORE AND BEACH AD	VISORY COMMITTEE: Submitted		

Interests & Experiences

Are you a registered voter?
r Yes r No
Do you currently serve on any other City board, commission or committee at this time? If so please list:
No.
Education, Professional and/or Community Activity (Present)
U.S. Navy Veteran, entrepreneur/self-employed, member of the Corpus Christi Black Chamber, held several networking events for local small businesses
If you applied for multiple boards, which boards are you most interested in serving on, in order of preference? (Limit to top three)
Watershore & Beach Business & Job Development Regional Economic Development
Why are you interested in serving on a City board, commission or committee?
I see there is a need in Corpus and we can do better to serve the underrepresented population. I believe in a more diverse representation within the City.
Upload a Resume Are you an ex-Officio member of a City Board, commission or committee?
r Yes r No
Demographics
Gender
▽ Male
Code of Ethics - Rules of Conduct/Conflicts of Interest
Do you represent any person or organization in any claim or lawsuit or proceeding involving the City?
r Yes r No
Do you, your spouse, your business or your spouse's business have a City contract?
r Yes r No

r Yes & No			
Are you involved with any activities or employment that would conflict with the official duties on the City boards for which you are applying?			
r Yes & No			
	ouse, your business or your spouse's business involved in any pending negotiation in connection with a contract with the City?		
て Yes ೯ No			
Do you or your sp	pouse have a pending claim, lawsuit or proceeding against the City?		
r Yes r No			
•	es" to any of the questions above, please explain or ask to speak with the rtment. If you answer "NO" to all questions above, please enter N/A.		
N/A			
The Watershore 8	RSHORE AND BEACH ADVISORY COMMITTEE & Beach Advisory Committee must include members representing certain ou qualify for any of the following categories? *		

Question applies to CORPUS CHRISTI BUSINESS AND JOB DEVELOPMENT CORPORATION, CORPUS CHRISTI B CORPORATION, PLANNING COMMISSION

Harchal Shnate

€ Yes € No

Are you a registered voter?

Verification

City Code Requirement - Residency

As a board, commission, or committee member, you will be asked to adhere to City Code of Ordinances, Section 2-65, which states that all members of City boards and commissions, including ad hoc committees, appointed by the City, must be residents of the city. A move outside the city limits of the city by any member shall constitute automatic resignation from the particular board or commission on which such member served.

□ I Agree

City Code Requirement - Attendance

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□ I Agree

Oath

I swear that all of the statements included in my application and attached documents, if any, are true and correct.

□ Agree

Hershel Shoats

4426 Greensboro Dr., Corpus Christi, TX | (361) 960-0534 | Email

Qualifications:

Coded Welder 4954, 4955, 4956. Qualified in MIG, TIG, SMAW, GTAW, Carbon Arc, Heli Arc and OXY/ACE Welding and Cutting, Plasma Arc Cutting, Maintenance Activity Journeyman. Pipe-fitter Code 4921. PVC piping repairs/installations. Quality assurance inspector. Controlled material manager. Gas Free engineer. Fork lift operator. Water tight closure/underwater hull inspector. High pressure weld inspector. Remote operating gear technician (Uniflex, Teleflex). Familiar with Microsoft Office Suite.

Experience:

Forklift Operator Sept 2018 - present

Corpus Christi, TX

FedEx Freight

May 2018 - present

Owner/Instructor of Brazilian Jiu-Jitsu

Corpus

Christi, TX

Oz: the Gorilla Village

2010 - present

Personal Trainer

Corpus Christi, TX

Silverback Wellness LLC (self-employed)

Jan 2010 - July 2010

Plant Mechanic/Fitter/Welder

Corpus Christi, TX

TOR Minerals

July 2007 – Nov 2009 Welder

Portland,

TX

CCC Group, Sherwin Alumina

Mar 2006 - Jun 2007

Ship/Rig Repair

Corpus Christi, TX

Gulf Copper

Sept 2004 - Mar 2006

Fabricator

Hampton, VA

D2D Customs (self-employed)

Nov 2001 - Jun 2005

Marine Inspector

Newport News,

VA

Marine Systems Corporation, Boston, MA

Dec 2000 - May 2001 Welder

Newport News,

VA

Davis Boat Works

Sept 1986 - Sept 2000 Hull Technician

various

United States Navy

Education:

Overhead Monorail System/Emergency Diesel Generator Inspector School (43131-9BQ3). Fleet Training Center, Norfolk, VA (600 hours, Jan 1998-Mar 1998)

Hershel Shoats page 2

Hydraulic Ram/Shipboard Electrical Wiring School. Fleet Training Center, Norfolk, VA (Oct 1997-Dec 1997)

Gas Free Engineer School (K-495-0051). Fleet Training Center, Norfolk, VA (200 hours, Dec 1996-Jan 1997)

Shipboard Collection Holding Transfer (CHT) School (K-652-2141). Fleet Training Center, Norfolk, VA (90 hours, Aug 1996)

Quality Assurance Supervisor/Inspector and Controlled Materials Supervisor School (43279.3-90). Fleet Training Center, Norfolk, VA (440 hours, Jan 1996-Mar 1996) Hull Technician, Class C, Phase III School. Fleet Training Center, San Diego, CA (400 hours, Oct 1995-Dec 1995)

Sewage Holding/Treatment/Disposal Group Operator School. Fleet Training Center, San Diego, CA (610 hours, Jun 1995-Sept 1995)

Pipe Fabrication/Repair School (SQIP) (S-651-0692). SIMA. Mayport, FL (90 hours, Aug 1994-Sept 1994)

Structural Repair School (SQIP) (S-495-070). SIMA. Mayport, FL (90 hours, Mar 1989-Apr 1989)

Hull Technician Class A School, Phase I/II (S-495-0035). Damage Control Training Center, Philadelphia, PA (440 hours, Dec 1987-Feb 1988)

Awards Received:

Combat Action Medal, Navy Achievement Medal (2), Sea Service Medal (6), Humanitarian Medal (4), Kuwait Liberation Medal, Saudi Arabia Medal

References:

Furnished upon request.

Profile				
Dr.	Philippe	Tissot		
Prefix	First Name	Last Name		
Email Addre	ss			
3560 Ar	ransas			
Street Addre				
Comus	Christi		TV	70411
Corpus City	Christi		TX	78411 Postal Code
			Oldio	1 55165 5545
What d	listrict do you live in? *			
- 5: :	1.10			
₽ Dist	rict 2			
Curren	t resident of the city?			
r Yes	C No			
If yes,	how many years?			
21 year	s			
Home: ((361) 851-0403	Business: (361) 825-3776		
Primary Pho	ne	Alternate Phone		
Texas A	A&M University-Corpus			
Christi		Associate Research Professor		
Employer		Job Title		
Work A	Address - Street Addres	s and Suite Number		
6300 O	cean Dr.			
Work A	Address - City			
Corpus	Christi			
Monte A	Addross Cists			
WOLK A	Address - State		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Texas				
Work A	Address - Zip Code			
78412				

Work Phone	
361-825-3776	
Work E-mail address	
philippe.tissot@tamucc.edu	
Preferred Mailing Address	
Which Boards would you like to apply for?	
WATERSHORE AND BEACH ADVISORY COMMITTEE: Submitted	
Interests & Experiences	
Are you a registered voter?	
c Yes c No	
Do you currently serve on any other City board, commission or committee at this tiplease list:	ime? If so,
I do not currently serve on any City board, commission or committee.	
Education, Professional and/or Community Activity (Present)	
Present activity: Associate Research Professor and Interim Director of the Conrad Blucher Inst at Texas A&M University-Corpus Christi. I have been studying and modeling coastal physical pfor more than 20 years. Education consist of Physics Engineering Diploma (MS) and Nuclear EPhd.	processes
Why are you interested in serving on a City board, commission or committee?	
I have been visiting Corpus Christi for over thirty years and have been a resident for over 20 years also been researching and modeling local coastal processes for the past 20 years. I care deep city and, if selected, I will be happy and interested in continuing to contribute my understanding coastal processes to help our City tackle coastal challenges the best we can.	ly about our
Upload a Resume	

board, commission, committee or corporation at the same time. If you currently serve as a voting member for a board, commission, committee or corporation are you willing to resign your current seat to serve on another board, commission, committee or corporation?
€ Yes ⊂ No
Demographics
Gender
⋈ Male
Code of Ethics - Rules of Conduct/Conflicts of Interest
Do you represent any person or organization in any claim or lawsuit or proceeding involving the City?
C Yes r No
Do you, your spouse, your business or your spouse's business have a City contract?
c Yes r No
Does your employer or your spouse's employer have a City contract?
€ Yes ← No
Are you involved with any activities or employment that would conflict with the official duties on the City boards for which you are applying?
C Yes € No
Are you, your spouse, your business or your spouse's business involved in any pending bid, proposal or negotiation in connection with a contract with the City?
r Yes € No
Do you or your spouse have a pending claim, lawsuit or proceeding against the City?
C Yes € No

No person shall be appointed by the Mayor or Council Members to serve on more than one

If you answer "Yes" to any of the questions above, please explain or ask to speak with the City's Legal Department. If you answer "NO" to all questions above, please enter N/A.

The TAMU-CC Conrad Blucher Institute is and has been the recipient of several City contracts over the years, presently including the monitoring and analysis of the changing dynamic of Packery Channel, precipitation measurements and salinity measurements. I am presently the interim director of the Conrad Blucher Institute and I supervise colleagues who are the principal investigators for these contracts including Deidre Williams who is the PI for the Packery Channel contract. Only the Packery Channel monitoring contract has been relevant to this advisory board during the past four years. When I discuss any aspects of the Packery Channel monitoring, I make sure to remind the other board members and city staff that the Conrad Blucher Institute has a relevant contract with the City.

Board-s	pecific	questions	(if a	applicable	
Dualu-s	Decilic	questions	(11 6	applicable	ı

Question applies to WATERSHORE AND BEACH ADVISORY COMMITTEE

The Watershore & Beach Advisory Committee must include members representing certain categories. Do you qualify for any of the following categories? *

Scientist i.e., Marine Biologist)

Verification

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□ Agree

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✓ I Agree

Oath

I swear that all of the statements included in my application and attached documents, if any, are true and correct.

□ Agree

August 2021

PHILIPPE E. TISSOT, Ph.D.

Professional: Texas A&M University-Corpus Christi, 6300 Ocean Drive, Unit 5799, Corpus Christi, Texas 78412-5799

Phone: (361) 825-3776, Fax: (361) 825-2715 - E-mail: philippe.tissot@tamucc.edu

CURRENT POSITION

Interim Director & Research Scientist, Conrad Blucher Institute (CBI), Texas A&M University-Corpus Christi. Associate Research Professor, College of Science and Engineering, Texas A&M University-Corpus Christi (TAMU-CC). Co-PI for the NSF AI Institute for Research on Trustworthy AI in Weather, Climate, and Coastal Oceanography. Member of the Texas A&M University System Graduate Faculty.

SHORT BIO

Dr. Tissot is the Interim Director for the Conrad Blucher Institute, an Associate Research Professor at Texas A&M University-Corpus Christi and a co-PI for the NSF AI Institute for Research on Trustworthy AI in Weather, Climate, and Coastal Oceanography, or AI2ES. For the past 20 years, his research focused on the development of artificial intelligence methods for the analysis and predictions of environmental systems with a focus on coastal physical processes. Projects include developing operational predictions for navigation and emergency management, work on relative sea level rise and its impact and the development of mobile apps to better communicate this information. Dr. Tissot has authored or co-authored over 50 peer reviewed articles, over 200 proceedings, abstracts and technical presentations, a Physical Science text book for future K-12 teachers, and 2 US Patents. Prior to joining TAMUCC in 1999, Dr. Tissot was a research scientist at a private research institution working on R&D projects including developing prototypes for companies in the areas of oil exploration, environmental assessment, semiconductor materials analysis, and treatment of engineered wood materials. Dr. Tissot's education consists of a Ph.D. in Nuclear Engineering from Texas A&M University, College Station, and a Diploma in Physics Engineering from the Swiss Federal Institute of Technology, Lausanne.

RESEARCH INTERESTS

- Development of Coastal Artificial Intelligence models and methods
- Dynamic of coastal processes
- Spatial variability of relative sea level rise and impact
- Operational predictive models including water levels, storm surge, water temperatures for the Laguna Madre (to help manage navigation interruptions), thunderstorm
- Coastal modeling projects include the application of hydrodynamic models (Delft3D) for the Coastal Bend waters for circulation, water level predictions and inundation predictions verifications, water quality modeling.

Research Interests -

Philippe Tissot, Ph.D., Interim Director of the Conrad Blucher Institute, Associate Research Professor

The research interests of Dr. Tissot have been focused on the development of machine learning methods for environmental applications and studying the dynamic of coastal processes. The core of his research is at their intersection, the development of Coastal AI. This work is presently supported by one of the seven inaugural NSF AI institutes, the NSF AI Institute for Research on Trustworthy AI in Weather, Climate, and Coastal Oceanography (AI2ES). Dr. Tissot is one of the Institute's Co-PIs. The research focuses on developing coastal models to predict coastal fog, inundation and models to support the conservation of sea turtles including predictions of cold stunning events. The team recently developed new AI methods to predict coastal fog, FogNet, and thunderstorms based on 3D convolutional neural networks and autoencoders respectively (see publication list). Work is continuing to improve

architectures, broaden the scale of the predictor sets and making the models portable to other locations. The new models are also giving the opportunity to apply and develop eXplainable AI (XAI) methods to explore with a novel approach the dynamic of coastal processes in particular the nonlinear nature of these processes. Operational models are still based on shallow neural networks and have been used by stakeholders since the mid 2000's for water levels and cold-water predictions. As part of the AI2ES institute Dr. Tissot collaborates actively with other academic institutions, NCAR, private sector companies and in particular IBM. Dr. Tissot's students are taking advantage of IBM's GRAF ensemble atmospheric predictions to research new methods to quantify AI models uncertainty and visualize confidence intervals. Dr. Tissot works closely . Undergraduate students, presently eight funded researchers, play an important role in most of these research tasks.

Faculty info on experience with undergraduate student research

Philippe Tissot, Ph.D.: Mentoring undergraduate researchers has been a focal point for Dr. Tissot since his arrival at TAMU-CC in 1999. Dr. Tissot has mentored directly more than 50 funded undergraduate researchers through his grants, through the Conrad Blucher Institute and some through prior REUs including with the project PI. Dr. Tissot often takes on students as freshmen or sophomores scaffolding tasks to pace their progression and productivity. The vast majority of students become the lead author/presenter for conference posters or oral presentations, over 70 presentations with undergraduate researchers as lead authors to date. These presentations have resulted in 17 undergraduate awards at local and national conferences. At present Dr. Tissot's undergraduate students are developing real-time visualizations of environmental series for stakeholders, calibration of operational neural networks, evaluating the robustness of AI models during extreme events and otherwise helping PhD students with their research. One of the undergraduate researcher's visualization tool was used continuously during the February 2021 record cold event that saw the largest number of cold stunned turtles, over 13,000, in US records. Dr. Tissot's undergraduate researchers have also been the lead authors for three peer-reviewed publications. Prior contributions included faculty advisor for the NASA Means Business finalists TAMU-CC teams, head judge for several TAMU-CC Undergraduate Research Symposia and faculty mentor for student associations. Dr. Tissot received the 2007 award for Texas A&M University-Corpus Christi Faculty Advisor of the year.

EDUCATION

Ph.D.

Nuclear Engineering, Texas A&M University, May 1994. (Major GPA 3.9/4, overall GPA 3.8/4). *Dissertation*: Fabrication of <100> Germanium Silicon layers by heated ion implantation and study of pre- and post-anneal characteristics by channeling and Rutherford Backscattering Spectrometry. *Classwork:* included nuclear engineering, radiation detection and shielding, transport theory, nuclear power plant design, heat transfer, heat transfer in two phase flow systems, control theory, numerical methods, differential equations, solid state physics, electromagnetism, and microelectronics.

Diploma

Engineering Physics, Swiss Federal Institute of Technology at Lausanne, Switzerland, January 1987 (GPA 8.15/10). *Thesis*: Analysis of the degradation of MoS₂ protective coatings when exposed to humidity using AES (Auger Electron Spectroscopy) and XPS (X-ray Electron Spectroscopy). *Classwork:* included general basic physics classes, fluid dynamics, quantum mechanics, solid state physics, nuclear physics, electronic theory of solids, microelectronics, optoelectronics, general relativity and cosmology, laser and transducer physics.

AWARDS AT TAMUCC

2015: Conrad Blucher Institute Employee Excellence Award recognizing an employee who has made truly distinctive contributions to the advancement of the mission and vision of the Institute. The goal is to celebrate those who model, exemplify, and promote outstanding leadership qualities and work ethic.

2010: Recipient of a Spring 2010 Texas A&M University System Chancellor Teaching Excellence Award (\$5,000). One of three TAMUCC faculty to score in top 5 percent.

2007: Texas A&M University-Corpus Christi Faculty Advisor of the year

TABLE OF CONTENTS CURRENT POSITION SHORT BIO OTHER BIO..... Error! Bookmark not defined. RESEARCH INTERESTS AWARDS AT TAMUCC......2 TABLE OF CONTENTS PROFESSIONAL EXPERIENCE......4 PRODUCTS: PUBLICATIONS, PATENTS, REPORTS, COURSE BOOKS......9 Journal Publications and Peer Reviewed Conference Proceedings (36): COURSE BOOKS &FIELD TRIP GUIDE: 14 Conference Proceedings, Trade Journals, Abstracts, Invited Presentations & Presentations (Students' Presentations Program Coordination Appointments 32 New Programs 32 OTHER SERVICE ACTIVITIES46 MS Advising 37 RECENT PROFESSIONAL DEVELOPMENT & VISITS......48

OTHER QUALIFIC	CATIONS, AFFILIATIONS & AWARDS53
PREVIOUS SELEC	TED PROPOSALS (Declined)54
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	s.about.com/od/cartravel/fl/Road-Tripping-This-App-Shows-You-Weather-Forecasts-Along-
	Suser, "Make Your Road Trip Safer with the Weather on Wheels App, Now Available for iPhone"45
(http://gisuser.com/	ut.com web story: "Road Tripping? This App Shows You Weather Forecasts Along Your Route 2015/10/make-your-road-trip-safer-with-the-weather-on-wheels-app-now-available-for-iphone/).
	T58
PROFESSION	NAL EXPERIENCE
January 2019 – present	Interim Director of the Conrad Blucher Institute. Overseeing all personnel (50-70 staff, researchers, associated faculty and students), daily operations, budgets and establishing with institute colleagues' directions for the institute. Primary goals included reestablishing a financially sound information technology department, rolling out software for the surveying community, updating the institute strategic plan and mission, developing new financial tracking tools for the institute and organizing the search for next permanent director.
September 2013 – present	Associate Research Professor, Texas A&M University-Corpus Christi.
September 2011 – December 2018	Associate Director of the Conrad Blucher Institute. Support of the CBI director and leadership of the institute during Director travel and as needed. Participation to management meetings and decisions, lead role in the development of institute research strategy and institute wide proposals, development and implementation of institute research strategy, supervision of research assistants.
June 2009 – September 2011	Assistant Director of the Conrad Blucher Institute. Support of the CBI director and leadership of the institute during Director travel and as needed. Participation to management meetings and decision, lead role in the development of institute wide proposals, supervision of research assistants.
August 2007 – August 2013	Associate Professor of Physics with Tenure at the Texas A&M University-Corpus Christic College of Science and Technology, Conrad Blucher Institute Research Scientist, Harte Research Associate. Teaching of Physics, Physical Science classes (undergraduate) and Environmental Forecasting (graduate). Participation and chairing of committees at department, college and university levels. Research in data intensive coastal models and sea level rise and its impact.

August 2001 – August 2007

Assistant Professor of Physics and Physical Science at the Texas A&M University-Corpus Christi College of Science and Technology, Researcher at the Conrad Blucher Institute Division of Nearshore Research. Faculty tasks included teaching of General and University Physics, Physical Science and Environmental Physics classes. First coordinator for the College Science, Math and Technology Education (SMTE) program and second coordinator for the College first PhD program in Coastal and Marine System Science (CMSS). Leadership in the development of operational predictive models and supervision of research assistants at CBI.

Summer 2001

Visiting faculty intern at Advanced Micro Devices Process Characterization and Analysis Laboratory (pcal), Austin, Texas. Developed and tested measurement protocols for the quantitative assessment of copper diffusion barriers effectiveness.

February 1999 -Summer 2001

Assistant Research Scientist at the TAMUCC Conrad Blucher Institute. Projects included the development of tracking methods for contaminants from the South Texas Uranium mines, the development of real-time forecasting models for water levels and HF current maps, and participation to the development of new procedures for the evaluation of surface oil during contained oil spill experiments. Also responsible for supervising students, for administrative and operational aspects such as laboratory infrastructure, equipment and the development of the CBI web site.

February 1999 – Summer 2001

Adjunct Professor of Physics at the Texas A&M University-Corpus Christi College of Science and Technology. Member of the Physical and Life Sciences Graduate faculty.

March 1995 -January 1999

Research Scientist at the Technology Development Laboratory (TDL) of the Houston Advanced Research Center (HARC). Secured and performed research contracts for private sector companies, universities, and governmental agencies. Projects included development of a new chemical treatment process for fiberboard materials, detection of contaminants and land mines in the near ground surface using nuclear spectroscopic methods, development of semiconductor material characterization techniques (measurement of processing damage in 300 mm Silicon wafers by RBS Spectroscopy/Channeling), development of prototypes such as the design and testing of a down hole High Purity Germanium (HPGe) detection system for oil exploration and the support of the laboratory activities in the fields of cryogenics, heat transfer computations, and computerized data acquisition systems.

May 1996 – January 1999

Institutional Radiation Safety Officer for the Houston Advanced Research Center (IRSO). In charge of the supervision of all activities involving the use of radiation sources and radiation producing machines. Wrote and updated the HARC radiation safety policies and regulations and supervised the operation of the individual laboratory radiation safety programs.

March 1996 -February 1998

Instructor teaching a 4 day course (industry engineers and scientists with engineering bachelor, masters or Ph.D. degrees) and a 1 day course (industry operators and technicians with associate degrees and personnel with non scientific bachelor degrees) covering the underlying principles and the individual process steps involved in the manufacturing and characterization of silicon materials (silicon wafers). Taught more then 200 hours of lectures over a 2 year period.

Aug. 1994 -May 1995

Instructional Materials Specialist at the Electronics Training Division (ETD) of the Texas Engineering EXtension services (TEEX). Principal investigator in the development of courses on the processes and fundamentals of silicon materials fabrication for Texas Instruments. Development of interactive simulations of semiconductor processes for computer based training (CBT).

1988-1994

Texas A&M University. Research assistant responsible for operating, maintaining and modifying a 200 keV Cockroft Walton ion beam accelerator, including the vacuum systems,

the ion gun, the ion optics and the vacuum chamber and its apparatus.

1987 Innovi SA Le Locle (Switzerland). Scientific evaluation for venture capitalism.

1982-1986 Swiss Federal Institute of Technology. Teaching assistant (mechanics, electromagnetism and

quantum mechanics), president of the organizing committee of Forum '85 (a three day meeting between industry and students), vice-president (1986) of the student organization "Junior Enterprise". Named Bossard Consultant "Entrepreneur of the Class" for my involvement in

student initiatives and my academic achievements.

MEMBERSHIPS

Tissot Economic Foundation (1987-)

American Physical Society (1988-)

American Nuclear Society (1988-)

Sigma Xi, The Scientific Society (1999-)

Coastal Bend Bays Foundation (2000-), board of trustees since 2016

American Meteorological Society (2001-)

National Science Teacher Association (2002-2012)

Surfrider Foundation (2004-)

American Shore and Beach Preservation Association (2013-)

South Coast Angel Network (2015-), board member since 2016, chair of screening committee since 2017

City of Corpus Christi, Watershore and Beach Advisory Committee, Member, (January 2018 -)

GRANTS: CURRENT, PAST

(Over 30 million dollars as PI, CoPI, principal scientist and collaborator)

- 61. "A Deep Learning Thunderstorm Model to Support National Weather Service Forecast Operations" \$155,818 NOAA High Performance Computing and Communications (HPCC) Program's Information Technology Incubator 4/23/2021 4/22/2022 Waylon Collins PI, Philippe Tissot & Scott King Co-PIs. Submitted.
- 62. NSF NRT-HDR: Stakeholder-Guided Environmental Science (STAGES) Proposal, Co-PI, Dorina Murgulet, PI. \$2,000,000, 5/1/2022 4/30/2026.
- 60. NSF MRI: Acquisition of a Leading-edge Portable Geoprobe System with Subsurface Sampling, Logging, and Imaging capabilities for Geoscience Research and Education \$330,818 Collaborator, Dorina Murgulet, PI 9/1/2021 8/31/2023.
- 59. "SAI: Strengthening Coastal Bend Infrastructure through the Improvement of Science Communication" \$49,685 NSF 3/1/2021 2/28/2022 Colleen Fitzgerald and Dorina Murgulet PIs, Philippe Tissot and Hua Zhang Co-PIs.
- 58. "The NSF AI Institute for Research on Trustworthy AI in Weather, Climate, and Coastal Oceanography (AI2ES)" \$19,998,596 9/1/2020 8/32/2025 Amy Mc Govern (OU) PI, Imme Ebert-Uphoff (CSU), Ruoying He (NCSU), Christopher Thorncroft (AU), and Philippe Tissot (TAMUCC) Co-PIs, total of 42 collaborators including NCAR, LBNL, Google, IBM. PI for TAMU-CC Team, \$2,579,356.
- 56. "Coastal Bend Joint COVID-19 Taskforce" \$321,139 including \$103,297 CBI & TAMU-CC match 5/15/2020 1/15/2021 Philippe Tissot PI, Chris Bird, Lucy Huang, Davey Edwards, Meng Zhao, Greg Buck, Scott King, Bryan Gillis, Co-PIs.
- 55. "Support for a Total Maximum Daily Load (TMDL) for Indicator Bacteria at Poenisch Park" \$18,000, Texas

Commission on Environmental Quality – 9/1/2019 – 11/30/2020 – Philippe Tissot PI.

- 54. "Operation and Maintenance of the Texas Coastal Ocean Observation Network (TCOON)" 363,118, Woods Hole Group through NOAA 03/01/2019-02/28/2020 James Rizzo, PI Philippe Tissot, Co-PI.
- 53. "Geospatial Modeling" \$2,186,046 10/1/2018 9/30/2020 James Rizzo PI, Philippe Tissot, Co-PI with others.
- 52. "Operation and Maintenance of the Texas Coastal Ocean Observation Network (TCOON)" \$1,391,784, Woods Hole Group through NOAA 03/01/2016-02/28/2019 Gary Jeffress, PI, James Rizzo and Philippe Tissot, Co-PIs.
- 51. "Regional Geospatial Modeling" \$3,959,223, University of Southern Mississippi through NOAA 10/01/2013 09/30/2019 David Mooneyhan, University of Southern Mississippi, overall PI, Philippe Tissot, one of the TAMUCC CBI Co-PIs.
- 50. "Laguna Madre Water Temperature Prediction System for Mitigation of Cold Water Events" \$115,343, Texas Parks and Wildlife, Collaboration with National Park Service -9/1/2018 08/31/2022 Philippe Tissot PI, Donna Sharver and Niall Durham Co-PI.
- 49. "Support for a Total Maximum Daily Load (TMDL) for Indicator Bacteria at Poenisch Park" \$29,894, Texas Commission on Environmental Quality 9/1/2018 11/30/2019 Philippe Tissot PI.
- 48. "Support for Total Maximum Daily Load (TMDL) for Indicator Bacteria at Poenish Park" \$48,000, Texas Commission on Environmental Quality 9/1/2017 11/30/2018 Philippe Tissot PI.
- 47. "Texas Coastal Ocean Observation network" \$357,541 –Woods Hole group 2016-2017 Gary Jeffress PI (James Rizzo, Philippe Tissot, Co-PIs).
- 46. "Regional Spatial Modeling" \$1,036,545 NOAA Prime through the University of Southern Mississippi 8/1/2016-9/30/2017 Gary Jeffers, PI (James Rizzo, Mike Starek, Philippe Tissot Co-Is).
- 45. "Texas Coastal Ocean Observation network" \$398,546 -Woods Hole group 3/16/2016-9/30/2016 Gary Jeffress PI (Co-PI with James Rizzo).
- 44. "Baffin Bay Past 200+ Years: Core Analysis for Radiochronology and Correlated Physical and Biological Events" \$45,642 Coastal Bend Bays Estuary Program 9/1/2016-8/31/2017 PI (Mark Besonen, Paul Zimba and Erin Hill Co-PIs)
- 43. "Adjusted Datums Estimates for South Padre Island" \$6,500 ERGIS 1/1/2016 5/31/2016
- 42. "Monitoring of Ocean Currents and Waves for Bob Hall Pier" \$10,000 Nueces County PI.
- 41. "Water Quality of the Baffin Bay System Since AD 1850 as Inferred from Sediment Cores" \$75,086 Coastal Bend Bays Estuary Program \$75,086, M. Besonnen PI (Co-PI, \$13,361 without fringes)
- 40. "Commercialization of a Geologistics App" \$20,000 TAMUCC Research Development Funding Program, PI, Bill Cone, Co-PI, 9/1/2014-8/31/2015.
- 39. "HPGe Gamma Ray Measurements of Radionuclide Contents of RCT Soil Samples" \$ 4,050 from the Railroad Commission of Texas, April 2014 May 2014.
- 38. "Water Level Prediction Software Modernization" \$25,000 NOAA CO-OPS, Co-PI, Scott Duff, PI, September 20, 2013 September 19, 2014.
- 37. "Coastal Current Monitoring Network" \$152,244 Texas General Land Office Oil Spill Prevention and Response Program, 2014-2015 Funding Cycle Grant, PI, James Rizzo Co-PI, 9/1/2013 8/31/2015.
- 36. "Texas Coastal Ocean Observation Network (TCOON)" \$651,398 Texas General Land Office, Co-PI, Gary Jeffress, PI, 03/01/12-08/31/14
- 35. "Gulf Offshore Wind (GoWind)" Consortium proposal headed by Baryonyx Corporation and the Texas Engineering Experiment Station Wind Energy Center. US Department of Energy (proposal DE-FOA-0000410). Project PI for the CBI/TAMUCC portion of the project (\$300,045, 3 years).
- 34. "Hydrodynamic Modeling of Tidal Flats" \$5,000 TAMUCC Research Enhancement Funding Program, PI, 9/1/2012-8/31/2013.

- 33. "Transit Time! Mobile Application" \$25,000 NOAA CO-OPS, PI, Scott Duff, Co-PI, February 8 July 31, 2012 (contract number DG-133C-12-SE-0592).
- 32. "Improved Convective Initiation Forecasting in the Gulf of Mexico Region". \$37,818 NASA ROSE program through Univ. of Alabama, Huntsville, John Mecikalski overall project PI, PI for TAMU-CC portion of the grant 6/1/10-5/31/12. NASA A.40 Award Number: NNX10AO07G
- 31. "Combination of Artificial Neural Network and FVCOM Models for Gulf of Mexico Water Levels and Storm Surge Predictions" \$ 46,551 NOAA ECSC Year 5, project lead, part of NOAA sponsored Environmental Cooperative Science Center (ECSC): Regional Studies in Integrated Management of Coastal and Marine Ecosystems for Informed Decision Making, a multi institution project, Florida A&M University lead institution, Wes Tunnell, TAMUCC lead PI. Full project award number NA06OAR4810164.
- 30. "Tidal or Non-Tidal Nature of a Set of Shallow Water Stations in the Vicinity of the Florida Indian River" \$45,560 (including all amendments) from Cooner & Associates/Florida Department of Environmental Protection PI, D. Martin Co-Pi. 12/14/2009-6/15/2011.
- 29. "Gamma Ray Analysis of Soil Samples" \$ 4,050 from the Railroad Commission of Texas, June 2010 August 2010.
- 28. "Combination of Artificial Neural Network and FVCOM Models for Gulf of Mexico Water Levels and Storm Surge Predictions" \$ 51,063 NOAA ECSC Year 4, project lead, part of NOAA sponsored Environmental Cooperative Science Center (ECSC): Regional Studies in Integrated Management of Coastal and Marine Ecosystems for Informed Decision Making, a multi institution project, Florida A&M University lead institution, Wes Tunnel, TAMUCC lead PI. Full project award number NA06OAR4810164.
- 27. "Gamma Ray Analysis of Soil Samples" \$ 1,400 from the Railroad Commission of Texas, May 2009 August 2009.
- 26. "Tidal or Non-Tidal Nature for set of Florida Keys Shallow Water Stations" \$47,720 Cooner and Associates, Fort Myers, Florida, December 2008 August 2009.
- 25. "Combination of Artificial Neural Network and FVCOM Models for Gulf of Mexico Water Levels and Storm Surge Predictions" \$ 45,882 NOAA ECSC Year 3, project lead, part of NOAA sponsored Environmental Cooperative Science Center (ECSC): Regional Studies in Integrated Management of Coastal and Marine Ecosystems for Informed Decision Making, a multi institution project, Florida A&M University lead institution, Wes Tunnel, TAMUCC lead PI. Full project award number NA06OAR4810164.
- 24. "A Massive Heterogeneous Data Repository for Computing Research on the Gulf of Mexico)" CNS-0708596 \$49,000 NSF Longzhuang Li, Co-PI, (09/2007 08/2009).
- 23. "Combination of Artificial Neural Network and SLOSH Models for Gulf of Mexico Storm Surge Predictions", \$48,296 NOAA ECSC Project Year 2, September 2007, August 2008.
- 22. "Coastal Navigational Safety in Texas: A study of the causes of navigational accidents along the Texas coast with comparisons with Florida, and the United States", NOAA ECSC Year 1, Jan 2007, August 2007.
- 21. "A Real-Time Hurricane Surge Prediction System" \$50,000 Texas Research Development Fund (TRDF), PI, Beate Zimmer and Gary Jeffress Co-PI, September 2006 August 2008.
- 20. "Gamma Ray Analysis of Soil Samples" \$ 1,500 from the Railroad Commission of Texas, December 2006 August 2007.
- 19. "Correlation Between Water Temperature and Fish Kills in the Laguna Madre" \$50,000, Texas Parks and Wildlife Co-PI, John Adams, PI Jan. 2006 August 2007.
- 18. "Future Teacher Travel to Anaheim 2006 NSTA Conference", TxCETP Level II 2005-2006 Grant, February 2006, \$6,848.
- 17. "Gamma Ray Analysis of Soil Samples" \$ 2,000 from the Railroad Commission of Texas, April 2006 Aug 2006 PI pending, submitted Oct. 2005.
- 16. "Analysis and Design of Environmental ANN Models" \$30,000 TAMUCC Texas Research Development Funds Co-PI, Beate Zimmer, PI, Oct. 2005 Aug. 2006.

- 15. "Gamma Ray Analysis of Soil Samples" \$ 2,000 from the Railroad Commission of Texas, Apr. 2005 Aug 2005 PI.
- 14. "Future Teacher Travel to the Houston 2005 Conference for the Advancement of Science Teaching (CAST)", TxCETP Level II 2005-2006 Grant, October 2005, \$6,253.
- 13. "Artificial Neural Network Modeling of Unusual Natural Events: Proposal and Code Development" \$ 5,619 Harte Research Institute Summer Faculty Grant Summer 2005 PI.
- 12. "Future Teacher Travel to the Dallas 2005 National Science Teacher Association (NSTA) Conference", TxCETP Level II 2004-2005 Grant, March 2005, \$7,193.
- 11. "Acquisition of a Powder X-ray Diffraction System for Earth Science Research and Education" \$ 120,000 NSF MRI program Award No. EAR-0421410 Sept 2004 Aug 2007 Co-PI, Thomas Naehr, PI.
- 10. "MRI: Acquisition of an AA Graphite Furnace and Microwave Digestor for the Enhancement of Rsearch/Teaching at Texas A&M University-Corpus Christi" \$ 98,643 NSF MRI program Award No. CHE-0421239 Sept 2004 Aug 2007 Co-PI, Eugene Billiot, PI.
- 9. "Study of a Possible Correlation between Drowning Fatalities and Rip Currents for the South Texas Gulf Coast" \$ 9,996 Sea Grant (NOAA) March 2004 March 2005 PI.
- 8. "Gamma Ray Analysis of Soil Samples" \$ 2,000 from the Railroad Commission of Texas, Nov. 2003 Aug 2004 PL
- 7. "Incorporating Meteorological Forecasts to Nowcast/Forecast Water Level Anomalies in Navigable Waterways of the Northern Gulf of Mexico" \$ 134,887 from the Sea Grant Technology Program Sept. 2003 to Aug. 2005 Co-PI (Dan Cox PI, Patrick Michaud Co-PI) PI for the \$ 65,126 TAMUCC portion
- 6. "Gamma Ray Analysis of Soil Samples" \$ 2,000 from the Railroad Commission of Texas, Jan. 2003 Aug 2003 PI.
- 5. "Study of Radon Exhalation within the Context of the South Texas Uranium Mines" \$ 11,941 from the Texas A&M University-Corpus Christi Research Enhancement Committee Sep. 2002 to Aug. 2003 PI.
- 4. "Impact of Preliminary Team Building Activities on Student Attitudes and Overall Class Performance for Inquiry Based High School Science Curricula" \$ 16,675 grant from the Texas A&M University System's Regent's Initiative for Excellence in Education May 2002 to Aug. 2003 PI (Lon Sieger, Nancy Reynolds, Vinay Dulip, Co-PIs).
- 3. "A Fundamental Upgrade of the Texas Coast Water Level Forecasting System" \$ 78,000 grant from the Coastal Management Program Oct. 2001 to Sept. 2003 Co-Pi (Patrick Michaud & Dan Cox other Co-PIs).
- 2. "Wave Climate Monitoring System for Coastal Users and Shoreline Erosion" \$ 100,000 grant from the Coastal Management Program Oct. 2001 to Sept. 2003 Co-Pi. (Patrick Michaud and Frank Kelly other Co-Pis).
- 1. "Contaminants from South Texas Uranium Mines: Environmental Fate from Molecular to Watershed Scales" \$ 35,000 grant from the Advanced Research Program (ARP) of the Texas Higher Education Coordinating Board (THECB) in collaboration with Texas A&M University Department of Geology Jan. 2000 to Jul. 2001 project scientist/manager (Bruce Herbert & Patrick Michaud PIs).

PRODUCTS: PUBLICATIONS, PATENTS, REPORTS, COURSE BOOKS

Journal Publications and Peer Reviewed Conference Proceedings (46):

- 1 Kamangir, H., Krell, E., Collins, King, S.A., W., Tissot (2021). Importance of 3D Convolution and Physics-based Feature Grouping in Atmospheric Predictions. Environmental Modelling & Software, in review.
- Dinh, H., King, S.A., Collins, W., Tissot, P., Kamangir, H., Durham, N. and Nguyen, S. (2021). Application of Autoencoders for Thunderstorm and Fog Prediction. IEEE Transactions on Neural Networks and Learning Systems, submitted.
- 3 Kirk, K., Dusek, G., Tissot, P., Sweet, W. (2021). Wave Height Estimates from Acoustic Tide Gauges. Journal of Atmospheric and Oceanic Technology (in review).

- 4 McColly, Q., Mace, R., Tissot, P., & Yoskowitz, D. (2021). Pricing Options on Water in Texas. Texas Water Journal, 12(1), 91–108. https://doi.org/10.21423/twj.v12i1.7121
- Kamangir, H., Collins, W., Tissot, P., King, S.A., Dinh, H., Durham, N., Rizzo, J. (2021). FogNet: A Multiscale 3D CNN with Double-Branch Dense Block and Attention Mechanism for Fog Prediction. Machine Learning with Applications, accepted, https://doi.org/10.1016/j.mlwa.2021.100038.
- Boukabara, S.-A., Krasnopolsky, V. M., Penny, S. G., Stewart, J. Q., McGovern, A., Hall, D., Hoeve, J. E. T., Hickey, J., Huang, H.-L. A., Williams, J., Ide, K., Tissot, P., Haupt, S. E., Casey, K. S., Oza, N., Geer, A., Maddy, E. S. and Hoffman, R. N. (2021). Outlook for exploiting artificial intelligence in Earth science. *Bull. Am. Meteorol. Soc.*, 1-53. https://doi.org/10.1175/BAMS-D-20-0031.1
- McGovern, A., Ebert-Uphoff, I., He, R., Tissot, P., Thorncroft, C., Bostrom, A., Demouth, J., Hickey, J., Williams, J., Boukabara, S. and Gagne, D.J. (2020). Artificial Intelligence and the Wicked Sustainability Problem, Eos, 101, https://doi.org/10.1029/2020EO147065
- 8 Kamangir H, Collins W, Tissot P, King SA. A deep-learning model to predict thunderstorms within 400 km2 South Texas domains (2020). Meteorol Appl. 2020;27:e1905. https://doi.org/10.1002/met.1905
- 9 Culver, Michelle, Gibeaut, James, Shaver, Donna, Tissot, Philippe and Starek, Michael (2020) Using lidar data to assess the relationship between beach geomorphology and Kemp's ridley (Lepidochelys kempii) nest site selection along Padre Island, TX, USA. Frontiers in Marine Science 7, 214 https://doi.org/10.3389/fmars.2020.00214.
- Pashaei, M.; Kamangir, H.; Starek, M.J.; Tissot, P. Review and Evaluation of Deep Learning Architectures for Efficient Land Cover Mapping with UAS Hyper-Spatial Imagery: A Case Study Over a Wetland. Remote Sens. 2020, 12, 959. https://www.mdpi.com/2072-4292/12/6/959
- 11 Nguyen, C., Starek, M. J., Tissot, P. & Gibeaut, J. (2019). Unsupervised clustering of multi-perspective 3D point cloud data in marshes: a case study. Remote Sensing, Remote Sensing, 11(22), 2715. https://www.mdpi.com/2072-4292/11/22/2715
- 12 Liu, N., Liu, C. & Tissot, P.E. (2019). A Bayesian-like approach to describe the regional variation of high-flash rate thunderstorms from thermodynamic and kinematic environment variables. Journal of Geophysical Research: Atmospheres, 124(23)12507-12522. https://doi.org/10.1029/2019JD031254
- 13 Nguyen, C., Starek, M. J., Tissot, P., Cai, X. & Gibeaut, J. (2019). Ensemble Neural Networks for Modeling DEM Error. International Journal of Geo-Information, 8, 444. doi.org/10.3390/ijgi8100444
- 14 Ahmed, M., Sultan, M., Elbayoumi, T. & Tissot, P. (2019). Forecasting GRACE Data over the African Watersheds Using Artificial Neural Networks. Remote Sensing 11(15), 1769. Doi.org/10.3390/rs11151769.
- Moss, R.H., Avery, S., Baja, K., Burkett, M., Chischilly, A.M., Dell, J., Fleming, P., Geil, K., Jacobs, K., Jones, A., Knowlton, K., Koh, J., Lemos, M., Melillo, J., Pandya, R., Richmond, T., Scarlett, L., Snyder, J., Stults, M., Waple, A., Whitehead, J., Zarrilli, D., Ayyub, B., Fox, J., Ganguly, A., Joppa, L., Julius, S., Kirshen, P., Kreutter, R., McGovern, A., Meyer, R., Neumann, J., Solecki, W., Smith, J., Tissot, P., Yohe, G., and Zimmerman, R. (2019). Evaluating Knowledge to Support Climate Action: A Framework for Sustained Assessment. Weather, Climate, and Society, 11(3), 465-487. doi.org/10.1175/WCAS-D-18-0134.1
- Moss, R. H., Avery, S., Baja, K., Burkett, M., Chischilly, A. M., Dell, J., Fleming, P. A., Geil, K., Jacobs, K., Jones, A., Knowlton, K., Koh, J., Lemos, M. C., Melillo, J., Pandya, R., Richmond, T. C., Scarlett, L., Snyder, J., Stults, M., Waple, A., Whitehead, J., Zarrilli, D., Fox, J., Ganguly, A., Joppa, L., Julius, S., Kirshen, P., Kreutter, R., McGovern, A., Meyer, R., Neumann, J., Solecki, W., Smith, J., Tissot, P., Yohe, G. and Zimmerman, R. (2019). A Framework for Sustained Climate Assessment in the United States. Bulletin of the American Meteorological Society, 100(5), 897-907. doi.org/10.1175/BAMS-D-19-0130.1
- 17 Nguyen, C., Starek, M. J., Tissot, P., & Gibeaut, J. (2018). Unsupervised Clustering Method for Complexity Reduction of Terrestrial Lidar Data in Marshes. Remote Sensing, 10(1), 133. doi.org/10.3390/rs10010133
- 18 Reisinger, A., Tissot, P. and Gibeaut, J. (2017) Estuarine Suspended Sediments Dynamics: Observations Derived from Over a Decade of Satellite Data. Frontiers in Marine Science, 4, 233. doi.org/10.3389/fmars.2017.00233

- 19 Murgulet, D., Murgulet, V., Hay, R., Tissot, P. and Mestas-Nuñez, A. (2017) Relationships Between Sea Surface Temperature Anomalies in the Pacific and Atlantic Oceans and South Texas Precipitation and Streamflow Variability. Journal of Hydrology, 550, 726-739. doi.org/10.1016/j.jhydrol.2017.05.041
- 20 Shaver, D. J., Tissot, P. E., Streich, M. M., Walker, J. S., Rubio, C., Amos, A. F., George, J. & Pasawicz, M. R. (2017) Hypothermic stunning of green sea turtles in a western Gulf of Mexico foraging habitat. PLoS ONE 12(3): e0173920. doi.org/10.1371/journal.pone.0173920
- 21 Waylon G. Collins and Philippe Tissot (2016). Thunderstorm Predictions Using Artificial Neural Networks, *Artificial Neural Networks Models and Applications*, Dr. Joao Luis Garcia Rosa (Ed.), InTech. doi: 10.5772/63542.
- 22 Collins, W. and Tissot, P.E. (2015) An Artificial Neural Network Model to Predict Thunderstorms within 400-km2 South Texas Domains. Meteorological Applications, Vol 22(3), 650-65. doi.org/10.1002/met.1499
- 23 Reid, S., Tissot, P.E. and Williams, D. (2014) Methodology for Applying GIS to Evaluate Hydrodynamic Model Performance in Predicting Coastal Inundation. Journal of Coastal Research, 30(5), 1055-1065. doi.org/10.2112/JCOASTRES-D-13-00160.1
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- 26 Reid, S. K., & Tissot, P. E. (2013). Performance of the Coastal Modeling System for Various Conditions in the Navigational Waters of the South Texas Coastal Bend. In *Estuarine and Coastal Modeling (2011)* M. L. Spaulding ed., American Society of Civil Engineers, 496-509. doi: 10.1061/9780784412411.00029
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- 33 G. Beate Zimmer, Alexey L. Sadovski, Philippe E. Tissot, Blair Sterba-Boatwright, "Monte Carlo Simulations and Factor Analysis to Optimize Neural Network Input Selections and Architectures", in Intelligent Engineering Systems through Artificial Neural Networks, Vol. 18, ed. C. H.Dagli et. Al., ASME Press, New York, 2008, pp. 501-8.
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- 35 Mostella, A. Sadovski, S.Duff, P. Michaud, P.E. Tissot, and C. Steidley, "Comparison of Gap Interpolation Methodologies for Water Level Time Series Using PERL/PDL", Revista de Matematica: Teoria y Aplicaciones, Volume 12, No 1 & 2, pp 157-164, 2005.
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- 38 A.L. Sadovski, C.W. Steidley, A Mostella and P.E. Tissot, "Integration of Regression and Harmonic Analysis to Predict Water Levels in Estuaries and Shallow Water of the Gulf of Mexico", WSEAS Transactions on Systems, No. 3, Vol. 8, pp. 2686-2694, ISSN 1109-2777, October 2004.
- 39 A.L. Sadovski, C.W. Steidley, P.R. Michaud and P.E. Tissot, "Developing a Goodness Criteria for Tide Predictions Based on Fuzzy Preference Ranking", Developments in Applied Artificial Intelligence, 16th International Conference on Industrial and Engineering Applications of Artificial Intelligence and Expert Systems, IEA/AIE 2003, Loughborough, UK, pp. 391-401, Lecture Notes in Artificial Intelligence 2718, Springer, June 2003.
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- 45 P.E. Tissot, C.B. Fuller, P. Louchouarn, J.S. Bonner, S. Dellamea and D. Bujnoch, "Quantitative Method for Surface Oil Measurement and Recovery Based on a New Type of Low Impact Skimmer", Proceedings of the twenty-third Arctic and Marine Oil spill Program (AMOP) Technical Seminar, Environment Canada, No. 23a (2000) 353-366.
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- 48 Fuller, C., Bonner, J., Dellamea, S., Ussery, S., Tissot, P., Louchouarn, P., Page, C., and McDonald, T., "Ecological Evaluation of Shoreline Cleaners Used on Oiled Mesocosm Sandy Beaches" Proceedings of the

- Twenty-third Arctic and Marine Oil spill Program (AMOP) Technical Seminar, Environment Canada, No. 23b (2000) 795-804.
- 49 P.E. Tissot, L. Crowe, J. Colvin, T.L. Mann, and A. Guerra, "Design and Testing of a Pulsed Tube Based Cooling System for High Purity Germanium Detectors", Advances in Cryogenic Engineering, Vol. 43 (1998) 2069-2076.
- 50 P.E. Tissot, J.C. McCoy & R.R. Hart, "Medium Energy implantation of germanium into heated <100> Silicon", Applied Physics Letters 66-8 (1995) 979-981. http://dx.doi.org/10.1063/1.113818
- 51 P.E. Tissot & R.R Hart, "Ion Beam Heating of Thin Silicon Membranes," Nuclear Instruments and Methods B79 (1993) 796-799.

PATENTS

(1) John Colvin, Charles Vignal, Philippe Edouard Tissot, and Larry Raymond Crowe "Resin-Impregnated Substrate, Method of Manufacture and System Therefor", US Patent US 6,620,459 B2, Sept. 16, 2003.

A product based on this patent, HARCwood, won first place in the Innovative Technology category for New Products recognizing environmental innovation at the 2003 Association of Woodworking & Furnishings Suppliers Fair. The Association of Woodworking & Furnishing Suppliers Fair was the largest woodworking and furniture supply event in 2003. Over 30,000 industry professionals attended with over 800 exhibiting companies displaying the latest technologies with over 400,000 square feet of exhibitors.

(2) John Colvin, Charles Vignal, Philippe Edouard Tissot, and Larry Raymond Crowe "Resin Impregnated Substrate Materials", US patent US 7,585,566, 9/8/2009.

REPORTS

(peer reviewed when indicated)

- 1. Jonathan Scott Duff, Francesca Picarazzi, Gabriel Picarazzi and Philippe Tissot (2014). Water Level Prediction Software Modernization. Final reported provided to the National Oceanic and Atmospheric Administration (NOAA) Center for Operational Oceanographic Products and Services (CO-OPS), Silver Spring, Md. (Contract Number: EE-133C-13-SE-1762).
- 2. Philippe Tissot, Scott Duff, Wenbo Zhu and Mike Rink (2014). IT Enhancement #1 & #2. Final Report to the Texas General Land Office, January 2014, GLO Contract # 12-461-000-6603.
- 3. Philipe Tissot & Waylon Collins (2013). TAMUCC Contribution to NASA ROSE "Improved Convective Initiation Forecasting in the Gulf of Mexico Region" final report, submitted 6/2/2013.
- 4. Philippe Tissot, Scott Duff, Julien Clifford & Cristián Romo (2012). Development of the Transit Time! Mobile App for Houston/Galveston PORTS® and other NOAA PORTS®. Final reported provided to the National Oceanic and Atmospheric Administration (NOAA) Center for Operational Oceanographic Products and Services (CO-OPS), Silver Spring, Md. (Contract Number: DG-133C-12-SE-0592).
- 5. P.E. Tissot and Doug Martin. (2011). Determining the Tidal or Non-Tidal Nature of Indian River Water Level Stations. Final report submitted to Cooner and Associates, Land O'Lakes, Florida and the Florida Department of Environmental Protection, Tallahassee, Florida. Report under review by the NOAA National Ocean Service Center for Operational Oceanographic Products and Services., 215pp.
- 6. Jennifer Kennedy and Philippe Tissot (2010. Coastal Bend Workshop on Streaming Atmospheric and Oceanographic Environmental Data. Report provided to participants of the August 27 workshop of the same name and the Texas General Land office, September 20, 2010.
- 7. P.E. Tissot, Doug Martin and Lori Busch. (2010). Determining the Tidal or Non-Tidal Nature of Florida Keys Water Level Stations. Final report submitted to Cooner and Associates, Land O'Lakes, Florida and the Florida Department of Environmental Protection, Tallahassee, Florida. Report reviewed by the NOAA National Ocean Service Center for Operational Oceanographic Products and Services. The full report will be included in the surveying database LABINS or Land Boundary Information System (http://data.labins.org/2003/), the on-line survey and maps information system for the state of Florida. The report will be used by land surveyors working in the Florida Keys.

- 8. P.E. Tissot and J. Rodriguez. (2007). Coastal Navigational Safety in Texas: A study of the causes of navigational accidents along the Texas coast with comparisons with Florida, and the United States. Final report submitted to the National Oceanic and Atmospheric Administration Environmental Cooperative Science Center. (http://lighthouse.tamucc.edu/TissotPhilippe/NavigationalSafetyStudy).
- 9. P.E. Tissot, R. Ball and J.S. Adams. (2007). Monitoring and Predictive Modeling of Water Temperatures in the Laguna Madre. Final report to Texas Parks & Wildlife and the Coastal Conservation Association, Texas A&M University Corpus Christi, Conrad Blucher Institute Division of Nearshore Research, Corpus Christi, Texas. (http://lighthouse.tamucc.edu/Forecasts/TPWDReport2007).
- 10. P.E. Tissot. (2005). Study of a Possible Link between Drowning and Near-Drowning Events and Surf Conditions in South Texas. Final report submitted to Texas Seagrant (http://lighthouse.tamucc.edu/TissotPhilippe/SurfDrowningStudy)

COURSE BOOKS & FIELD TRIP GUIDE:

Richard A. Davis, Jr., James C. Gibeaut and Phillipe Tissot, 2017, "Coastal Environments of North Padre Island", Field Trip Guide for the 2017 Meeting of the Texas Section of the American Shore and Beach Preservation (ASBPA), Port Aransas, Texas, April 27, 2017.

G. Reid & P. Tissot, 2009, "A Teacher's Guide to Physical Science", 174 pp., Kendall Hunt, Dubuque, Iowa. ISBN 978-0-7575-6268-6.

Participation (principal investigator) to the design, research, and text development of the course "Silicon Manufacturing Overview" addressed to industry professionals with associate degrees or non engineering Bachelor degrees, published by the Texas Engineering Extension Service, Electronics Training Division, 1997, Texas A&M University System, College Station, TX 77843-8000 (taught the class for different units of Texas Instruments and MEMC Electronics and certified instructors for the class).

Participation (principal investigator during the first part of the development) to the design, research, and text development of the four volume course "Silicon Materials Fabrication" addressed to industry professionals with Bachelor, Masters or Ph.D. degree, published by the Texas Engineering Extension Service, Electronics Training Division, 1996, Texas A&M University System, College Station, TX 77843. (taught the class for different units of Texas Instruments and MEMC Electronics and certified instructors for the class).

Conference Proceedings, Trade Journals, Abstracts, Invited Presentations & Presentations (126, Students' Presentations in Other Category):

- 1. Tissot, P.E. (2021). The Texas Marine Cold-Water Response Collaborative (TCRC). Invited presentation at the area wide meeting, December 1st, 2021, Corpus Christi, TX.
- 2. Tissot, P.E. (2021). The NSF AI2ES Institute. Invited presentation at GeoAI 2021, Del Mar College, Corpus Christi, Texas, November 17, 2021.
- 3. Tissot, P.E. (2021). Mapping Current and Future Sea Level Rise for the Coastal Bend. Invited presentation at the Cape Climate Summit: Race to Save the Coastal Bend November 13, 2021.
- 4. Tissot. P.E. (2021). The Application of Artificial Intelligence to Mitigate Coastal Environmental Issues. Invited presentation at the Bethune Cookman Department of Integrated Environmental Science Seminar, November 1, 2021,
- 5. Tissot, P.E., McGovern, A., He, R., Kamangir, H., Krell, E. and King, S.A. (2021). Coastal AI and the AI2ES NSF AI Institute, Oral presentation at the ASBPA Coastal Conference, New Orleans, LS, 9/30/2021 (https://asbpa.org/2021-conference-program/).
- 6. Tissot, P.E. (2021). Cold Stunning Events in the Laguna Madre Voluntary Activities Interruptions & Predictions. Invited presentations at the 116th GICA Annual Seminar, August 5th 2021, New Orleans, Ls.

- 7. Tissot, P.E. (2021). Coastal AI Models, their General Settings and Early Efforts to Explain the Models and Bring Trust to Users. Presentation at the 2021 Trustworthy Artificial Intelligence for Environmental Science (TAI4ES) Summer School, organized by the National Center of Atmospheric Research and the NSF AI2ES Institute, July 26-29,

 (https://docs.google.com/document/d/1HVvBR 8DoHxRvUUYKL31LskK1tIjo2sByEEnTINyYEA/edit)
- 8. Tissot, P.E. (2021). Conrad Blucher Institute. Invited presentation at the Texas Coastal Ocean Observation Network Annual Meeting, Tissot, P.E. (2021). Artificial Intelligence: History, Future and the Coastal Environment. Invited presentation to the University at Albany 2020-2021 DAES/ASRC Joint Colloquium March 28, 2021. April 22, 2021.
- 9. Tissot, P.E. (2021). Artificial Intelligence: History, Future and the Coastal Environment. Invited presentation to the University at Albany 2020-2021 DAES/ASRC Joint Colloquium March 28, 2021.
- 10. Tissot, P.E., Reisinger, A., Chu, T. Zhong, W. and Qiao, X. (2021). Spatial Variability of Coastal Subsidence: tide gauges, cGPS and InSAR. Presentation at the Southeast Texas Subsidence Area Control Workshop, National Geodetic Survey and Conrad Blucher Institute, March 5, 2021.
- 11. Tissot, P.E. (2020). Leveraging NWP for Operational Machine Learning Predictions for Coastal and Environmental Stakeholder. Presentation at the 2nd Workshop on Leveraging AI in the Exploitation of Satellite Earth Observations & Numerical Weather Prediction (NWP). October 22, 2020. Workshop in Slow Motion organized by NOAA Center for Weather and Climate Prediction, College Park, Md, remote presentation.
- 12. Davis, P., Tissot, P.E., Nelson, J., Caruso, K., Best, D., King, S., McGovern, A. (2020). Broadening the AI Workforce through a Community College Program. 27th National Advanced Technological Education (ATE) Conference, American Association of Community Colleges (AACC), Spotlight Session and Oral Presentation, 10/19-23/2020.
- Kamangir, H., Collins, W., Tissot, P., King, S.A., Dinh, H., Durham, N., and Rizzo, J. (2020). 3D Convolutional Deep Learning for Coastal Fog Predictions. NOAA 2nd Workshop on Leveraging AI in Environmental Sciences, poster virtual presentation, 9/29/2020, NOAA Center for Weather and Climate Prediction, College Park, MD. https://www.star.nesdis.noaa.gov/star/documents/meetings/2020AI/presentations/202009/20200929_Kamangir.pdf
- 14. Experts at Texas A&M University-Corpus Christi's Conrad Blucher Institute help public understand spread of COVID-19 with analyses, predictions, detailed maps, Texas Map Society, August 2020, submitted.
- 15. Philippe Tissot (2020). History and Potential of Artificial Intelligence for the Environmental Sciences. *Invited* presentation to start the NOAA STAR special seminar series on AI. Remote presentation, 3/24/2020. Over 200 attendees. https://www.star.nesdis.noaa.gov/star/seminars.php#TopExp23494. Archives at https://www.star.nesdis.noaa.gov/star/PastSeminars.php, recording at https://www.star.nesdis.noaa.gov/star/documents/seminardocs/2020/20200325 Tissot.mp4
- 16. Philippe Tissot (2020). Artificial Intelligence and Sea Turtle Conservation. *Invited* Presentation to the Coastal Issues Forum, Coastal Bend Bays Foundation, March. 2, Del Mar Economic Center, Corpus Christi, TX. http://www.baysfoundation.org/cif/
- 17. Philippe E Tissot and Donna Shaver (2020). Sea Level Rise, Subsidence and Beach Management: Present and Future Impact on Sea Turtle Nesting and Conservation. *Invited* Oral Presentation at the Southeast Regional Sea Turtle Network 2020 Meeting, Corpus Christi, Texas February 3-6, 2020.
- 18. Philippe Tissot (2020). AI Applications to the Earth Sciences: 35 years through the lens of the AMS AI Committee. Oral presentation at the 100th AMS Annual Meeting 19th Conference on Artificial Intelligence for Environmental Science, Boston, MA, January 14. https://ams.confex.com/ams/2020Annual/meetingapp.cgi/Paper/369727.
- 19. Philippe Tissot (2020). Machine Learning, NWP, Real-Time Measurements for Coastal, Weather and Environmental Predictions. Presentations to IBM, Andover, MA, 1/9/2020.
- 20. Quinn McColly, David Yoskowitz, Paul Montagna, Philippe Tissot, and Robert Mace (2019). "Data fusion; combining biophysical and economic data to model water prices." Paper presented at the Coastal and Estuarine Research Federation meeting in Mobile, Alabama

- 21. Philippe Tissot (2019). "Panel for the 1919 Hurricane: Environmental Science". Invited panelist at the Texas A&M University-Corpus Christi Historical Forum along with the Mary and Jeff Bell Library "100 Years After the Storm", Friday, Sept. 13, 2019, Texas A&M University-Corpus Christi.
- 22. Tissot, P.E. (2019). "The AMS AI Committee: 25 Years and counting of supporting the community". Invited presentation at the 1st Workshop on Leveraging AI in the Exploitation of Satellite Earth Observations & Numerical Weather Prediction (NWP). April 23-25, 2019, NOAA Center for Weather and Climate Prediction, College Park, Md.
- 23. Tissot, P.E., Collins, W., Hamid, Kamangir, Chuyen Nguyen, Michael Starek, Niall Durham (2019). "Leveraging NWP for ML Coastal Predictions and Other Coastal ML Applications". Poster presentation at the 1st Workshop on Leveraging AI in the Exploitation of Satellite Earth Observations & Numerical Weather Prediction", April 23-25, 2019, NOAA Center for Weather and Climate Prediction, College Park, Md.
- 24. Tissot, P.E. (2019). "Laguna Madre Water Temperature Prediction System for Mitigation of Cold Water Events". Invited presentation at the 2019 USFWS Wildlife Sportfish Restoration (WSFR) Region 2 (Texas, New Mexico, Arizona, Oklahoma) Retreat, Port Royal, Port Aransas, Texas.
- 25. Mukkavilli, S.K., McGovern, A. and Tissot, P. (2019). "Towards Planetary Intelligence: On the Synergistic Future of AI, Weather and Climate". Organizers of AMS AI Conference Panel with panelists Valliappa Lakshmanan, Gregory Dudek, Vipin Kumar, Lucas Joppa, January 8, 2019 American Meteorological Society Annual Meeting, Phoenix, Az.
- 26. Mukkavilli, S. K., A. Bara, D. J. Gagne II, P. Tissot, E. Campos, A. R. Ganguly, L. Joppa, D. Meger and G. Dudek (2019), EnviroNet: ImageNet for Environment, 18th AMS Conference on Artificial and Computational Intelligence and its Applications to the Environmental Sciences, Phoenix, AZ, 1/5-10/19
- 27. Satterfield E. (Organizer), Tissot, P.E. (facilitator) (2019. "Statistics vs Machine Learning for Complex Problems: White, Black or Grey Boxes?". Town Hall with panelists Elana Fertig, David John Gagne, Sebastian Lerch, Amy McGovern, Elaine Yang. Town Hall organized at the 18th Conference on Artificial and Computational Intelligence and its Applications to the Environmental Sciences, January 9, Phoenix Az.
- 28. Xiaopeng Cai, Philippe Tissot (presenter), Chuyen Nguyen, Michael J. Starek, "Estimates of Spatial Variability of Digital Elevation Models from Ensemble Neural Networks", Oral Presentation at the 2019 American Meteorological Society Annual Meeting, Phoenix, Az.
- 29. Tissot, P.E. and McGovern, A. (2019). "Perspectives on key challenges from experienced STAC Chairs: Committee on Artificial Intelligence Applications to Environmental Science". Invited presentation at the 2019 STAC Annual Meeting, January 6, Phoenix, Az.
- 30. Tissot, P. "Impacts of Sea Level Rise and Subsidence along the Texas Coast". Invited presentation to Ingleside on the Bay residents, December 5, 2018, Beach Club, Ingleside on the Bay, Texas.
- 31. Tissot, P., Reisinger, A., Besonen, M, (2018). Spatial Variability of Relative Sea Level Rise Along the Texas Coast. Oral presentation at the 2018 American Shore and Beach Preservation Association National Conference, October 31-November 2, 2018, Galveston, Texas.
- 32. Tissot, P. "Sea Level Rise and Coastal Flooding: Causes Differences Progression". Oral presentation and panel participation at the Gulf of Mexico Climate and Resilience Outreach Community of Practice Workshop, May 1, 2018, Port Aransas, Texas.
- 33. Shaver, D., Tissot, P., Streich, P., Walker, J., Rubio, C., Amos, A., George, J.A., Pasawicz, M.R. and Purvin, C. (2018). "Hypothermic stunning of green sea turtles in a western Gulf of Mexico foraging habitat". Presentation at the Southeast Regional Sea Turtle Meeting 2018, February 14, Myrtle Beach, South Carolina.
- 34. Tissot, P., Buchanan, M. & Durham, N. (2018). Neural Network Surge Predictions: Design, Implementation, History, and Performance Comparison. Oral Presentation at the 2018 American Meteorological Society Annual Meeting, Austin, Tx. https://ams.confex.com/ams/98Annual/webprogram/Paper337404.html.
- 35. Starek, M., Tissot, P. & Nguyen, C. (presenter) (2018). Space-Time Cube and Cluster Representation of Evolving Landforms at Local and Regional Scales Using Lidar Time Series Data. Oral Presentation at the 2018 American Meteorological Society Annual Meeting, Austin, Tx, Jan 22-26.

- https://ams.confex.com/ams/98Annual/webprogram/Paper337221.html.
- 36. Tissot, P., Reisinger, A. and Besonen, M. (2017). Variability of Relative Sea Level Rise: Spatial and Temporal Correlations in Northwest Gulf of Mexico. Presentation at the 2017 AGU Conference, New Orleans, December 11-15. https://agu.confex.com/agu/fm17/meetingapp.cgi/Paper/262917.
- 37. Tissot, P. (2017). Spatial variability of Relative Sea Level Rise Along the Texas Coast: Impact and Measurements. Presentation Texas A&M University Kingsville Environmental Engineering Graduate Seminar, November 3, 2017.
- 38. Philippe Tissot (2017). Sea Level Rise along the TX Coast. Invited presentation at the National Weather Service Fall Seminar, Corpus Christi, Texas, November 2.
- 39. Starek, M.J., C. Nguyen, and P. Tissot (2017). Fusion of Terrestrial Laser Scanning and UAS Imaging for Marsh Observation, American Shore and Beach Preservation Association (ASBPA) Annual Conference, Fort Lauderdale, FL, October 26.
- 40. Philippe Tissot (2017). Nuisance flooding patterns along the Coastal Bend. Invited presentation at the Resilient Texas: Planning for Sea Level Rise Workshop, Port Aransas, Texas, August 8. https://missionaransas.org/resilient-texas-planning-sea-level-rise
- 41. Philippe Tissot (2017). SLR: Spatial variability and interpreting data based on local and regional contexts. Invited presentation at the Resilient Texas: Planning for Sea Level Rise Workshop, Port Aransas, Texas, August 8. https://missionaransas.org/resilient-texas-planning-sea-level-rise
- 42. Philippe Tissot (2017). Sea Level Change. Invited presentation at the Texas Surf Museum, Corpus Christi, Texas, July 20.
- 43. Tissot, P., Reisinger A., Besonen M. and Gibeaut, J. (2017). Spatial Variability of Relative Sea Level Rise at Embayment Scale and Impact on Nuisance Flooding. Poster Presentation at the Regional Sea Level Changes and Coastal Impacts Conference, New York, NY, July 10-14.
- 44. Tissot, P.E. and Davidson, P. (2017). Sea Level Rise & Downtown Corpus Christi: Past, Present and Future. Oral Presentation, 2017 Coastal Bend Hurricane Conference, Robstown, Texas, May 3-4. https://www.cbrac.org/wp-content/uploads/2017/04/17CBHurrConf-Detailed-Schedule.pdf
- 45. Tissot, P., Reisinger A. and Besonen M. (2017). Spatial Variability of Relative Sea Level Rise at Embayment Scale and Impact on Nuisance Flooding. Oral Presentation at the 2017 Meeting of the Texas Section of the American Shore and Beach Preservation (ASBPA), Port Aransas, Texas, April 24-25, 2017.
- 46. Naismith, J. and Tissot, P. (2017). 2015-2016 Nuisance Tidal Flooding and Sea Level Anomalies On The Texas Coast. Oral presentation at the 2017 Meeting of the Texas Section of the American Shore and Beach Preservation (ASBPA), Port Aransas, Texas, April 24-25, 2017.
- 47. Tissot, P.E. & Davidson, P. (2017). Relative Sea Level Rise and Downtown Corpus Christi. Invited presentation at the 2017 Gulf of Mexico Alliance (GOMA) All Hands Meeting, March 29-31, Houston, Tx.
- 48. Tissot, P., Reisinger A. and Besonen M. (2017). Spatial Variability of Relative Sea Level Rise at Embayment Scale and Impact on Nuisance Flooding. Oral Presentation at the 2017 American Meteorological Society Annual Meeting, Seattle, WA. https://ams.confex.com/ams/97Annual/webprogram/Paper316098.html.
- 49. Tissot, P., Davidson, P., Reisinger, A., and Besonen, M. (2016). Relative Sea Level Rise and Downtown Corpus Christi: Past, Present, Future. Coastal Issues Forum, Coastal Bend Bays Foundation, Nov. 14, Del Mar Economic Center, Corpus Christi, TX.
- 50. Tissot, P. & Reisinger, A. (2016). Spatial Variability of Relative Sea Level Rise in the Coastal Bend. oral presentation at the 2016 Gulf Coast Association of Geological Societies and Gulf Coast Section of SEPM, Sept. 18-20, Corpus Christi, TX.
- 51. Khan, R.H., Smith-Engle, J.M., Tissot, P. & Murgulet, D. (2016). Temporal Spatial and Depth Variations of Ground Water Chemistry: An Indicator of Hydro-Geochemical Evolution in Shallow Coastal Aquifers, South Texas. Gulf Coast Association of Geological Societies Transactions, 66, 313-320.
- 52. Besonen, M, Tissot, P., Zimba, P., McKay, M., Huang, I., Hill, E., and Silliman, J., "Historical Water Quality and

- Environmental Changes in Baffin Bay as Inferred from a Multiproxy Sediment Core Study", oral presentation at the 2016 Texas Bays and Estuaries Meeting, The University of Texas Marine Science Institute, Port Aransas, Texas April 13-14, 2016.
- 53. Tissot, P. and Dell. L., "Coastal Bend Nearshore Currents and Waves: Measurements and Models", oral presentation at the ASBPA Texas Chapter Symposium, "Texas Shorelines Bays to Beaches", The University of Texas Marine Science Institute, Port Aransas, Texas April 1, 2016. (http://www.texasasbpa.org/site/asbpa-2016-symposium/)
- 54. Reisinger, A., Tissot, P. and Gibeaut, J., "Satellite monitoring of suspended sediments patterns in Texas Estuaries: distinguishing between natural processes, dredging, and commercial fishing", oral presentation at the ASBPA Texas Chapter Symposium, "Texas Shorelines Bays to Beaches", The University of Texas Marine Science Institute, Port Aransas, Texas April 1, 2016.
- 55. Tissot, P., "Relative Sea Level Rise around the Gulf of Mexico and its Impact: from Nuisance Flooding to Large Surges", Invited Presentation at the NOS Hydrographic Services Review Panel Meeting, Galveston, TX, March 15-17, 2016.
- 56. Tissot, P., and Larry Dell (2016), "Coastal Currents and Waves along the Texas Coastal Bend: Measurements and Model Comparisons", Proceedings of and oral presentation at the 14th Symposium on the Coastal Environment, part of the AMS 96th Annual Meeting, 10-14 January 2016, New Orleans, Ls. [Both available online at https://ams.confex.com/ams/96Annual/webprogram/Paper290365.html].
- 57. Tissot, P. "Waves, Currents, Water Levels And Flooding Frequency In The Coastal Bend", Presentation at the Texas Beaches and Dunes: Science and Management Workshop, September 24-25, 2015, Corpus Christi, Texas.
- 58. Warner, N., Tissot, P. and Sterba-Boatwright, "Predicted Inundation Frequencies Due to Relative Sea-Level Rise: Comparison between Texas and Other Gulf of Mexico Locations" oral presentation at the ASBPA Texas Chapter Symposium, March 20th, 2015, Corpus Christi, Texas.
- 59. Tissot, P., Rizzo, J. and Williams, D., "Nearshore Wave and Current Measurements in the Coastal Bend", oral presentation at the ASBPA Texas Chapter Symposium, March 20th, 2015, Corpus Christi, Texas.
- 60. Tissot, P., Darius Stephen, David Fonseca, Hoang Chau, Duc Tran, Laura Pulgarin and Selvy Letlora (2015) "Weather for the Road: a Mobile Solution", presentation at the 13th Symposium on the Application of Artificial Intelligence to Environmental Sciences, part of the AMS 95th Annual Meeting, 4-8 January 2015, Phoenix, Az. [Available online at https://ams.confex.com/ams/95Annual/videogateway.cgi/id/29823?recordingid=29823].
- 61. Tissot, P., Larry Dell, James Rizzo and Deidre Williams (2015), "Nearshore Measurements of Wave Climate and Current Profiles along the Texas Coastal Bend", Proceedings of and oral presentation at the 13th Symposium on the Coastal Environment, part of the AMS 95th Annual Meeting, 4-8 January 2015, Phoenix, Az. [Both available online at https://ams.confex.com/ams/95Annual/webprogram/Paper269560.html].
- 62. Tissot, P., Bradley Koskowich, Darius Stephen and Francesca Picarazzi (2015), "Near Real-Time Coastal Measurements and Predictions on Mobile Devices", oral presentation at the 13th Symposium on the Coastal Environment, part of the AMS 95th Annual Meeting, 4-8 January 2015, Phoenix, Az. [Available online at https://arms.confex.com/ams/95Annual/webprogram/Paper269457.html].
- 63. P.E. Tissot, J. Rizzo and D. Williams (2014) "Nearshore Measurements and Correlations of Wave and Current Profiles", oral presentation at the 2014 American Shore and Beach Preservation Association National Conference, October 15-17, 2014, Virginia Beach, Virginia.
- 64. Philippe E. Tissot, Wen Bo Zhu, Scott Duff, Doug Martin, Mike Rink and James Rizzo (2014) "Development, Assessment and Implementation of an Automated Gap Filling Method for Tide Stations with Dual Water Level Sensors", oral presentation and proceedings of Oceans' 14, September 15-18, St. Johns, Newfoundland, CA. doi: 10.1109/OCEANS.2014.7003065.
- 65. James Rizzo, Philippe Tissot and Scott Duff, "The Texas Coastal Ocean Observation Network", oral presentation and proceedings of Oceans' 14, September 15-18, St. Johns, Newfoundland, CA. doi: 10.1109/OCEANS.2014.7003131.
- 66. Mark Besonen, Paul Zimba, Erin Hill, Philippe Tissot, Mark McKay, Brien Nicolau, Xinping Hu, and Jim

- Silliman (2014) Long-term Water Quality and Environmental Changes in Baffin Bay as Inferred from Sediment Cores—Preliminary Results. Presentation at the 2014 Texas Bays and Estuaries Meeting, April 23-24, Port Aransas, TX.
- 67. Wade, H., Tissot, P. and McLaughlin (2014) Quantitative Modeling of Flood Insurance Claims, Inundation, and Sea Level Rise as a tool for Coastal Planning and Policy. Poster presentation at the Planning for Disaster Resilience Symposium, College Station, TX, April 4-5, 2014.
- 68. Starek, M., Bridges, D., Gibeaut, J. and Tissot, P. (2014) Unmanned Aerial System for Coastal Reconnaissance of the Near-shore Zone. Presentation at the ASPRS 2014 Annual Conference, March 23-28, Louisville, KY.
- 69. McKay, M. C., Besonen, M. (Author), Tissot, P., Zimba, P. V., Hill, E. M. (2014). Understanding the Development of South Texas Bays and Estuaries from a Paleoperspective. 2014 Ocean Sciences Meeting, ASLO, AGU, and TOS; Association for the Sciences of Limnology and Oceanography, American Geophysical Union, and The Oceanography Society, Honolulu, Hawaii USA. (February 2014).
- 70. Besonen, M. Zimba, P., Hill, E., Tissot, P., McKay, M. and Silliman, J. "Finding the Baseline Putting Recent Eutrophication of Two South Texas Coastal Water Bodies Into Perspective by Using Sedimentary Records to Examine the Long-Term, Natural Variability of the Systems", poster presentation OS23C-1669, 2013 AGU Fall meeting, December 9-13, 2013, San-Francisco, CA.
- 71. P.E. Tissot and James Rizzo (2013) "The Texas Coastal Ocean Observation Network (TCOON)", oral presentation at the 2013 American Shore and Beach Preservation Association National Conference, October 22-25, 2013, South Padre Island, Texas, http://www.asbpa.org/conferences/conf fall 13 sessions.htm.
- 72. Tissot, P.E. (2013), "Sea Level Rise and Storm Surge: Model and Discussion of Future Coastal Inundation Frequencies", Invited Presentation, Impacts of Sea Level Rise and Hurricane Storm Surge on the Corpus Christi Bay Community Workshop organized by the Nature Conservancy and the Coastal Bend Bays & Estuaries Program, Corpus Christi, Texas, August 27.
- 73. Tissot, P.E. (2013) "Sea Level Rise, Climate Change and Coastal Planning", Invited Presentation, 2013 Coastal Bend Hurricane Conference, Robstown, Texas, May 14-16.
- 74. P.E. Tissot (2013) "CBI-TCOON: An Integrated Observations and Operational Predictions System for Gulf of Mexico Coastal Waters" oral presentation at the 11th Symposium on the Coastal Environment, part of the AMS 93rd Annual Meeting, 6-10 January 2013 in Austin, TX, https://ams.confex.com/ams/93Annual/webprogram/Paper223485.html.
- 75. Tissot, P.E. (2012) "Climate Change and the Gulf Coast". Invited presentation at the Texas Center for Climate Studies 'Gulf of Mexico Regional Climate Modeling Workshop', May 30-31, 2012, College Station, Texas.
- 76. Philippe E. Tissot and Waylon Collins (2012) "Comparison of Machine Learning Techniques for the Prediction of Thunderstorm Location", presentation at the 10th Conference on the Application of Computational Intelligence to Environmental Science, AMS 92nd Annual Meeting, January 2012, New Orleans, Ls.
- 77. P.E. Tissotl, G. Jeffress*1, N. Warnerl, X. Huangl, and D. Martin (2012) "Variability and Local Impact of Sea Level Rise in Economically Sensitive Areas Dominated by Vertical Land Motion" presentation at the 20th International Conference on GeoInformatics, Hong Kong, June 15-17, 2012.
- 78. Froeschke, B.F., Tissot, P. and Stunz, G.W. (2011). Comparison of Spatio-Temporal Models for Juvenile Southern Flounder (Paralichthys Lethostigma) Habitat Use Along the Northern Gulf of Mexico using Boosted Regression Trees and Artificial Neural Networks. American Fisheries Society Annual Meeting, Seattle, WA.
- 79. Philippe Tissot, "Application of Computational Intelligence for the Design and Implementation of Real-Time Coastal Models", oral presentation at the Twelfth International Conference on Estuarine and Coastal Modeling, St. Augustine, Fl, Nov. 7-8, 2011.
- 80. Scott C. Cordero, Philippe E. Tissot and Jennifer Kennedy, "Coastal Bend Collaborative Consortium of Streaming Atmospheric and Oceanographic Environmental Data", presentation at the Coastal Zone 2011 conference, Chicago, Illinois July 17 to July 21, 2011.
- 81. Philippe E. Tissot, "Predictive Modeling and the Texas Coastal Ocean Observation Network (TCOON)", invited presentation, Environmental Engineering Seminar, Texas A&M University-Kingsville, Kingsville, TX, April, 11,

2011.

- 82. Tissot, P.E. "Operational Models for the Support of Navigation and Coastal Decisions at CBI-TCOON", NOAA Center for Operational Oceanographic Products and Services (CO-OPS), Silver Spring, MD, 11 March 2011.
- 83. Tissot, P.E. "Relative Sea Level Rise and the Texas Coastal Ocean Observation Network (TCOON)", NOAA Center for Operational Oceanographic Products and Services (CO-OPS), Silver Spring, MD, 10 March 2011.
- 84. Simoniello, C., Tissot, P., McKee, D., Adams, A., Ball, R., Butler, R. A Cooperative Approach to Resource Management: Texas Gamefish Win. Presentation at the 2011 ASLO Aquatic Sciences Meeting, San Juan, Puerto Rico, February 13-18, 2011.
- 85. Philippe E. Tissot, "Sample Application of CI: Coastal Water Level Predictions", presentation at the 2011 American Meteorological Society Educational Forum on Computational Intelligence Techniques, Seattle, January 23, 2011.
- 86. Philippe E. Tissot, "Coastal Modeling at the Texas Coastal Ocean Observation Network (TCOON)", presentation at the Technical Session of the 2010 TCOON Meeting, Austin, Texas June 2, 2010.
- 87. Philippe E. Tissot, "Coastal Modeling and the Texas Coastal Ocean Observation Network (TCOON)", invited presentation, US Army Corps of Engineer, ERDC, Coastal & Hydraulics Laboratory, Vicksburg, Mississippi, May 27, 2010.
- 88. Philippe E. Tissot, "CBI Real-time Coastal Predictions", invited presentation at the 2010 Corpus Christi Weather Forecast Office Marine Workshop, Corpus Christi, Tx, May 14, 2010.
- 89. Alexei Sadovski, Gary Jeffress, Philippe Tissot, Scott Duff, and S. Ussery "Mean Sea Level-What are the Recent Changes Along the Texas Gulf Coast?", Poster presentation at the 2010 Sea Level Rise Conference, Corpus Christi, Texas, March 1-3, 2010.
- 90. Philippe E. Tissot, Lori Busch and Doug Martin, "Determining the Tidal or Non Tidal Nature of Florida Keys Water Level Stations", Poster presentation at the 2010 Ocean Sciences Meeting, Portland, Oregon, February 22-26, 2010.
- 91. Tissot, P.E. and Rizzo, J. "CBI-TCOON: An Integrated Observation and Operational Forecast System for the Gulf of Mexico", invited presentation, NOAA Center for Operational Oceanographic Products and Services (CO-OPS), Silver Spring, MD, 18 November 2009.
- 92. Philippe E. Tissot, "A Comparative Discussion of Machine Learning and Physical Models for Coastal Ocean Observation Networks", Proceedings of the Data Integration and Management on the Gulf of Mexico Workshop, Corpus Christi, TX, May 14-15, 2009, pp. 65-74.
- 93. Niall Durham, Philippe Tissot, James Davis and Scott Duff, "On Demand Neural Network Based Water Level Prediction System", Data Integration and Management on the Gulf of Mexico Workshop, Corpus Christi, TX, May 14-15, 2009, p. 88.
- 94. Philippe Tissot, Daniel Prouty, Don Mulcare, James Rizzo, Stacey Lyle, Gary Jeffress, "An Offshore Water Level Network for Hurricane Storm Surge Measurements and Predictions", Presentation at the Gulf Coast Hurricane Preparedness, Response, Recovery & Rebuilding Conference, November 11-14, 2008, Mobile, Alabama.
- 95. Philippe Tissot, Daniel Prouty, Gary Jeffress and James Rizzo, "TCOON Based Storm Surge Predictions for Texas Bays and Estuaries and Future Offshore Extension", Presentation at the Severe Storm Prediction and Global Climate Impact on the Gulf Coast, October 29-31, 2008, Rice University, Texas.
- 96. Philippe Tissot, "Coastal Modeling at the Division of Nearshore Researcher (DNR)", presentation at the 2008 TCOON Stakeholder Meeting, Corpus Christi, Texas, July 10, 2008.
- 97. Philippe Tissot, James Davis, Niall Durham and Waylon Collins, "Implementation and performance of a neural network based surge prediction system for the Texas coast", presentation at the 6th Conference on Artificial Intelligence Applications to Environmental Science, AMS 88th Annual Meeting, January 2008 New Orleans, Ls. (http://ams.confex.com/ams/88Annual/techprogram/paper_135669.htm)
- 98. Daniel Bruce Prouty, Philippe Tissot and Arif A. Anwar, "Using ensembles of artificial neural networks for storm surge predictions in the North Sea" presentation at the 6th Conference on Artificial Intelligence Applications to

- Environmental Science, AMS 88th Annual Meeting, January 2008 New Orleans, Ls. (http://ams.confex.com/ams/88Annual/techprogram/paper_128464.htm)
- 99. Waylon Collins, Philippe Tissot, "An Artificial Neural Network to Forecast Thunderstorm Location: Performance Enhancement Attempts" Proceedings of the 19th Conference on Probability and Statistics, AMS 88th Annual Meeting, January 2008 New Orleans, Ls.(http://ams.confex.com/ams/88Annual/techprogram/paper 132577.htm)
- 100. Waylon Collins, Philippe Tissot, "An Artificial Neural Network to Forecast Thunderstorm Location: A Search for More Relevant Land Surface Input Data", proceedings of the 22nd Conference on Weather Analysis and Forecasting/18th Conference on Numerical Weather Prediction, June 25-29 2007, Park City, Utah.
- 101. Philippe Tissot and Felischa Cullins, "Radionuclide Transport Mechanisms from Mine Spoil & Pits" Presentation at the 2007 Global Uranium Symposium: U2007 Taking U into the Future, May 20,24, 2007, Corpus Christi, Texas.
- 102.Philippe Tissot, "DNR/TCOON Real-Time Surge Prediction Models", Presentation at the 2007 Ozone Season Meteorologist Briefing, April 27th, Corpus Christi, Texas
- 103.Philippe Tissot, Beate Zimmer, "ANN Training Methods Targeting Performance during Extreme Events", presentation at the 5th Conference on Artificial Intelligence Applications to Environmental Science, AMS 87th Annual Meeting, 14-18 January 2007 in San Antonio, TX (http://ams.confex.com/ams/87ANNUAL/techprogram/paper_118853.htm)
- 104. Waylon Collins, Philippe Tissot, "Use of an Artificial Neural Network to Improve the Forecasting of Thunderstorm Location", proceedings of the 5th Conference on Artificial Intelligence Applications to Environmental Science, AMS 87th Annual Meeting, 14-18 January 2007 in San Antonio, TX. (http://ams.confex.com/ams/pdfpapers/117375.pdf)
- 105. Sadovski, Zimmer, Steidley, Sterba-Boatwright, Tissot, "Coastal and Estuarine Water Levels as a Random Signal", in Programa y Resumenes de XV Simposio Internacional de Metodes Matematicos Aplicados a las Ciencias, Universidad de Costa Rica, 2006.
- 106.Zimmer, G. Beate, Phillipe E. Tissot, Jeremy Flores, Zack Bowles, Alexey L. Sadovski, Carl Steidley, "Water Level Forecasting Along the Texas Coast: Interdisciplinary Research With Undergraduates," Proceedings of the Annual Conference of the American Society for Engineering Education, CD-ROM Session 1165, Portland, Oregon, June, 2005.
- 107. Steidley, Carl, Rush, Richard, Thomas, David, Tissot, Philippe, Sadovski, Alex, Bachnak, Ray, "Signal Post-Processing as Applied to Texas Coastal Ocean Observation Network (TCOON) Data," Proceedings of the Seventh Controls and Applications Conference of The International Association of Science and Technology for Development (IASTED), Cancun, Mexico, May 2005.
- 108. Alexey Sadovski, Carl Steidley, Aimee Mostella, Philippe Tissot, and Beate Zimmer "Real Time Web Availibility of Statistical Models for Water Levels Along the Texas Coastline", 2nd International conference on informatics in control, automation and robotics, Spain, 2005.
- 109.Alexey Sadovski, Carl Steidley, Garry Jeffress and Philippe Tissot, "Multi Objective Decisions for Artificial Intelligence Systems Based on Ratings", presentation at 17th IMACS World Congress Scientific Computation, Applied Mathematics and Simulation, Paris, France July 11 - 15, 2005.
- 110.P.E. Tissot, S. Duff, P. Michaud, J. Rizzo and G. Jeffress, "DNR-TCOON: An Integrated Observation and Operational Forecasts System for the Gulf of Mexico", Proceedings of the Symposium on Living in the Coastal Zone, San Diego, California, January 9-13, 2005.
- 111.P.E. Tissot, S. Duff, A. Mostella and K. Duraisamy, "Performance and Comparison of Water Level Forecasting Models for the Texas Gulf Coast" invited presentation at the Corpus Christi Weather Forecasting 2004 Coastal Flood workshop, Corpus Christi, Texas, November 17th, 2004.
- 112.A.L. Sadovski, C. Steidley, G. Jeffress, P.E. Tissot, P. Michaud, and J. Champane, "Modeling and Computational Simulation of Water Levels in the Corpus Christi Bay Based on Real-Time Data", Proceedings of the International Conference on Computer, Communication, and Control Technologies, CCCT 03.

- 113.P. Tissot, N. Reynolds, L. Seiger, V. Dulip and G. Stuart, "Impact of Preliminary Team Building Activities on Student Attitudes and Overall Class Performance in Middle and High School Science Classrooms", presentation at the Fourth Annual Chancellor's Invitational Conference, Houston, Texas, June 13, 2003.
- 114.P.E. Tissot, "Neural Network Modeling and the Texas Coastal ocean Observation Network", invited presentation at the Fourth Seminar on Selected Topics of Applied Mathematics on Ocean Engineering, Mexico City, Mexico, May 28, 2003.
- 115.A.L. Sadovski, P. Michaud, C. Steidley, J. Tishmack, K. Torres, A. Mostella, "Integration of Statistics and Harmonic Analysis to Predict Water Level in Estuaries and Shallow Waters of the Gulf of Mexico", presentation at the MATA International Conference (Cancun, Mexico), April 2003.
- 116.P.E. Tissot. N. Reynolds, L.Seiger and V. Dulip, "Impact of Preliminary Team Building Activities on Student Attitudes and Overall Class Performance For Inquiry Based High School Science Curricula", presentation at the 2003 CEDER Symposium, Texas A&M University-Corpus Christi, March 1st, 2003.
- 117.P.E. Tissot, D.T. Cox, and P.R. Michaud, "Optimization and Performance of a Neural Network Model Forecasting Water Levels for the Corpus Christi, Texas, Estuary", Proceedings of the 3rd Conference on the Applications of Artificial Intelligence to Environmental Science, Long Beach, California, February 2003.
- 118.P.E. Tissot, P. Michaud, D. Cox, Z. Bowles, J. Stearns, A. Drikitis, "Neural Network Forecasting of Water Levels along the Texas Gulf Coast" invited presentation at the National Weather Service 2003 Coastal Flood workshop, Corpus Christi, Texas, January 30, 2003.
- 119.P. E. Tissot, "Origin, Measurement, and Environmental Applications of Radioactivity in South Texas", Invited talk to the Texas A&M University-Kingsville Public Lecture Series, Kingsville, Texas, March 21, 2002.
- 120. W.D. James, P.E. Tissot, A. Ghatak-Roy, T. Hossain, B.J. MacDonald, J. Bernard, and C. Wang, "Evaluation of Copper Migration in Silicon Oxide Layers by Neutron Activation Analysis", invited talk to the 2002 American Nuclear Society Winter Meeting, Washington, DC.
- 121.A.L. Sadovski, P.E. Tissot, P.R. Michaud, and C. Steidley, "Statistical and Neural Network Modeling and Predictions of Tides in the Shallow Waters of the Gulf of Mexico", Proceedings of the 2002 WSEAS International Conferences on System Science, Applied Mathematics and Computer Science, Power Engineering Systems, Rio de Janeiro, Brazil, October 21-24, 2002, pp 2131-2136.
- 122.A.R. Patrick, W.G. Colllins, P.E. Tissot, A. Drikitis, J. Stearns, P. Michaud, D. Cox, "Use of the NCEP MesoEta Data in a Water Level Predicting Neural Network" Proceedings of the 19th AMS Conference on Weather Analysis and Forecasting/15th AMS Conference on Numerical Weather Prediction, 12-16 August 2002, San Antonio, Texas, pp. 369-372, 2002.
- 123.P.E. Tissot, J. Perez, F. J. Kelly, J. Bonner, P. Michaud "Forecasting HF Radar Current Maps using Dynamic Neural Network Modeling", presentation at the 2001 HF Radar Workshop, Miami, Florida on April 4-5, 2001,
- 124.P. E. Tissot, "Neural Network Forecasting of Water Levels", presentation at the 2001 Southern Region Marine Forecaster Workshop, Corpus Christi, Texas, March 2001.
- 125. Tissot, P.E., Perez, J., Kelly, F.J., Bonner, J.S. and Michaud, P., "Dynamic neural network modeling of HF radar current maps for forecasting oil spill trajectories", Proceedings of the twenty-fourth Arctic and Marine Oil spill Program (AMOP) Technical Seminar, Environment Canada, No. 24 (2001) 519-529.
- 126.P.E. Tissot, D.T. Cox, P. Michaud, "Water Level Changes on the Texas Coast", invited presentation to the quarterly meeting of the Intra Coastal Waterway (ICW) users meeting, Corpus Christi, Texas, January 2001.
- 127.P. E. Tissot, P. Michaud, D. Cox, "A New Real Time Model for the Forecasting of Water Level Changes", invited presentation at the Texas Gulf Coast Emergency Manager Association conference, Corpus Christi, Texas, October 2000.
- 128.P.E. Tissot, T. Hossain, A. Ghatak-Roy, and R.R Hart, "Silicide Characterization by RBS/TOF" poster presentation at the 14th international conference on the applications of accelerators in research and industry, Denton, Texas, November 4-7, 1998.
- 129.J. Colvin, T. Mann, S. Peck, P. Tissot, and J. Zeigler, "Second Generation of Micro Superconducting Magnetic

- Energy Storage (MicroSMES) Sub-Systems", Superconductor Industry, winter 1997 (1998) 12-17.
- 130.Invited speaker at the 1997 Cryogenic Society of America (CSA) short course: "Application of Pulse Tube Cryocoolers for Gamma Ray Spectroscopy", July 1997.
- 131.Invited talk at Sam Houston University, "Overview of Prompt Gamma Neutron Activation Analysis (PGNAA)", May 1997.
- 132.J. McCoy, P.E. Tissot & R.R Hart, "High Fluence Implantation of Ge into Heated <111> Silicon," poster presentation at the 12th international conference on the applications of accelerators in research and industry, Denton, Texas, 1994.
- 133.P.E. Tissot, J.C. McCoy & R.R Hart, "Germanium Silicon Layers Produced by Implantation of Silicon <100> Substrates," oral presentation at the fall 1993 meeting of the APS/AAPT (Texas section) in College Station, Texas (This presentation received an award for outstanding research paper from the APS industrial section sponsorship fund).
- 134.J.C. McCoy, P.E. Tissot & R.R Hart, "Medium Energy Ion Implantation of Germanium into Heated <111> Silicon," oral presentation at the fall 1993 meeting of the APS/AAPT (Texas section) in College Station, Texas.
- 135.B. Stewart, P.E.Tissot & R.R. Hart, "Measurement of Thin Carbon Surface Layers by Rutherford Backscattering," oral presentation at the fall 1993 meeting of the APS/AAPT (Texas section) in College Station, Texas.
- 136.P.E. Tissot & R.R Hart, "Ion Beam Heating of Thin Silicon Membranes," poster presentation at the 11th international conference on the applications of accelerators in research and industry, Denton, Texas, 1992.

Student Conference Proceedings, Abstracts, and Presentations (113presentations, star '*' added for award, presently at 21)

- 1. Wen, Tissot, Chu, Hua, InSAR Poster presentation at the 2021 ASBPA Coastal Conference, New Orleans, LS, 10/1/2021 (https://asbpa.org/2021-conference-program/).
- 2. Vicens Miquel, M., Medrano, A., Tissot, P.E., Kamangir, H., Starek, M. (2021). Wet/Dry Shoreline Detection Using Deep Learning. Oral Presentation. Presentation at the 2021 ASBPA Coastal Conference, New Orleans, LS, 10/1/2021 (https://asbpa.org/2021-conference-program/).
- 3. Kamangir, H. FogNet description including Physics groupings of predictors. Presentation at the 2021 Trustworthy Artificial Intelligence for Environmental Science (TAI4ES) Summer School, organized by the National Center of Atmospheric Research and the NSF AI2ES Institute, July 26-29, 2021 (https://docs.google.com/document/d/1HVvBR_8DoHxRvUUYKL31LskK1tIjo2sByEEnTINyYEA/edit).
- 4. Krell Evan. XAI methods applied to FogNet (2021). Presentation at the 2021 Trustworthy Artificial Intelligence for Environmental Science (TAI4ES) Summer School, organized by the National Center of Atmospheric Research and the NSF AI2ES Institute, July 26-29, 2021 (https://docs.google.com/document/d/1HVvBR_8DoHxRvUUYKL31LskK1tIjo2sByEEnTINyYEA/edit).
- 5. Qiao, X., Chu, T., Tissot, P. Louis, J. (2021). Land subsidence with tide gauge, radar altimetry and GNSS: a case study at subsiding coast in Texas. Presentation at the INO GNSS+ 2021 meeting, September 20-24, 2021, St. Louis, Mo (accepted).
- 6. Duff, C. & Tissot, P.E. (2021). Sea turtle cold stunning event water temperature predictions for resource management using machine learning. Presentation at the 2021 Coastal Bend AI2ES Retreat, Corpus Christi, Texas, July 19.
- 7. Estrada, B., Presentation at the 2021 Coastal Bend AI2ES Retreat, Corpus Christi, Texas, July 19.
- 8. Zhong, W. Chu, T. and Tissot, P. (2021). InSAR Measurements of Land Subsidence over the Texas Coastal Areas. Presentation at the Texas meeting of the American Shore and Beach Preservation Association, April 22, 2021.
- 9. Dinh, H., Kamangir, H., Collins, W., King, S.A., Tissot, P., Durham, N., and Rizzo, J. (2021). Deep Learning Predictions of Coastal Fog Using Autoencoders. Oral Presentation at the 2021 American Meteorological Society Annual Meeting, New Orleans, Ls.. https://ams.confex.com/ams/101ANNUAL/meetingapp.cgi/Paper/380605.

- *The presentation was awarded honorable mention in the student competition (34 posters and presentations)
- 10. Kamangir, H., Tissot, P., Collins, W., King, S. A., Dinh, H., Durham, N. and Rizzo, J. (2021). FogNet: A Multiscale 3D CNN with an Attention Mechanism and a Dense Block for Fog Predictions. Oral Presentation at the 2021 American Meteorological Society Annual Meeting, New Orleans, Ls.. https://ams.confex.com/ams/101ANNUAL/meetingapp.cgi/Paper/382528. *The presentation was awarded the third prize of the student competition (34 posters and presentations)
- 11. Kamangir, H., Collins, W., Tissot, P., King, S.A., Dinh, H., Durham, N. and Rizzo, J. (2020). FogNet: A 3D Attention Convolutional Neural Network for Fog Prediction. Presentation at the 2020 YOUMARES 11 Conference, Deutsche Gesellschaft für Meeresforschung, Hamburg, Germany.
- 12. Pilartes-Congo, Jose, Chu, V, Louis, Jason and Tissot, Philippe (2020) Visualizing GNSS and Tide Gauge Stations along the Gulf of Mexico: A decision-making Toll Support for Relative Sea-level Rise Management. Poster presentation at the 2020 ESRI virtual conference, July 13-16 Conference.
- 13. Bates, Sean, Durham, Niall, Williams, Jennifer, DeGrande, Jensen and Tissot, Philippe (2020). Sea Turtle Cold Stunning Event Automated Predictions & Analysis System. Poster Presentation at Southeast Regional Sea Turtle Network 2020 Meeting, Corpus Christi, Texas February 3-6, 2020.
- 14. DeGrande, Philippe and Tissot, Philippe (2020). Poster Presentation at the Southeast Regional Sea Turtle Network 2020 Meeting, Corpus Christi, Texas February 3-6, 2020.
- 15. McColly, Quinn, Tissot, P. and Yoskowitz, D. (2020). U.S. Water Prices: a Machine Learning Approach. Poster presentation at the 100th AMS Annual Meeting 19th Conference on Artificial Intelligence for Environmental Science, Boston, MA, January 13, 2020. https://ams.confex.com/ams/2020Annual/meetingapp.cgi/Paper/371294.
- DeGrande, Jensen, Tissot, P., Williams, J., Kamangir, H., Durham, N. and Bates, S. (2020). Comparison of shallow and deep neural network water temperature predictions for resource management during cold stunning events. Poster presentation at the 100th AMS Annual Meeting 19th Conference on Artificial Intelligence for Environmental Science, Boston, MA, January 13, 2020. https://ams.confex.com/ams/2020Annual/meetingapp.cgi/Paper/367326
- 17. Williams, Jennifer and Tissot, Philippe (2020). Precipitation-Based Modeling of Water Quality Within an Urban Recreational Watershed. Poster presentation at the 100th AMS Annual Meeting 19th Student Conference, Boston, MA, January 12, 2020.
- 18. Williams, Jennifer, Congo, Jose, DeGrande, Jensen and Tissot, Philippe (2020). Water Quality Assessment and Modeling of Poenisch Park Watershed. Poster presentation at the Texas Section of the American Shore and Beach Protection Association, Corpus Christi, Texas, April 16, 2019.
- Nguyen, Chuyen, Starek, M. J., Tissot, P., Cai, X. (2019). Assessment of Machine Learning Ensembles for Modeling DEM Uncertainty in Marshes with Terrestrial Laser Scanning. Oral Presentation at the 2019 American Meteorological Society Annual Meeting, Phoenix, Tx. https://ams.confex.com/ams/2019Annual/meetingapp.cgi/Paper/354576.
- Reisinger, A., Unruh, A., Tissot, P., and Lakshmanan, V. (2019). Building Custom Neural Net Models to Classify Coastal Imagery. Oral Presentation at the 2019 American Meteorological Society Annual Meeting, Phoenix, Tx. https://ams.confex.com/ams/2019Annual/meetingapp.cgi/Paper/355445.
- Xiaopeng Cai, Tissot, P., Nguyen, C., and Starek, M. J. (2019) Estimates of Spatial Variability of Digital Elevation Models from Ensemble Neural Networks. Oral Presentation at the 2019 American Meteorological Society Annual Meeting, Phoenix, Tx. https://ams.confex.com/ams/2019Annual/meetingapp.cgi/Paper/353869.
- 22. Chuyen, Nguyen, Starek, M.J., Tissot, Philippe and Gibeaut, James (2018). Unsupervised Clustering Method for Complexity Reduction of Airborne and Terrestrial 3D Point Cloud Data in Marshes. ASPRS IGTF Annual Meeting, Denver, Colorado: March 12-16.
- Chuyen, N., Starek, M., Tissot, P. & Gibeaut, J. (2018). Unsupervised Clustering Method for Complexity Reduction of Airborne and Terrestrial 3D Point Cloud Data in Marshes. Oral Presentation at the 2018 American Meteorological Society Annual Meeting, Austin, Tx.

- https://ams.confex.com/ams/98Annual/webprogram/Paper337339.html. * This presentation earned honorable mention in the AMS AI student presentations competition.
- 24. Cai, X., Nguyen, C., Tissot, P. & Starek, M. (2018) Self-Organizing Map Clustering of Terrestrial Lidar Data within Marshes. Oral Presentation at the 2018 American Meteorological Society Annual Meeting, Austin, Tx. https://ams.confex.com/ams/98Annual/webprogram/Paper337305.html. * This presentation earned honorable mention in the AMS AI student presentations competition.
- 25. Nguyen, Chuyen, Starek, M.J., Tissot, Philippe and Gibeaut, James (2017). Unsupervised Clustering Method for Complexity Reduction of Airborne and Terrestrial 3D Point Cloud Data in Marshes. AGU Fall Meeting, New Orleans, Louisiana: Dec 11-15.
- 26. Culver, M., Gibeaut, J.C., Shaver, D.J., Tissot, P.and Starek, M.J., "Beach Geomorphology and Kemp's Ridley (Lepidochelys kempii) Nest Site Selection along Padre Island, Texas, USA." Oral Presentation EP22B-01, 2017 AGU Conference, New Orleans, December 11-15, 2017.
- 27. Nguyen, Chuyen T., Starek, Michael J. and Philippe Tissot (2017) Multi-scale voxel segmentation for terrestrial lidar data within marshes. IGTF 2017 Imaging and Geospatial Technology Forum 2017, ASPRS Annual Conference, Baltimore, Md, March 12-16.
- 28. Dell, L., Tissot, P., Williams, D., Koskowich, B. and Durham, N. (2017) "Hydrodynamic Modeling of Engineered Inlet and Canal Extension" oral presentation at the ASBPA Texas Chapter Symposium, April 25, 2017, Port Aransas, Texas. http://www.texasasbpa.org/site/asbpa-2017-symposium/.
- 29. Nguyen, C, Starek, M., Tissot, P. and Gibeaut, J. (2017) "Multi-Scale Voxel Segmentation for Terrestrial LiDAR Data within Marshes", Poster presentation at the 2017 International LiDAR Mapping Forum, February 13-15, Denver, CO.
- 30. Nguyen, C, Starek, M., Tissot, P. and Gibeaut, J. (2017) "Multi-Scale Voxel Segmentation for Terrestrial Lidar Data within Marshes", Oral Presentation at the 2017 American Meteorological Society Meeting, January 22-26, Seattle, WA. https://ams.confex.com/ams/97Annual/webprogram/Paper312280.html.
- 31. Dell, L., Tissot, P., Williams, D., Koskowich, B. and Durham, N. (2017) "Hydrodynamic Modeling of Engineered Inlet and Canal Extension" Oral Presentation at the 2017 American Meteorological Society Meeting, Seattle, WA. https://ams.confex.com/ams/97Annual/webprogram/Paper302979.html.
- 32. Nguyen, C, Starek, M., Starek, M., Tissot, P. and Gibeaut, J. (2016) "Multi-Scale Voxel Segmentation for Terrestrial Lidar Data within Marshes", Poster Presentation (EP23A-0956) at the 2016 AGU Fall Meeting, December 14-18, San Francisco, Ca. https://agu.confex.com/agu/fm16/meetingapp.cgi/Paper/185211.
- 33. Nguyen, C, Starek, M., Starek, M., Tissot, P. Gibeaut, J. and Lord. A. (2015) "Geodetic Imaging of Marsh Surface Elevation with Terrestrial Laser Scanning", Poster Presentation, American Geophysics Union (AGU) Fall Meeting, December 14-18, San Francisco, California.
- 34. Larry Dell and Philippe Tissot (2015) "Nearshore Current Measurements, Predictions and Spatial Analysis For The Coastal Bend". Poster presentation at GIS Day, Corpus Christi, Texas, November 27, 2015. *This presentation won the best student presentation award for the event.* *
- 35. Bradley Koskowich, Gabby Picarazzi, Lary Dell and Philippe Tissot (2015) "Tar Tracking In The Gulf Of Mexico". Poster presentation at GIS Day, Corpus Christi, Texas, November 27, 2015.
- 36. Andrew Frost, Carly Stanton, Bradley Koskowich, Darius Stephen, Julien Clifford, Scott Duff and Philippe Tissot (2015) "Weather on Wheels". Poster presentation at GIS Day, Corpus Christi, Texas, November 27, 2015.
- 37. Larry Dell and Philippe Tissot (2015) "Nearshore Current Measurements, Predictions And Spatial Analysis For The Coastal Bend". Poster presentation at the Texas A&M System 12th Annual Pathways Student Research Symposium, Corpus Christi, Texas, October 23, 2015.
- 38. Bradley Koskowich, Gabby Picarazzi, Lary Dell and Philippe Tissot (2015) "Tar Tracking In The Gulf Of Mexico". Poster presentation at the Texas A&M System 12th Annual Pathways Student Research Symposium, Corpus Christi, Texas, October 23, 2015. This presentation won first prize in the Undergraduate Environmental Science Poster Competition. *

- 39. Bradley Koskowich, Larry Dell, Gabby Picarazzi, Francesca Picarazzi & Philippe E. Tissot, "Geospatial Reconciliation of Tar on The Gulf Coast", Presentation at the 2015 EnerGIS conference, Canonsburg, Pennsylvania, May 19 2015 (http://www.energis.us/). Brad won the 2015 EnerGIS scholarship Grand Prize. *
- 40. Koskowich, B. and Tissot, P., "Development of Apps to Access Nearshore Measurements and Predictions Including Longshore Currents", oral presentation at the ASBPA Texas Chapter Symposium, March 20th, 2015, Corpus Christi, Texas.
- 41. Dell, L., Picarazzi, G., Picarazzi, F. and Tissot, P., "Comparison of Longshsore Currents with NGOFS Predictions", poster presentation at the ASBPA Texas Chapter Symposium, March 20th, 2015, Corpus Christi, Texas.
- 42. Anthony S. Reisinger, Philippe Tissot and James C. Gibeaut (2015) "Seasonal suspended sediment patterns of Texas Estuaries: insights from a decade of satellite data", Oral presentation at the 2015 Texas Bays and Estuaries Meeting, Port Aransas, April 8-9, 2015.
- 43. Anthony Shook, Julien Clifford, Scott Duf, James Rizzo and Philippe Tissot, "Development of an App for the Geolocation of Coastal Benchmarks", poster presentation at 13th TAMUCC/Sigma Xi Undergraduate Research Symposium, October 12th, 2013, Corpus Christi, TX.
- 44. Wenbo Zhu, Mike Rink and Philippe Tissot: "An Automated Method for the Gap Filling of Water Level Time Series", oral presentation at 13th TAMUCC/Sigma Xi Undergraduate Research Symposium, October 12th, 2013 Corpus Christi, TX.
- 45. Julien Clifford, Francesca Picarazzi and Philippe Tissot: "Transit Time: Mobile Device Based Visualization and Prediction for Navigation", oral presentation at 2013 TAMUCC Undergraduate Research Symposium, March 2nd, Corpus Christi, TX (this presentation won first prize in the oral competition and the "Most Innovative with the Greatest Potential for Impact" award sponsored by the Honors Program). *
- 46. Hoang Nguyen, Wenbo Zhu and Philippe Tissot: "Detection of Drift in Water Level Time Series", poster presentation at 2013 TAMUCC Undergraduate Research Symposium, March 2nd, Corpus Christi, TX.
- 47. Whitney Rutledge, Waylon Collins, and Philippe Tissot: "A Sea Surface Temperature Neural Network model for the Prediction of Cloud to Surface Lightning", poster presentation at 2013 TAMUCC Undergraduate Research Symposium, March 2nd, Corpus Christi, TX.
- 48. Wenbo Zhu, Hoang Nguyen and Philippe Tissot: "Model Comparison for Improving Water Level Data Quality", poster presentation at 2013 TAMUCC Undergraduate Research Symposium, March 2nd, Corpus Christi, TX.
- 49. Francesca Picarazzi, Julien Clifford and Scott Duff: "Winderful Texas: An App for Visualization of Wind Data Along the Texas Coast", poster presentation at 2013 TAMUCC Undergraduate Research Symposium, March 2nd, Corpus Christi, TX. (this presentation won the "Most Innovative with the Greatest Potential for Impact" award for poster presentations sponsored by the Honors Program). *
- 50. Natalya Warner, Blair Sterba-Boatwright, Philippe Tissot and Gary Jeffress,: "Estimated Increase in Inundation Probability with Confidence Intervals for Texas and Florida stations", oral presentation at the 11th Symposium on the Coastal Environment, part of the AMS 93rd Annual Meeting, 6-10 January 2013 in Austin, TX
- 51. Sergey Reid, Philippe Tissot & Deidre Williams: "Inundation Analysis Using GIS and Hydrodynamic Modeling", oral presentation at the 11th Symposium on the Coastal Environment, part of the AMS 93rd Annual Meeting, 6-10 January 2013 in Austin, TX, https://ams.confex.com/ams/93Annual/webprogram/Paper219768.html
- 52. Natalya Warner, Blair Sterba-Boatwright, Philippe Tissot and Gary Jeffress, "Estimated Increase in Inundation Probability with Confidence Intervals for Pensacola, Florida and Key West, Florida" Proceedings of Oceans' 12, 120517-057, 2012. doi: 10.1109/OCEANS.2012.6404881. (http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6404881&url=http%3A%2F%2Fieeexplore.ieee.org%2Fxpls%2Fabs_all.jsp%3Farnumber%3D6404881)
- 53. Natalya Warner, Blair Sterba-Boatwright, Philippe Tissot and Gary Jeffress, "Estimated Increase in Inundation Probability with Confidence Intervals for Pensacola, Florida and Key West, Florida" oral presentation at Oceans' 12, Hampton Beach, Virginia Oct. 14-19, 2012.

- 54. Boris Radosavljević, James C. Gibeaut and Philippe Tissot, "Sea-Level Rise: Estuarine Wetlands of Mustang Island at Imminent Risk of Submergence", poster presentation EGU2012-6554 (session HS10.2/GM8.2), EGU General Assembly 2012, Vienna, Austria, April 22-27, 2012. http://meetingorganizer.copernicus.org/EGU2012/EGU2012-6554-2.pdf
- 55. Morgan Matchett and Philippe Tissot, "The Effects of Adding Wave Data to a Water Level Predictive Model", poster presentation at the 11th Annual AMS Student Conference and Career Fair, January 22, 2012, New Orleans, Louisiana.
- 56. Morgan Matchett and Philippe Tissot, "The Effects of Adding Wave Data to a Water Level Predictive Model", presentation at the LSU Triple Ex Symposium for Undergraduate Research, November 4, 2011, Baton Rouge, Louisiana.
- 57. Natalya Warner, Blair Sterba-Boatwright, Philippe Tissot and Gary Jeffress, "Storms, Sea Level Rise and Estimated Increase in Inundation Probability with Confidence Intervals for Galveston, Texas" oral presentation at the Twelfth International Conference on Estuarine & Coastal Modeling, St. Augustine, Fl, Nov. 7-9, 2011.
- 58. Sergey Reid and Philippe Tissot, "Hydrodynamic Model Implementation for Navigation Support in Corpus Christi Bay" poster presentation at the Twelfth International Conference on Estuarine & Coastal Modeling, St. Augustine, Fl, Nov. 7-9, 2011.
- 59. Whitney Rutledge and Philippe Tissot, "A Water Level Prediction Model for the Port of Baltimore" poster presentation at the Twelfth International Conference on Estuarine & Coastal Modeling, St. Augustine, Fl, Nov. 7-9, 2011.
- 60. Julien Clifford, Cristian Romo, Sergey Reid and Philippe Tissot, "Development and Implementation of Mobile Applications for Access and Visualization of Coastal Predictions" poster presentation at the Twelfth International Conference on Estuarine & Coastal Modeling, St. Augustine, Fl, Nov. 7-9, 2011.
- 61. Whitney Rutledge and Philippe Tissot, "A Water Level Prediction Model for the Port of Baltimore" oral presentation at the Eleventh Texas A&M University-Corpus Christi Undergraduate Research Symposium, Corpus Christi, Tx, Sept. 23, 2011.
- 62. Julien Clifford, Cristian Romo, Sergey Reid and Philippe Tissot, "Development and Implementation of Mobile Applications for Access and Visualization of Coastal Predictions", oral presentation at the Eleventh Texas A&M University-Corpus Christi Undergraduate Research Symposium, Corpus Christi, Tx, Sept. 23, 2011. (presentation won 2nd place in the oral presentations competition). *
- 63. Morgan Matchett and Philippe Tissot, "Effects of Adding Wave Data to a Water Level Predictive Model", presentation at the Nineth Annual SURF Symposium, August 4, 2011, Corpus Christi, Texas.
- 64. Jennifer Kennedy, Gary Jeffress & Philippe Tissot, "Coastal Bend and State of Texas Collaborative Consortium of Streaming Atmospheric and Oceanographic Environmental Data", oral presentation at the Fifth Annual Graduate Scholarly Works Symposium, Texas A&M University-Corpus Christi, Corpus Christi, TX, Apr. 22, 2011.
- 65. Sergey Reid, Yelena Nevel, James Davis and Philippe Tissot, "Hydrodynamic Model Comparison for Corpus Christi Bay", poster presentation at the American Meteorological Society Tenth Annual Student Conference, Seattle, WA, January 22-23, 2011. (http://ams.confex.com/ams/91Annual/webprogram/Paper187856.html)
- 66. Sergey Reid, Yelena Nevel and Philippe Tissot, "Hydrodynamic Model Comparison for Corpus Christi Bay", oral presentation at the 10th TAMUCC Undergraduate Research Symposium, Corpus Christi, TX, September 25, 2010 (presentation won 1st place in the oral presentations competition). *
- 67. Domingo Hiracheta, Sergey Reid and Philippe Tissot, "Potential for Application of ANN Water Level Prediction Models Around the Gulf of Mexico", Poster presentation at the 10th TAMUCC Undergraduate Research Symposium, Corpus Christi, TX, September 25, 2010 (presentation won honorable mention in the poster competition i.e. 4th place). *
- 68. Ijeoma C. Ekeh, Sergey Reid and Philippe Tissot, "Coastal Modeling System Grid Optimization for Corpus Christi Bay", presentation at the Eight Annual SURF Symposium, July 29, 2010, Corpus Christi, Texas.

- 69. Roberto Chavez, Philippe Tissot, Waylon Collins and Oliver Probst "On the accuracy of numerical weather prediction models for wind speed predictions along the Texas Gulf coast", presentation at the 2010 American Wind Energy Association Windpower 2010 Conference, May 23-26, 2010, Dallas, Texas.
- 70. Boris Radosavljević, James C. Gibeaut and Philippe Tissot, "Vertical Accretion Rates in Estuarine Wetlands Using Cs-137, Mustang Island, TX", poster presentation at the 2010 Texas Bays and Estuaries Conference, April 15-16, Port Aransas, Texas.
- 71. Natalya Warner, Philippe Tissot, Blair Sterba-Boatwright, and Gary Jeffress, "Comparison of Extreme Value Statistical Distributions and Implications for Galveston Pier 21", Poster presentation at the 2010 Sea Level Rise Conference, Corpus Christi, Texas, March 1-3, 2010.
- 72. Sergey Reid and Philippe Tissot, "Performance of a Water Level Predictive Model at Freeport, Texas", Poster presentation at the 9th TAMUCC Undergraduate Research Symposium, Corpus Christi, Oct.10, 2009. (this presentation was awarded 2nd place in the poster competition). *
- 73. Anthony S. Reisinger, Philippe Tissot, David W. Hicks, and James C. Gibeaut, "A neural network spatial model for salinity in Bahia Grande", presentation at the 2009 Texas Bays and Estuaries Conference, April 28-30, Port Aransas, Texas.
- 74. Angelica Villarreal, P.Tissot and Richard Hay, "Analysis and verification of NEXRAD precipitation estimates for the Texas Coastal Bend", Poster presentation at the 8th American Meteorological Society Student Conference, Phoenix, Arizona, January 10,11, 2009.
- 75. Robyn Ball, P. Tissot, B. Zimmer, and B. Sterba-Boatwright, "Comparison of random forest, artificial neural network, and multi-linear regression: a water temperature prediction case", Proceedings of the Seventh Conference on Artificial Intelligence and its Applications to the Environmental Sciences, January 11-15, 2009, Phoenix, Arizona.
- 76. Angelica Villarreal, P.Tissot and Richard Hay, "Analysis of NEXRAD Precipitation Estimates for the Texas Coastal Bend", Oral presentation at the 8th TAMUCC Undergraduate Research Symposium, Corpus Christi, Nov.1, 2008 (awarded 2nd place). *
- 77. Brendan Hughes, Felischa Cullins, Jon Brandt, Benjamin Draper and Philippe Tissot "Transport of Radionuclides at the Bargmann Uranium Mine: Assessment and WEPP Modeling", GSA Abstracts with Programs Vol. 40, No. 2, poster presentation at the 43rd Annual Meeting of the Northeastern Section of the Geological Society of America, 27-29 March 2008, Buffalo, NY.
- 78. Brendan Hughes, Felischa Cullins, Jon Brandt Benjamin Draper, and Philippe Tissot, "Transport of Radionuclides at the Bargmann Uranium Mine: Assessment and WEPP Modeling", Poster presentation at the 2007 Sigma Xi Student Research Conference, Nov. 2-3, Orlando, Florida.
- 79. Felischa Cullins, Philippe Tissot, and Jon Brandt, "Transport Mechanism and Range of Radionuclides from Former Uranium Mines", Poster presentation at the 2007 Sigma Xi Student Research Conference, Nov. 2-3, Orlando, Florida.
- 80. Jenny Rodriguez and Philippe Tissot, "Navigational Safety in Texas: A comparative study of causes of accidents between Texas, Florida, and the rest of the United States", presentation at the Quarterly meeting of the Texas US Coast Guard Auxiliary, August 11, 2007, Canyon Lake, Texas.
- 81. Benjamin Draper, Felischa Cullins, Brendan Hughes and Philippe Tissot, "The effect of Water on Radon Exhalation from South Texas Uranium Mine Soil", TAMUCC SURF Symposium, Friday August 3, 2007, Corpus Christi, Texas.
- 82. Brendan Hughes, Felischa Cullins, Jon Brandt Benjamin Draper, and Philippe Tissot "Transport of Radionuclides at the Bargmann Uranium Mine: Assessment and WEPP modeling", TAMUCC SURF Symposium, Friday August 3, 2007, Corpus Christi, Texas.
- 83. Robyn Ball, Philippe E. Tissot, John Adams, G. Beate Zimmer, and Blair Sterba-Boatwright, "Artificial Neural Network Predictive Water Temperature Modeling of Cold Water Events in the Laguna Madre", presentation at the Graduate Student Association Research Symposium, Corpus Christi, Texas. 21 April 2007.

- 84. Robyn Ball, Philippe Tissot, Beate Zimmer, Blair Sterba Boatwright "ANN Predictive Water Temperature Modeling of Cold Water Events in a Shallow Lagoon", proceedings of the 5th Conference on Artificial Intelligence Applications to Environmental Science, AMS 87th Annual Meeting, 14-18 January 2007 in San Antonio, TX. (http://ams.confex.com/ams/pdfpapers/116711.pdf)
- 85. Felischa Cullins, Philippe Tissot, Jon Brandt, and Rick Hay, "Historical Transport of NORM in the Mabel New-Superior (MNS) Mine", Poster presentation at the Texas A&M University-Corpus Christi sixth Annual Undergraduate Research Symposium, Corpus Christi, Texas, October 7, 2006. (This presentation won third place in the overall competition). *
- 86. Robyn Ball, "Understanding Conditions that Precede a Fish Kill in the Laguna Madre", presentation at the 14th Annual South Texas, Mathematics Consortium, Texas A&M University-Corpus Christi, February 25th, 2006, Corpus Christi, Texas.
- 87. Dawn Lalmansingh, P.E. Tissot and Richard Hayes, "Neural Network Modeling of Spring Levels Linked to a Karst Aquifer: Case Study of the Comal Springs", presented at the National Groundwater Association 2005 Ground Water Summit, San Antonio, Texas, April 17-20.
- 88. K. Tai, P. E. Tissot, R. Hay and B. Sterba-Boatwright, "Study of Spatial and Temporal Correlations Between Spring Flows and Precipitations for a Central Texas Aquifer", presented at the National Groundwater Association 2005 Ground Water Summit, San Antonio, Texas, April 17-20.
- 89. D. Prouty and P.E. Tissot, "Using Artificial Neural Networks for Predicting Storm Surge Propagation in the North Sea and the Thames Estuary" presented at the 4th conference on the Application of Artificial Intelligence to Environmental Science, San Diego, California, January 9-13, 2005.
- 90. K. Tai, P. E. Tissot, R. Hay and B. Sterba-Boatwright, "Study of Spatial and Temporal Correlations between Spring Flows and Precipitations for a Central Texas Aquifer", presented at the 2004 National Sigma Xi Student Research Conference, Montreal, Canada, November 12-13, 2004. Awarded a gold ribbon for excellent poster presentation. *
- 91. N. Cook, P.E. Tissot and J. Mott, "ANN Forecasting of Indicator Bacteria Counts in Corpus Christi Bay", presented at the 2004 National Sigma Xi Student Research Conference, Montreal, Canada, November 12-13, 2004. Awarded a gold ribbon for excellent poster presentation. *
- 92. K. Duraisamy and P.E. Tissot, "Cross Station Now-casting Using Artificial Neural Networks in a Shallow Embayment", poster presentation at the 2nd Annual TAMUS Pathways Research Symposium, Corpus Christi, Texas October 16, 2004.
- 93. K. Tai, P. E. Tissot, R. Hay and B. Sterba-Boatwright, "Study of Spatial and Temporal Correlations between Spring Flows and Precipitations for a Central Texas Aquifer", poster presentation at the 2nd Annual TAMUS Pathways Research Symposium, Corpus Christi, Texas October 16, 2004.
- 94. K. Tai, P. E. Tissot, R. Hay and B. Sterba-Boatwright, "Study of Spatial and Temporal Correlations between Spring Flows and Precipitations for a Central Texas Aquifer", Texas A&M University-Corpus Christi Fourth Undergraduate Research Seminar, Corpus Christi, Texas, October 9, 2004. (This presentation won third place in the oral presentation competition). *
- 95. I. Arreola, P. E. Tissot, and J. Adams, "Historical Assessment of NORM in Brine Water Discharge through Sediment Core Analysis", poster presentation at the 2nd Annual TAMUS Pathways Research Symposium, Corpus Christi, Texas October 16, 2004.
- 96. I. Arreola, P. E. Tissot, and J. Adams, "Historical Assessment of NORM in Brine Water Discharge through Sediment Core Analysis", poster presentation at the Texas A&M University-Corpus Christi Fourth Undergraduate Research Seminar, Corpus Christi, Texas, October 9, 2004.
- 97. M. Beaman and P.E. Tissot, "Radon in Groundwater of the South Texas Uranium District", presentation at the 2004 ESRI Education User Conference, San Diego, California, August 9–13, 2004.
- 98. Dawn Lalmansingh, P.E. Tissot and Richard Hayes, "Neural Network Modeling of Spring Levels Linked to a Karst Aquifer: Case Study of the Comal Springs", 2004 Meeting of the Texas Section of the Mathematical Association of America, Corpus Christi, Texas, April 1-3, 2004.

- 99. A. Mostella, A.L. Sadovski, S. Duff, P. Michaud, P. Tissot, C. Steidley, "Comparison of Gap Interpolation Methodologies for Water Level Time Series using Perl/PDL", presentation at the XIV International Symposium on Mathematical Methods Applied to the Sciences, San Pedro, Costa Rica, February 18, 2004.
- 100.Z. Bowles, P.E. Tissot, P. Michaud, A. Sadovski, S. Duff and C. Steidley, "Engineered Training Sets: Enhancing the Learning Power of Artificial Neural Networks for Water Level Forecasts", XIVth International Symposium on Mathematical Methods Applied to the Sciences (XIV SIMMAC), San Jose, Costa Rica, February 17-20, 2004.
- 101.M.H. Willingham, C.S. Smith, B.A. Dolan, P.E. Tissot, "Evaluation of the Surface Transport of NORM from Former Uranium Mines through Sediment Core Analysis", abstracts of the Society for Environmental Toxicology and Chemistry (SETAC) 24th Annual Meeting, Austin, Texas, November 9-13, p. 280, 2003.
- 102.B.A. Dolan, M.H. Willingham, P.E. Tissot, "Meteorological Impact on Soil Radon Exhalation in the Context of a Former South Texas Uranium Mine" abstracts of the Society for Environmental Toxicology and Chemistry (SETAC) 24th Annual Meeting, Austin, Texas, November 9-13, p. 218, 2003.
- 103.B.A. Dolan, M.H. Willingham, J. Brandt and P.E. Tissot, "Impact of meteorological conditions on soil radon exhalation within the context of a former south Texas uranium mine", Texas A&M University-Corpus Christi, 2003 Undergraduate Research Symposium, Corpus Christi, Texas, November 8, 2003.
- 104.M.H. Willingham, C. Smith, B. A. Dolan and P.E. Tissot, "Evaluation of the Surface Transport of NORM from Former Uranium Mines Through Sediment Core Analysis", Texas A&M University-Corpus Christi, 2003 Undergraduate Research Seminar, Corpus Christi, Texas, November 8, 2003. (This presentation won second place in the oral presentation competition). *
- 105.J. Telleria, M.H. Willingham, B. Newgard, P. E. Tissot, "Contamination of Mexican Hollow? Assessment of Radionuclide Transport from Open-Pit Uranium Mines through Creek Bed Sediment Analysis", presentation at the 2003 National Sigma Xi Student Research Conference, Los Angeles, California, November 16, 2003.
- 106.B. Newgard, J. Telleria, M. Willingham, P. Tissot, "Assessment of Radionuclide Concentration and Radiochronological Dating of Sediments in Oso Bay, Texas", presentation at the 2003 Summer Undergraduate Research Focus Symposium, Texas A&M University-Corpus Christi, Texas, August 8, 2003.
- 107.J. Telleria, M. Willingham, P. Tissot, B. Newgard, C. Smith, "The Question of Mexican Hollow Assessment of Radionuclide Transport from Open-Pit Uranium Mines", presentation at the 2003 Summer Undergraduate Research Focus Symposium, Texas A&M University-Corpus Christi, Texas, August 8, 2003.
- 108.B.A. Dolan, M.H. Willingham, P.E. Tissot, "Impact of Meteorological Conditions on Soil Radon Exhalation within the Context of a Former Uranium Mine", NOAA Expanding Opportunities Conference, Tallahassee, Florida, March 2003. This presentation won first place in the Undergraduate competition. (80 posters, 6 awards, top prize for \$ 500, http://www.weather.gov/com/nwsfocus/fs040703.htm) *
- 109.Z. Bowles, P.E. Tissot, P. Michaud and A. Sadovski "Artificial Neural Network Predictions of Water Levels in a Gulf of Mexico Shallow Embayment", Third International Conference on Multivariate Approximation Theory and Applications, Cancun, Mexico, April 24-29 2003.
- 110.C. Smith, P. E. Tissot, P. Louchouarn, M. Beaman, R.L. Parker, M. Williams, J. Brandenberger, B. Herbert, and P. Michaud, "Have Radionuclides Released from the South Texas Uranium Mines Affected Lake Corpus Christi?" invited presentation to the 2002 National Sigma Xi Student Research Conference, Galveston, Texas, November 16, 2002, p. 31. *This presentation was selected for an award (3rd place, ecology).* *
- 111.C. M. Smith, P.E. Tissot, M. Beaman, R.L. Parker, J.M. Brandenberger, M. Williams, P. Louchouarn, B. Herbert, and P.R. Michaud, "Historical Environmental Impact of Uranium Mining Through the Gamma Ray Analysis of Livestock Pond Sediments", 2002 Annual Geological Society of America Meeting, October 27-30, 2002, Denver, CO. p.416.
- 112.M. Beaman, P.E. Tissot, J. Brandt, "Kopplin Gamma Radiation Survey", 2002 ESRI User Conference, Redlands, CA
- 113.J. Stearns, P.E. Tissot, P. Michaud, W.G. Colllins, and A.R. Patrick, "Comparison of MesoEta Wind Forecasts with TCOON Measurements along the Coast of Texas" Proceedings of the 19th AMS Conference on Weather Analysis and Forecasting/15th AMS Conference on Numerical Weather Prediction, 12-16 August 2002. San

- Antonio, Texas, pp. J141-J144, 2002.
- 114.Robert Rivera and P.E. Tissot, "Radon Exhalation From Soils of South Texas Uranium Mines" presentation at the 2002 Summer Undergraduate Research Focus Symposium, Texas A&M University-Corpus Christi, Texas, August 2002.
- 115.M. Williams & P. Tissot, "Development of a method to create homogeneous sediment standards for use in calibration of gamma ray spectroscopy and application to estuarine sediment cores", presented at the 16th Biennial Estuarine Research Federation Conference (ERF 2001) in St. Petersburg Florida, November 4-8, 2001. This poster presentation was selected as one of the four outstanding undergraduate posters of the conference (runner up). *
- 116.M. Beaman, P. Tissot, and J. Brandt "Kopplin Gamma Radiation Survey" presented at the 2001 South Texas Environmental Conference, Corpus Christi, Texas, October 2001.
- 117.M. Beaman, P. Tissot, and J. Brandt "Kopplin Gamma Radiation Survey", CBI Technical Report # 01-001, Conrad Blucher Institute for Surveying and Sciences, Corpus Christi, Texas, May 2001.
- 118.J. Brandenberger, P. Louchouarn, J. Bonner, B. Herbert, P. Tissot, P. Michaud, and M. Beaman, "Trace Metal Concentrations in Sediments of Nueces Bay System", presentation to the 8th Annual South Texas Environmental Conference, Corpus Christi, Texas, October 2000.
- 119.R.L Parker, B.E. Herbert, P.E. Tissot, and G. Ussery, "Gamma Spectroscopy of Livestock Pond Sediments from the Falls City, Texas, UMTRA Site: Scrutiny of DOE Contamination Classification", presentation at the 1999 Annual meeting of the Geological Society of America, Denver, Colorado, October 25-28, 1999.
- *Sigma Xi 2004 Rewards: "Good, Excellent, and Superior poster presentations were recognized with White, Gold and Blue ribbons respectively. Blue ribbon recipients were also given a cash award".

UNIVERSITY SERVICE

Interim Director of the Conrad Blucher Institute. Overseeing all personnel (50-70 staff, researchers, associated faculty and students), daily operations, budgets and establishing with institute colleagues' directions for the institute. Primary goals included reestablishing a financially sound information technology department, rolling out software for the surveying community, updating the institute strategic plan and mission and organizing the search for next permanent director.

Member of CPIRA (Council of Principal Investigators and Research Administrators) Sept 2016 – Dec 2018. Chair of subcommittee for selection of NCURA issues to be addressed by CPIRA (2016-17), Chair of the Research Administration Development and Training Committee Jan 2017 – Dec 2018.

Associate Director of the Conrad Blucher Institute, October 2011 – Dec 2018. Responsible for reviewing and signing off on center's activities in the absence of director. Coordination of research activities, proposals, representation of the institute at various activities participation in decision process and implementation for institute personnel.

Member of the TAMUCC Research Computing Task Force (Sept 2016-present)

Associate Director of the Conrad Blucher Institute, October 2011 – Dec 2018. Responsible for reviewing and signing off on center's activities in the absence of director. Coordination of research activities, proposals, representation of the institute at various activities participation in decision process and implementation for institute personnel.

Assistant Director of the Conrad Blucher Institute, June 2009 – October 2011. Responsible for reviewing and signing off on center's activities in the absence of director, conducts weekly meeting. In 2011 coordinated allocation of new space and office moves for the institute, supervision of proposals budget, participated in decision on institute hiring and layoffs.

Responsible for candidate approval for several state science certifications (Science 4-8, Physical Science 8-12, Science 8-12), 2003-2012.

Chair of CMSS Curriculum committee, reviewing courses, preparing catalog copies for CMSS (2007-2011).

CMSS Library contact (2007-2011).

Member of Center for Water Supply Studies Advisory Board (2008-2010).

Program Coordination Appointments

Program coordinator for the Physics program. August 2012-August 2013.

Departmental coordinator for science teacher preparation degrees (ESCI 4-8, CHEM 8-12) Sept 2006 – August 2011. Responsibilities included frequent advising, coordination with other departments and College of Education, preparation of students for certification exams.

Program Coordinator for the Coastal and Marine System Science (CMSS) PhD program May 2006 – Sept 2007. Organized and supervised program operations for years 2 & 3 of the program including students, classes, assistantships and changes in operations and leadership of the degree.

Program Coordinator for the Science, Math and Technology Education (SMTE) program S03 – Su06. First SMTE coordinator with responsibilities including creating the program, catalog copy, migration of courses and beginning of operations.

New Programs

Initial draft of MS in Atmospheric Sciences (2012-2013)

Documentation for a proposed new BS in Physics (2012-2013)

Budgets for proposed BS Atmospheric Science (2009-2012)

All documents for the new Science Mathematics and Technology Education (SMTE) (2003-2005)

University, Departmental and Search Committees

Chair of the 2019-2021 & 2021-2022 CBI Director search committees

Member of the 2018-2019 Professional Assistant Professor in Atmospheric Science

Member of the 2018-2019 Library Director, Special Collections and Archives

Chair of the 2018-2019 CBI Software Applications Developer II position

Member of the 2017-2018 Assistant Professors in Geospatial Systems Engineering (2 positions)

Member of the 2014-2015 Assistant Professor of Environmental Chemistry search committee

Co-Chair of the 2012-2013 Professional Track Physics Faculty search committee

Member of the 2012-13 Atmospheric Science search committee (2 positions)

Member of the summer 2012 Instructor in Geographic Information Science search committee

Member of the summer 2012 Assistant Professor in Geographic Information Science search committee

Member of the 2012 CBI endowed chair search committee

Chair of the 2011-2012 Atmospheric Science Faculty search committee

Member of the University Beyond the Core Taskforce 2011-2012.

Member of the summer 2011 CBI Program Manager search committee

Member of the College of Science & Engineering Steering Committee 2011-2012

Member of the fall/spring 2010-11 Physics faculty search committee

Member of the Summer/fall/spring 2010-11 Geology faculty search committee

Chair of Summer/Fall 2009 Oceanography Faculty search committee

Member of 2008-2009 committee to prepare new Atmospheric Science program proposal

Member of Summer 2007 Student Activities Coordinator search committee

Member of Fall 2005/Spring 2006 Biology Faculty search committee

Chair of the Spring 2005 Science Mathematics and Technology Education (SMTE) Faculty search committee

Member of the Spring 2005 Biology Faculty search committee (3 positions)

Member of the University Graduate Council F04-S07

F04-S05 Member of the syllabus review committee

F05-S06 Member of one of the catalog review committee

S/F06 Chair subcommittee reviewing a proposed new Masters of Science in Geospatial Systems Engineering

F06 Chair of the subcommittee reviewing the general sections of the 07-08 graduate catalog

Member of College of Science and Technology Graduate Committee F04

Member of ESCI graduate admission committee 2004-2005

Member of 2002 Environmental Science Faculty search committee

Member of 2002 and 2003 Chemistry Faculty search committees

Student Activities Committees and Mentorship

Faculty advisor for the TAMUCC chapter of the National Science Teacher Association, 2002 - Spring 2010.

Member of spring 2009 UCSO Special Events Fund Committee.

Member of spring 2008 Student Affairs scholarship committee

Member of the 2007 committee selecting the scholarship recipients for the TAMU-CC 'island' award.

Head judge for the TAMUCC undergraduate Research Symposium 2002-2005, 2013

Faculty Mentor for the TAMUCC student group competing in the 2003 and 2004 NASA competition: "NASA Means Business". The 2003 TAMUCC group "The Red Star", headed by Robert Nuckols, was one of the 9 teams selected nationwide to compete in the final round of this competition (other universities include Art Center College of Design, Auburn, Chapman University, Georgia Institute of Technology, MIT, Stanford, University of Illinois at Urbana-Champaign, and UT Austin). The 2004 TAMUCC team was among the 5 teams selected for the finals at JSC in May 2004.

SERVICE TO PROFESSION

General Service Activities

Session co-chair/co-organizer Oceans Sciences Meeting 2022

Joint session co-chair/co-organizer AMS AI and Coastal Conferences

Member of the Scientific Committee of the third NOAA Workshop on Leveraging AI in Environmental Sciences, Sept 13-17, 2021. https://2021noaaaiworkshop.sched.com/ Chair of sessions 6B, 9B, 11A & poster 7.

Co-organizer and instructor for the NCAR/AI2ES July 2021 Summer School: Trustworthy Artificial Intelligence for Environmental Science (TAI4ES) Virtual Scummer School organized by the National Center of Atmospheric Research and the NSF AI2ES Institute, July 26-29, 2021

 $(https://docs.google.com/document/d/1HVvBR_8DoHxRvUUYKL31LskK1tIjo2sByEEnTINyYEA/edit)$

Invited panelist for the February 25, 2021 last session of the 2nd NOAA Workshop on Leveraging AI in the Environmental Sciences: Exploiting Space and Ground-Based Observations and Enhancing Earth Systems Predictions.

Moderator for Sessions 6 and 20 of the 2nd NOAA Workshop on Leveraging AI in the Environmental Sciences: Exploiting Space and Ground-Based Observations and Enhancing Earth Systems "Predictions AI/ML for Information Extraction from Data, Part 1" with Jebb Stewart (NOAA ESRL).

Member of the Science Committee of the 2nd NOAA Workshop on Leveraging AI in the Environmental Sciences: Exploiting Space and Ground-Based Observations and Enhancing Earth Systems Predictions. July 2020.

Chair, American Meteorological Society Committee on Artificial Intelligence Applications to Environmental Science, 2016-2020.

Co-organizer of the 1st NOAA Workshop on Leveraging AI in the Exploitation of Satellite Earth Observations & Numerical Weather Prediction, College Park Maryland, 4/23-25/2019.

Chair for the organization of the 18th Conference on Artificial and Computational Intelligence and its Applications to the Environmental Sciences part of the 2019 American Meteorological Society meeting, Phoenix, Tx. Also chair or co-chair of multiple sessions and panel.

Chair for the organization of the 17th Conference on Artificial and Computational Intelligence and its Applications to the Environmental Sciences part of the 2018 American Meteorological Society meeting, Austin, Tx

Organizer of the American Meteorological Society short course "Cloud-based Data Exploration and Machine Learning on environmental datasets", Seattle, WA, 1/22/2017. https://annual.ametsoc.org/2017/index.cfm/programs/short-courses-and-workshops/cloud-based-data-

https://annual.ametsoc.org/2017/index.cfm/programs/short-courses-and-workshops/cloud-based-data-exploration-and-machine-learning-on-environmental-datasets/

Co-Chair for the organization of the 15th Conference on Artificial and Computational Intelligence and its Applications to the Environmental Sciences part of the 2017 American Meteorological Society meeting, Seattle, Wa. https://ams.confex.com/ams/97Annual/webprogram/15AI.html

Panel member: "The State of the Coastal Environment" held as part of the 13th Symposium on the Coastal Environment, 2015 American Meteorological Society annual meeting, Phoenix, AZ, January 4-8, 2015. Panelists: Roger M. Samelson, Oregon State Univ.; Rick A. Luettich, University of North Carolina; Art Miller, Scripps Institution of Oceanography; Philipe Tissot, Texas A&M University; Andre J. van der Westhuysen, NOAA/NWS/NCEP

Participant to the "Adapting to Sea Level Rise in the Corpus Christi Bay Area" workshop, Nature Conservancy, Omni Bayfront Hotel, Corpus Christi, TX, 1/29/2013.

Member of the Program Committee for CIDU 2012, Conference on Intelligent Data Understanding, October 24 — 26, 2012, Boulder, Colorado, USA.

Participant to the "Coastal Community Response to Change" workshop, MANERR, Bay Education Center, Rockport, TX, 5/3/2011.

Participant to the 2-day workshop "NOAA/ECSC Coupled Ecological-Societal Systems Modeling (CESSM) Workshop for the Mission-Aransas National Estuarine Research Reserve", University of Texas Marine Science Institute, Port Aransas, Texas. The workshop consisted in providing and discussing with other local stakeholders relationships and relative importance of stressors and their valued ecosystem services across MANERR.

Lead writer for the report "Sustained, Integrated ocean Observing System for the Gulf of Mexico (GCOOS): Water Level Element", part of a plan for a comprehensive, sustained observing system for the Gulf of Mexico submitted by GCOOS to the NOAA IOOS Office, March 2011.

Development Team Member for the report "Sustained, Integrated ocean Observing System for the Gulf of Mexico (GCOOS): Enhanced Physical Oceanography Real-Time Systems", part of a plan for a comprehensive,

sustained observing system for the Gulf of Mexico submitted by GCOOS to the NOAA IOOS Office, March 2011.

Member of the organizing committee of the workshop "State of Texas Workshop on the Integration and Streaming of Coastal Atmospheric and Oceanographic Environmental Data", Friday March 4, 2011, Hilton Garden II, Austin, Texas.

Member of the organizing committee for the Ninth Conference on Artificial Intelligence Applications to Environmental Science, Seattle, 2011. Coordinator for the student presentation judging. The conference was part of the January 23–27, 2010 meeting of the American Meteorological Society (AMS).

Chair of the organization for the workshop "Coastal Bend Workshop on Streaming Environmental Data", Friday August 27, 2010, at Texas A&M University-Corpus Christi. The workshop was co-organized with the local office of the National Weather Service. The availability and communication of data for navigation and emergency situations are a focus of the workshop. Participants included staff from the National Weather Service, the US Coast Guard, the local ship pilot association and the City of Corpus Christi emergency management. https://www.cbi.tamucc.edu/wp-content/uploads/Coastal Bend Workshop.pdf

Two term member of the American Meteorological Society Committee on Artificial Intelligence Applications to Environmental Science (2005-2011)

Member of the organizing committee for the Eight Conference on Artificial Intelligence Applications to Environmental Science, Atlanta, 2010. Chair for the session "Applications of Artificial Intelligence Methods to Problems in Environmental Science: Part II. The conference was part of the January 17–21, 2010 meeting of the American Meteorological Society (AMS).

Member of the organizing committee for the Seventh Conference on Artificial Intelligence Applications to Environmental Science, Phoenix, 2009. Chair for the joint sessions (2) between AI applications and Hydrology. The conference was part of the January 11–15, 2009 meeting of the American Meteorological Society (AMS).

Member of the organizing committee for the Sixth Conference on Artificial Intelligence Applications to Environmental Science, New Orleans, 2008. Organization and chairing of the session "Application of Artificial Intelligence to Storm Surge Forecasting". The conference was part of the January 20–24, 2008 meeting of the American Meteorological Society (AMS).

Chair of the organizing committee of the 2007 Workshop on the Application of Artificial Intelligence to Environmental and Geospatial Science held in Corpus Christi, January 12-13, 2007

Journal & Proposal Review

Reviewer for BAMS, April 2021

Reviewer for NSF MRI Proposal, May 2020

Reviewer for PLOS One, 2019,

Reviewer for the Journal of Fish & Wildlife Management, paper 052019-JFWM-043

Reviewer for Geophysical Review Letters, spring 2019, Paper #2019GL083441

Reviewer for the Journal of Coastal Research, spring 2019: JCOASTRES-D-18-00151

Reviewer for the 100 years of progress in Applied Meteorology (2018): AMSMONOGRAPHS-D-18-0012

Reviewer for the Journal of Coastal Research, spring 2018 (JCOASTRES-D-18-00029)

Reviewer for the Journal of Marine Science Engineering, Fall 2015

Reviewer for the Journal of Waterway, Port, Coastal, and Ocean Engineering, spring 2015

Reviewer for National Science Foundation April 2014 (proposal number 1536365)

Reviewer for Journal of the Marine Technical Society, December 2014

Reviewer for four papers submitted to the proceedings of the conference UPINLBS, Summer-Fall 2013

Reviewer for Coastal Engineering Journal (manuscript WSPC-CEJ-D-14-00020), September 2014

Reviewer for National Science Foundation (proposal 1356044), October 2013

Reviewer for Atmospheric Science Letters (ASL-13-024), June 2013.

Reviewer for National Science Foundation (proposal 1332718), March 2013

Reviewer for EOS (article 2013ES004226R, March 2013)

Reviewer for Advances in Artificial Neural Systems (485913, Research Article), February 2013.

Reviewer for Natural Hazards (Manuscript NHAZ-D-12-00518), December 2012 & () June 2013.

Reviewer for the proceedings of the CIDU, 3 articles, July 2012.

Reviewer for Advances in Meteorology (Research Article 649450), July 2012.

Reviewer for the Natural Sciences and Engineering Research Council of Canada Environment Canada, NSERC Discovery Grant Proposal (spring 2012).

Reviewer for the proceedings of the twelfth International Conference on Estuarine and Coastal Modeling (2 papers), spring 2012.

Reviewer for Continental Shelf Research fall 2011 (CSR 2244).

Reviewer for the Open Access Journal Water (ISSN 2073-4441) May 2010 (ref: Water-20100511-Pasini-it)

Reviewer for Texas Sea Grant College Program, April 2011.

Reviewer for the Journal of Waterway, Port, Coastal, and Ocean Engineering, spring 2010 (ref: WWENG-141)

Reviewer for the International Journal of Oceanography, summer 2009 (ref: IJOG/167239)

Reviewer for the Journal Weather and Forecasting 2007 (ref: WAF 2007047)

Reviewer for the Journal of Atmospheric and Oceanic Technology, 2005 (ref: JTECHO 424)

Reviewer for the Elsevier Journal Global and Planetary Change, 2005.

Reviewer for the Journal of General Hazards, 2005 (ref: NHAZ1716-B F1REF1 215299).

STUDENTS (mentored, supported)

PhD Advising

Present Advising Committees:

Bradley Koskowich (GCSC), Larijai Francis (CMSS), Kevin Nelson (CMSS), Mohamad Paschai (GSCS), Bimal Gyawali (CMSS), Kelsi Schwind (CMSS), Isabel Garcia (CMSS), Xiaojun Qiao (GSCS) (co?), Wen Zhong (GSCS) (co?), Marina Vicens Miquel (GSCS) (co?), Shelby Metoyer (CMSS), Evan Krell (GSCS) (co?).

Previous:

Member of Advising Committee of Quinn McColly (CMSS), graduated Spring 2020

Member of Advising Committee of Nana Liu (CMSS), graduated Summer 2019

Member of Advising committee of Chuyen Nguyen (CMSS), graduated in May 2019

Member of Anthony Reisinger PhD. advising committee, graduated Summer 2015, "Suspended Sediment Dynamics of Texas Estuaries".

Member of Riaz Khan advising committees Ph.D., then MS ESCI, graduated fall 2014, "Predictive Modeling Of Groundwater Salinity Variation In South Texas Coastal Aquifers".

Chair of committee for Natalya Warner, PhD CMSS. Graduated May 2013, "Estimated Increase in Inundation Probability with Confidence Intervals for the Gulf of Mexico".

Kevin Nelson (PhD, CMSS), member of advising committee, graduated December 2012.

Elizabeth Shank, CMSS, Committee co-chair 2011-2012 (switched to ESCI MS, did not graduate).

Maggie Dalthorp (PhD, CMSS), member of advising committee, graduated December 2011.

Bridgette Froeschke (PhD, CMSS), member of advising committee, Southern Flounder (Paralichthys Lethostigma): The Whole Story. Graduated May 2011.

Daniel Prouty, PhD-Coastal Engineering at the University of Southampton, UK. Committee Co-chair, graduated summer 2007 "Using Artificial Neural Networks to Predict Storm Surge in the North Sea and the Thames Estuary".

External member of the PhD Committee of François Neville, Department of Spatial Information Science and Engineering of the University of Maine, Committee chair, Kate Beard.

MS Advising

Present:

Previous as chair or co-chair:

Hue Dinh, MS Computer Science, member, May 2021

Hamid kamangir, MS Computer Science, Co-Chair

Xiaopeng Cai, MS Computer Science, Co-Chair

James Davis (MS-ESCI), Committee chair, graduated Spring 2013. Implementation of a Hydrodynamic Model of Nueces Bay to Evaluate the Effects of Sea Level Rise and Changes in Freshwater Input.

Shanon Parham, (MS, ESCI) Committee Chair, graduated summer 2011. An Overview of the Recycling Electronic Waste in South Texas. (came in with BS double major ESCI/GEOL, associate degree in Biology from Del Mar, TCEQ Industrial Hazardous Waste Investigator since July 2008).

Felischa Cullins, (MS, ESI) Committee Chair, Measurements, Study of Transport Mechanisms and WEPP modeling of radionuclide transport from former Texas Uranium mines., Graduated May 2011.

Yelena Nevel (MS Math) Committee co-chair, graduated August 2012. "Data Assimilation for a Hydrodynamic Model", tested the ability of data assimilation techniques to improve the performance of the hydrodynamic model FVCOM for Corpus Christi Bay (Optimal Interpolation was used for FVCOM). Graduated August 2010.

Robyn Ball (MS-Math) Committee Co-chair, graduated Spring 2008. "A Comparison of Artificial Neural Network, Random Forest, and Multi-linear Regression Models: Predicting Water Temperature in the Upper Laguna Madre". Development of optimization techniques for the training of predictive artificial neural networks with application to environmental systems.

Karthik Durasaimy, MS-COSC, committee Co-chair and research advisor, graduated Fall 2005. Development of a web-based tool to archive, access and analyze atmospheric forecasts for the Gulf of Mexico region.

Dawn Lalmansingh, MS-ESCI, Committee chair, graduated fall 2004. Thesis: Artificial Neural Network Modeling of spring flows in the Edwards Aquifer.

Sarah Ussery, MS-ESCI, Committee co-chair, graduated fall 2004. End of study project: development of a rule based model for the predictions of indicator bacteria in recreational waters.

Binesh Prabhakar, MS-ESCI, Committee Co-chair, graduated spring 2004. End of study project: Comparative analysis of three oil spills in Texas (Gum Hollow, Chiltipin Creek, San Jacinto). Also worked on the application of neural networks to the forecast of water levels in a Karst Aquifer.

Christian Klinge, supported Sept 2003-Feb 2004: Combination of NCEP predictions and coastal observations to forecast water levels with artificial neural networks – Internship project for the Wurzburg-Schweinfurt Fachhochschule Department of Electrical Engineering, Germany.

Alexander Drikitis, graduated spring 2002. Diplomarbeit: "Forecasting water levels on the Gulf of Mexico with Neural Networks", degree was awarded from the Wurzburg-Schweinfurt Fachhochschule Department of Electrical Engineering, Germany.

Mark Beaman, MS-ESCI, committee chair, did not graduate (obtained employment before finishing). Study of radon concentrations in South Texas freshwater water well and correlation with Geology using GIS".

Michael Willingham, MS-ESCI. Committee Chair, did not graduate (obtained employment with NRC early). "Studied a possible correlation between drowning fatalities and rip currents for the South Texas Gulf Coast and the transport of NORM materials from the former South Texas Uranium mines through a series of core along an intermittent creek bed. Spring 2004.

Previous Committee Member:

Hue Din Thi, MS Computer Science 2021

Bryan Gillis, graduated Fall 2019 (GSEN)

Susan, Elizabeth Shanks (ESCI), did not graduate

Michelle Culver (CMSS)

Claire Rydman (MS CMSS)

Melanie Gingras (MS, CMSS), graduated May 2017

Member of Heather Wade (CMSS), Switched to TAMU program

Jason Louis (MS, GSEN) Automation of compiling, processing, and delivering remotely sensed data through and online web portal, graduated May 2014.

Frank Kelly, Jr. (MS, ESCI), committee member, graduated fall 2011.

Boris Radosavljevic (MS, ESCI) committee member, graduated fall 2011.

Daryl Sabourin (MS, ESCI) committee member, graduated fall 2011.

Billy Shelton (MS Computer Science), committee member, graduated 2007. "fFace recognition with Artificial Neural Networks"

Anne Williams, (MS ESCI) committee member, graduated May 2006. "Observing lithogenic particulate aggregation rates using Laser In-Situ Scattering Transmissometry".

Larry Young, (MS COSC) committee member, graduated May 2005. "Visualization of Natural System Model Errors".

George Crandall, (MS ESCI) committee member, graduated summer 2005. "Water runoff forecast based on GIS and the SCS Method".

Aimee Mostella, (MS, Math) Committee member, graduated fall 2004. "Predictive Analysis of the Atypical Water Level Time Series Data along the Texas Coast", December 2004.

Richard Rush, (MS-CS) committee member, graduated spring 2004

Jill M. Brandenberger (MS-ESCI), committee member graduated fall 2001.

Sandy Riggs (MS-ESCI) committee member (did not graduate)

Jason Picarazzi (MS, Math), Committee member, did not graduate.

Lori Busch, (MS, ESCI), Committee member, funded for ~ 1 year, development of methodology to assess the tidal/non tidal status of locations in the Florida Keys. Did not gracluate.

Other Graduate students funded, advised (but no Committee service)

Roberto Chavez, Summer 2009 visiting graduate student from the Physics Department, Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey, N.L., Mexico.

Jenny Rodriguez, Master in Counseling, funded for Investigation of navigational safety for the Texas Coast. Moved to position at Middle School Science teacher in San Antonio.

Andrea Hiracheta, BS-Interdisciplinary Studies, MS in Education. Funded for "Developing a web based tutorial to help students access data from the Texas Coastal Ocean Observation Network (TCOON), load into Matlab and perform basic operations".

Yemi Abioye, ESCI graduate student, funded for development of a GIS database for the coastal and oceanographic measurement stations of the Gulf of Mexico as well as the locations of atmospheric forecast locations from a NWS-DNR database (spring 2004).

Present & Previous Undergraduate Students

(51 students with 3 peer reviewed publications and many presentations resulting in 25 local and national presentation awards, including 10 awards at the TAMUCC Undergraduate Research Symposium)

Present Students:

- 1. Chantey Baca: June 2021 TCOON archives & learning python
- 2. Beto Estrada: January 2021 present: Development of internet tools for coastal predictions
- 3. Katie Colburn: September 2020 present: cold stunning events and coastal imagery digitalization.
- 4. Christian Duff: June 2020 present: research into historical AI applications to earth sciences
- 5. Brian Colburn: April 2020-present: Development of internet tools for coastal predictions

Previous Students:

- 1. Audrey Flores: January 2021 present: archival of TCOON data and metadata, coastal imagery digitalization
- 2. Jennifer Williams: May 2018 December 2020: Maps, field measurements (water quality & flow) for a TCEQ water quality modeling project, assistance with the writing of reports and QAPP, contact with NPS, tracking of volunteers and field work for the Cold Stunning project. Analysis of cold water temperature and participation to the predictive modeling of cold stunning events.
- 3. Jensen Degrande: October 2017 August 2020: Management and study of precipitation time series for a TCEQ project. Development of neural net method to predict cold stunning events.
- 4. Jose Congo: February 2016 May 2020: Development of apps followed by development of GIS database and maps for interactions with public for a TCEQ modeling project (worked with several other faculty members).
- 5. Sean Bates: September 2018- March 2020: Developing automated tools to retrieve gridded atmospheric predictions and publishing them on website for cold stunning predictions.
- 6. Andrew Miller: June 2017 August 2018: Development of hydro models including new grids for Packery and Corpus Christi, adaptation of a numerical flow model R for an urban watershed.
- 7. Gabriel Piccarazi: conversion of tidal software from Fortran to Java. Spring 2014 Dec 2017, development of Cassandra data bases to automatically download and store NAM and NGOFS gridded predictions.
- 8. Larry Dell: Development of a new data query interface with statistical summary measures for the Texas Coastal Ocean Observation Network. Analysis of coastal oceanographic data and model outputs. Larry calibrated and ran a hydrodynamic model to characterize Packery Channel. Larry presented at the 2018 American Meteorological Society in Seattle and was first author on the related proceeding. Larry was also author or coauthor on eight other presentation and won first place at the 2015 GIS Day. Larry is moving to Indiana after graduation.
- 9. Joshua Nugent: Feb 2017 May 2017 help with development of hydro models.
- 10. Bradley Koskowich: Development of mobile applications for the communication of coastal observations and predictions and development of the Tar Tracker app. Fall 2014 May 2016

- "Bradley developed coastal apps including an app to help identify the origin of oil spills. Bradley was main or co-author on six presentations, won the 2015 EnerGIS scholarship Grand Prize and first prize in the Undergraduate Environmental Science Poster Competition at the TAMU System 12th Annual Pathways Symposium. Bradley is joining the TAMUCC Geospatial Computing Science PhD program in the fall. "
- 11. Andrew Frost: May 2014- May 2016. Analytics and development of mobile apps with focus on Weather on Wheels.
 - "Andrew took over the development and implementation of the CBI App Weather on Wheels for Android and iOS. Weather on Wheels has now about 15,000 users and Andrew's latest version is about to be released. Andrew also worked on the analytics of Weather on Wheels and the institute. Andrew is planning to start a game development company."
- 12. Francesca Piccarazi: development of mobile application to visualize measurements and predictions along the Houston/Galveston ship channel. First author of a poster winning the prize for "Most Innovative with the Greatest Potential for Impact". Co-Author of an oral presentation with Julien Clifford winning first place in the 2013 TAMUCC Undergraduate Research Symposium.
 - "Since 2012 Francesca has designed and implemented software to facilitate access to coastal information. She won the award for "Most Innovative with the Greatest Potential for Impact" poster presentation at the 2013 TAMUCC Undergraduate Research Symposium. Download the app she created with Darius Stephen: "Texas Coastal Winds". She will be working with USAA."
- 13. Carly Erwin: Nov 2014- August 2015. Development of Weather on Wheels
- 14. David Mora: Fall 2014- Development of Weather on Wheels.
- 15. Gus Ladwig: Spring Dec 2014-May 2015. Use of GIS to investigate coastal observations.
- 16. Whitney Rutledge: Statistical Analysis, Design and optimization of neural network model for Chesapeake Bay. Managing of the Gamma Ray laboratory. 2011-2014.
- 17. Darius Stephen: Dec 2104 Development and packaging of smartphone application to access data from the Texas Coastal Ocean Observing Network while using the geolocation features of the phones.
- 18. Wenbo Zhu: Statistical analysis of water levels from different types of sensor and testing of related gap filling strategies. 2012-2014.
- 19. Julien Clifford: Visualization of hydrodynamic and neural network predictions in Google Earh and Google Map and development of mobile application to visualize measurements and predictions along the Houston/Galveston ship channel. Won first place for his essay titled "The Future of Surveying," published in the February 2013 issue of Professional Surveyor Magazine. http://www.tamucc.edu/news/2013/02/JulienClifford.html#.UUdDRByG1hw, first place in the oral competition and prize for "Most Innovative with the Greatest Potential for Impact"at the 2013 TAMUCC Undergraduate Research Symposium for "Transit Time: Mobile Device Based Visualization and Prediction for Navigation", also won second place in the oral competition at the 2011 TAMUCC Undergraduate Research Symposium. Outstanding islander: http://www.tamucc.edu/profiles/apr13/profile_julien.html. 2011-May 2014.
- 20. Anthony Shook: Development of application to easily locate benchmark monuments along the Texas coast while using the geolocation features of mobile devices. 2012-2014
- 21. Mike Rink: Analysis of oceanographic data to support the development of gap filling algorithms. 2012-2014
- 22. Sergey Reid: BS GIS/Surveying, (May 2008-August 2013) optimization of ANN models and construction of grids for hydrodynamic models. Received the 2013 GeoEye Foundation Award for the Application of High-Resolution Digital Satellite Imagery (\$20,000) http://www.tamucc.edu/news/2013/03/SergeyReid.html#.UUdGtRyG1hw. Outstanding islander (http://www.tamucc.edu/profiles/oct11/profile_reid.html)

- 23. Hoang Nguyen: Development and implementation of data quality algorithms for coastal data.
- 24. Cristián Romo: Development of mobile application to visualize measurements and predictions along the Houston/Galveston ship channel.
- Morgan Matchett, Summer 2011 SURF student: Effects of Adding Wave Data to a Water Level Predictive Model
- 26. Domingo Hiracheta, BE Mechanical Engineering (Fall 2009-August 2010) design and optimization of a neural network model to predict water levels for Tampa Bay Florida.
- 27. Ijeoma C. Ekeh, summer 2010 SURF student (from Wellesley College). Developed a CMS-Flow grid/model for Corpus Christi Bay.
- 28. Betsy Garvel, BS ESCI (Fall 2009-Spring 2010) data processing of water level time series for the Indian River coastal region of Florida & extraction and processing of coastal sediment core.
- 29. Samantha Quisenberry, BS Education (Science 4-8 preparation) training of artificial neural networks for water level predictions and preparation of samples for radioanalysis. Graduated December 2009.
- 30. Cindy Valencia, BS Biology, training of artificial neural networks for water level predictions. Graduated December 2009.
- 31. Angelica Villarreal, BS Mathematics & Computer Science, graduated Summer 2009, Implementation of hydrodynamic model FVCOM for Oso Bay, Texas and implementation of FVCOM runs on a Texas Advanced Computing Center cluster. Analysis and verification of NEXRAD precipitation estimates for the Texas Coastal Bend won 2nd place at the 8th TAMUCC Undergraduate Research Symposium, Corpus Christi, Nov.1, 2008. Also presented work at 2009 AMS student conference, Phoenix, Arizona.
- 32. Felisha Cullins, BS-Geology, graduated summer 2007. Studied the historical surface transport of NORM from a 1962 Uranium mines through radioanalysis of a stock pond core.
- 33. Ben Draper, 2007 SURF student. Studied Radon measurement with EPERM system and rand exhalation from clays, (The effect of Water on Radon Exhalation from South Texas Uranium Mine Soil") from Bellarmine University, Louisville KY 40205.
- 34. Brendan Hughes, 2007 SURF student, researched "Transport of Radionuclides at the Bargmann Uranium Mine: Assessment and WEPP Modeling" from Department of Environmental Science, Dickinson College, Carlisle, PA 17013.
- 35. Ismael Arreola, BS-Geology, Graduated spring 2006. Studied the potential historical contamination of Nueces Bay by brine water discharges through the analysis of a sediment core.
- 36. Bill Kinway Tai, BS-Geology, graduated spring 2005. Studied the statistical relationship between precipitations and spring flows in a karst aquifer. Several presentations, was awarded a gold ribbon for excellent poster presentation. at the 2004 National Sigma Xi Student Research Conference, Montreal, Canada, November 12-13, 2004.
- 37. Nathan Cook, 2004 SURF student. Development of a Neural Network prototype model to forecast bacteria indicator count in coastal recreational waters, presented his work at the Sigma Xi 2004 Student Research Conference, Montreal, Canada and was awarded a gold ribbon for excellent poster presentation.
- 38. Zack Bowles, BS-Geology. Scheduled to graduate spring 2005. Studied the performance of a ANN model for the shores of the town of Rockport. Also studied the potential of engineered training sets for the training of water level forecasting Artificial Neural Networks.
- 39. Brion Dolan, BS-ESCI, graduated Fall 2003. Studied of Radon exhalation from the tailings of the South Texas Uranium mines. Presented at several conferences including the 2003 SETAC meeting and won first place in the Undergraduate poster competition 2003 NOAA Expanding Opportunities Conference, Tallahassee, Florida (80 posters, 6 awards, top prize for \$ 500, http://www.weather.gov/com/nwsfocus/fs040703.htm)

- 40. Michael Willingham, BS-ESCI, graduated Fall 2003. Study of NORM surface transport from the Rosenbrock-Carmedy South Texas Uranium mine through creek bed sediment core analysis. Presented at several conferences including the 2003 SETAC meeting and won second place in the oral presentation competition of the 2003 TAMUCC Undergraduate Research Symposium.
- 41. Jeremy Stearns, BS-COSC & BIOL graduated May 2004. Integration of Real-Time NCEP Eta-12 forecasts into the TCOON database and study of the differences between Eta-12 forecasts and TCOON measurements (published work in the proceedings of the 19th AMS Conference on Weather Analysis and Forecasting/15th AMS Conference on Numerical Weather Prediction, 2002.
- 42. Jessica Telleria, Summer 2003 SURF student, collected and studied a core from the Mexican Hollow river bed for the possible transport of NORM contaminants from a former South Texas Uranium mine. Presented her work at the Sigma Xi 2003 Student Research Conference, Los Angeles, California.
- 43. Brandon Newgard, Summer 2003 SURF student. Collected and studied a sediment core from Oso Bay Texas for sedimentation rate and possible presence of Thorium.
- 44. Crystal Smith, BS-ESCI & CHEM graduated May 2003. Study of radionuclide transport from the South Texas Uranium Mines and their impact on the local health and the environment (presented at the 2002 Geological Society of America and the 2002 Sigma XiGSA-2002). The Sigma Xi presentation was selected for an award (3rd place, ecology).
- 45. Robert Rivera, 2002 SURF student. Study of the build up of radon in soil samples by gamma ray spectroscopy.
- 46. Judi Becker, graduated Summer 2002. Preparation of samples for gamma ray analysis.
- 47. Martha Williams, graduated Dec. 2001. Project: M. Williams, P. Tissot: "Development of a method to create homogeneous sediment standards for use in calibration of gamma ray spectroscopy and application to estuarine sediment cores" presented at the 16th Biennial Estuarine Research Federation Conference (ERF 2001) in St. Petersburg Florida, November 4-8, 2001. The poster presentation was selected as one of the four outstanding undergraduate posters of the conference (runner up).
- 48. Mark Beaman, graduated Summer 2001. Project: M. Beaman, P. Tissot, and J. Brandt: "Kopplin Gamma Radiation Survey" presented at the 2001 South Texas Environmental Conference, Corpus Christi, Texas, October 2001.

SERVICE TO COMMUNITY & MEDIA

Interview with Dallas Station on relative sea level rise, September, 2021.

Interview with KRIS-TV, KII-TV, Univision regarding the AI2ES Retreat, July 19-20, 2021.

Interview with Maria KIIITV regarding water quality in Corpus Christi Bay, Summer 2020.

Interview with Lee Sausley following Hurricane Hanna, Summer 2020.

4/2/2020 - 12/31/2020: Leading the joint TAMUCC/City/County/Hospitals COVID19 taskforce building and organizing the team with university and city colleagues. The goal of the effort was to provide scientific information regarding the progression and potential for the COVID10 epidemic in the Coastal Bend. This effort included regular briefings with city/county leadership and interactions with the press, e.g. KiiiTV, 4/25/2020, Jeremy Landers: "COVID-19 research team at TAMUCC say the virus is burning out across the state, but ending mitigation steps too early could result in a second wave" <a href="https://www.kiiitv.com/article/news/covid-19-research-team-at-tamucc-say-the-virus-is-burning-out-across-the-state-but-ending-mitigation-steps-too-early-could-result-in-a-second-wave/503-d29a7b47-7ec8-4f7a-8bab-2c93b2644154

3/30/2020 Interview with Jeremiah Marshall, KZTV, KRISTV, "TAMUCC scientists are tracking COVID-19 cases across Texas" with Bryan Gillis, Lucy Huang and Philippe Tissot, https://www.kristv.com/news/community/vista-semanal/local/tamucc-scientists-are-tracking-covid-19-cases-across-texas. TAMUCC Press release: https://tamucc.edu/news/2020/03/033020_cbi-covid-coastal-bend-map.html

2/28/2020 Interview by Lon Gonzales, KEDT News Director, "Artificial Intelligence and Sea Turtle Conservation", aired at least on Tuesday 3/3.

7/29/2019: Interviewed by KRISTV Greg Chandler on rip current, drownings and high water levels.

3/5/2019: Interviewed by KIIITV Brian Burns "No reports of cold stunned sea turtles despite cold weather" https://www.kiiitv.com/article/news/local/no-reports-of-cold-stunned-sea-turtles-despite-cold-weather/503-b0fa8f29-b35b-4f6d-81d8-7979a3aba9f3.

12/5/2018: "Impacts of Sea Level Rise and Subsidence along the Texas Coast" presentation to the Ingleside on the Bay Community, Beach Club, Ingleside on the Bay.

8/30/2018: Interview with Texas Tribune for "Report from environmental group warns of bacteria risk at Texas beaches, rivers" by Carlos Anchondo

https://www.texastribune.org/2018/08/30/report-environmental-group-warns-bacteria-risk-texas-beaches-rivers/

4/18/2018: Invited talk at the Corpus Christi Geological Society and Coastal Bend Geophysical Society Luncheon "Real Impacts of Sea Level and Subsidence along the Texas Coast".

3/15/2018: Interviewed by KRISTV "6 Investigates: High bacteria levels along the Bayfront", http://www.kristv.com/story/37737073/6-investigates-high-bacteria-levels-along-the-bayfront

Co-organizer of the workshop "Resilient Texas: Planning for Sea Level Rise", a one-day workshop including invited talks and a tools café with keynote address by John Englander. 71 registered. Organizers: Ecology and Environment Inc., NOAA MANERR, NOAA SeaGrant, UTMSI, TAMUCC Conrad Blucher Institute. Tuesday August 8, 2017, University of Texas Marine Science Institute, Port Aransas, Texas. https://missionaransas.org/resilient-texas-planning-sea-level-rise

2017 Harvey:

Local TV interview with KRISTV ahead of Harvey. Passed on August 24, 25 on KRIS and KZTV 5am, 6 am, and 10 pm (aired 6 times ahead of interview).

San Antonio Express News: Interviewed by Brendan Gibbons as part of his article "In storm-battered coastal towns, resilience takes many forms" along with other speakers of the pre Harvey workshop in Port Aransas focused on the impact of sea level rise. http://www.expressnews.com/news/local/article/In-storm-battered-coastal-towns-resilience-takes-12168196.php.

Texas Standard, David Brown: interviewed to discuss Harvey, hurricanes in Corpus Christi and the potential impact of climate change. The interview is at the following link: http://www.texasstandard.org/stories/texas-standard-goes-to-corpus-christi/

Member of the panel "How to use Sea Level Rise Data in Future Planning Efforts Local, Regional, State, Federal, and Global Perspectives" at the Resilient Texas: Planning for Sea Level Rise Workshop, Port Aransas, Texas: August 8, 2017.

Co-organizer and host of the invited talk "What we know and what we don't know about sea level rise" by John Englander with Q&A led by Meteorologist Maclovio Perez. Monday August 7, 2017, Texas A&M University-Corpus Christi, Corpus Christi, Texas.

June 2 interview discussing the potential impacts of US changes in participation to Paris Climate Accord with Andrew Ellison "Pres. Trump decision on climate agreement could impact Corpus Christi "http://www.kristv.com/story/35579724/trump-decision-on-climate-agreement-could-impact-corpus-christi". Live Channel 6 news 10pm.

Tissot, P. (2017) "Relative Sea Level Rise and Impact: The Texas Coastal Bend", invited presentation, City of Corpus Christi Water Resources Advisory Committee, April 27, 2017, Corpus Christi, Tx.

Co-organizer with Jon Brandt and Gina Concannon of the screening of the new movie "Between Earth and Sky: Climate Change on the Last Frontier", April 3. (1) screening at TAMUCC (~180) followed by panel discussion with David Weindorf (executive producer), Jennifer Smith-Engle and Fei Xie (faculty members) emceed by Maclovio Perez and Philippe Tissot. (2) Screening at the Alamo Drafthouse (~100) theater followed by discussion with movie executive producer David Weindorf and emceed by Maclovio Perez.

TV interviews regarding the screening of the new movie "Between Earth and Sky: Climate Change on the Last Frontier", April 2nd and April 3rd, KRISTV and KZTV.

Development and release of several apps to access regional environmental conditions (Texas Coastal Winds, Bob Hall Pier Conditions) and to improve safety on American Highways through the app Weather on Wheels. The app has been tested by $\sim 40,000$ users nationwide from release through 2016.

November 14, 2016: TV and press interviews regarding relative sea level rise in the Coastal Bend

- KRISTV: Posted: Nov 15, 2016 7:08 AM CSTUpdated: Nov 15, 2016 7:17 AM CST By Rachel Cole http://www.kristv.com/story/33711542/scientists-share-evidence-that-sea-levels-are-rising
- KIII NEWS: Brian Burns, KIII 5:48 PM. CST November 14, 2016
 http://www.kiiitv.com/news/local/forum-held-to-discuss-local-threat-of-rising-sea-levels/351901606
- Caller Times: Chris Ramirez, Corpus Christi Caller-Times8:43 p.m. CST November 14, 2016
 http://www.caller.com/story/news/2016/11/14/panel-sea-levels-rising-land-dropping/93107576/

Friday October 7, 2016: live skype interview on Swiss TV (Telejournal, Radio Television Suisse Romande) 'Violence des ouragans: les explications du Dr Philippe Tissot, météorologue aux Etats-Unis''. http://www.rts.ch/play/tv/19h30/video/violence-des-ouragans-les-explications-du-dr-philippe-tissot-meteorologue-aux-etats-unis?id=8074174

May 2016 through June 1st 2016: Series of interviews to help alert of the hurricane season including:

- KEDT Radio interview with Sara Flores 5/27/2016 (http://www.kedt.org/interviews-with-sara-flores/)
- Corpus Christi Caller Times interview: http://www.caller.com/news/local/possibility-of-la-nia-brings-higher-chance-of-hurricanes-in-coastal-bend-3423348b-d868-476d-e053-010-381445161.html
- KRIS (NBC) TV 6 News at Five (5/27/2016):

 http://mms.tveyes.com/Transcript.asp?StationID=4175&DateTime=5%2F27%2F2016+5%3A11%3A5-0+PM&Term=Conrad+Blucher+Institute&PlayClip=TRUE
- KRIS (NBC) TV 6 News at Six (5/27/2016): http://mms.tveyes.com/Transcript.asp?StationID=4175&DateTime=5%2F27%2F2016+6%3A19%3A4 1+PM&Term=%22Texas+AM%22+%2Bcorpus&PlayClip=TRUE
- KIII TV "First Day of Hurricane Season Brings Advice" (6/1/2016): http://www.kiiitv.com/story/32118454/first-day-of-hurricane-season-brings-advice
- Univision
- Island Moon
- TAMUCC Media story: http://www.tamucc.edu/news/2016/06/060116%20Hurricane%20Season.html#.V09OT00UWUk

2/16/2016 KRISTV "Solar panels act as cost effective measure for saving on energy", by Dorian Galindo (http://www.kristv.com/story/31230608/solar-panels-act-as-cost-effective-measure-for-saving-on-energy).

May/June 2015: Series of interviews to help alert of the hurricane season including:

- Univision 28 on 5/26/2016 17:07:50 & 22:12:10.
- KRIS (NBC), 6 News at Ten on 5/27/2015 22:10:13
- KZTV (CBS) KRIS (NBC) 6 News at Sunrise on 5/28/2015 05:37:10
- KEDT Radio interview with Ted Nelson 5/26/2016

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- Corpus Christi Caller Times on 5/31/2015"Nueces Co., Corpus Christi feel ready for hurricane flooding" by Beatriz Alvarado.

Monday March 21, 2016, 05:59:53 PM: KIII (ABC) - Corpus Christi, TX ABC World News With David Muir: Interview regarding potential damage from a Hurricane after strong week-end thunderstorms.

March 8, 2016. Univision 28 - Corpus Christi, 5:20pm: Interview regarding differences between H-Bombs and A-Bombs.

Monday November 16, 2015, "App is where weather meets road", Corpus Christi Caller Times (Natalia Contreras) article on Weather on Wheels (http://www.caller.com/news/education/local/am-cc-students-develop-weather-app-for-motorists-245922bd-63e3-176e-e053-0100007f6dea-350141061.html)

October 22, 2015, KRISTV and KZTV interview by Lee Sausley and piece on Weather on wheels: http://www.kristv.com/story/30331253/new-tool-for-travelers.

 $\underline{http://travelwithkids.about.com/od/cartravel/fl/Road-Tripping-This-App-Shows-You-Weather-Forecasts-Along-Your-Route.htm).}$

October 7, 2015, GISuser, "Make Your Road Trip Safer with the Weather on Wheels App, Now Available for iPhone".

October 2015, About.com web story: "Road Tripping? This App Shows You Weather Forecasts Along Your Route (http://gisuser.com/2015/10/make-your-road-trip-safer-with-the-weather-on-wheels-app-now-available-for-iphone/).

Wednesday September 3, 2014 Live TV Interview for KRIST TV morning show to share the release of the Beach Conditions App., (http://www.kristv.com/news/bob-hall-pier-beach-app/).

Friday August 29, 2014 Radio Interview for KEDT with Ted Nelson to share the release of the Beach Conditions App.

July 11, 2014, Interview with KIII TV: "The Reason Behind Coastal Erosion on North Beach: (http://www.kiiitv.com/story/25999880/the-reason-behind-coastal-erosion-on-north-beach).

May 2014 Press Release and TV to introduce "Texas Coastal Winds":

TAMUCC Story: http://www.tamucc.edu/news/2014/05/052214%20Wind%20App.html#.U4cSW_ldWSo Channel 6 news clips (5/23/2014):

http://www.kristv.com/videos/tamcc-releases-wind-app/

http://mms.tveyes.com/Expand.asp?aln=20474979&id=297967&dt=05%2f23%2f2014+05%3a13%3a40+PM&u=276979

May 2014: Series of interviews to help alert of the hurricane season including

- Live TV Interview for KRIST TV, Wednesday May 21 (5:30AM News with John-Thomas Kobos, http://www.kiiitv.com/story/25575375/know-your-coastal-bend-flood-zone)
- Radio interview for KEDT, Thursday May 29.
- TV Interview for KiiiTV, Thursday May 29 "TAMUCC Professor Discusses Potential Threats of a Hurricane http://www.kiiitv.com/story/25645904/tamucc-professor-discusses-potential-threats-of-a-hurricane
- Interview for Caller Times article "Ready or Not"/" Is Corpus Christi too comfortable for hurricane season?"Saturday June 1, 2014: http://www.caller.com/news/2014/jun/01/hurricane-season-here/

April 2014: Radio and press related to installation of Current meters at Bob Hall Pier including KUDT Austin PBS radio station.

TAMUCC story:

http://www.tamucc.edu/news/2014/04/043014%20New%20Sensors%20.html#.U4chB_ldWSo

9/9/2013: Series of interviews to highlight the middle of the 2013 hurricane season, encourage coastal residents to have a plan and discuss impact of sea level rise and upcoming increase in inundation frequencies.

University video: http://www.tamucc.edu/news/2013/09/Peak%20of%20Hurricane%20Season%20.html

KIIITV: http://www.kiiitv.com/story/23384800/halfway-through-hurricane-season-dont-let-guard-down

Bay Area Citizen: http://www.yourhoustonnews.com/bay_area/news/hurricane-season-peak-is-sept-expert-warns-don-t-let/article cb979c9e-f255-5779-8b7c-6c20d492b5a0.html

Nueces County Record Star: http://www.recordstar.com/news/article_6e5a5d0c-40a4-5a69-8f5e-be830349f2d6.html

2013 presentation on Sea Level Rise and Climate Change at the 2013 Coastal Bend Hurricane Conference

Gave a series of interviews on the dangers of rip currents including KiiiTV (June 25th http://www.kiiitv.com/story/18876714/expert-warns-of-rip-currents-near-piers-and-jetties), KEDT, and campus media services (July 24)

http://www.tamucc.edu/news/2012/07/TissotStudyRipCurrents.html).

Provided advice to the city of Corpus Christi regarding relative sea level rise in the Coastal Bend to help decision making regarding the Corpus Christi Marina (Peter Davidson and other city staff, September 2011).

Provided advice to the Houston/Galveston National Weather Service Office on modifications of surge rules for Galveston Bay after the removal of the Pleasure Pier tide station and replacement with the North Jetty tide station (summer 2011).

Providing since 2009 water temperature predictions for the Laguna Madre to several groups. Provided the guidance for the closure of the Laguna Madre to barge traffic during the winters of 2010 and 2011. During closure of the waterway in 2011, over 1400 turtles were stranded with about 2/3 surviving. The model, predictions and closure of the waterway likely helped.

Head Judge for the 2010 Coastal Bend Science Fair for grade K & judge for special Physics award.

Development with National Weather Service of new Thunderstorm Forecasting System for the region (Waylon Collins, PI). Story aired in spring 2008 on KIII TV 3 TV (Bill Vessey, interview).

Radio interview with Shane Barker for KEDT, June 2012.

TV Interview with KIIITV "Expert Warns of Rip Currents Near Piers and Jetties", on June 25, 2012 "http://www.kiiitv.com/story/18876714/expert-warns-of-rip-currents-near-piers-and-jetties"

Interviewed for David Sikes' article "Beware of Rogue Waves in Corpus Christi Bay", Corpus Christi Caller Times, June 13, 2012, http://www.caller.com/news/2012/jun/13/beware-of-rogue-waves-in-corpus-christi-bay/.

May 21, 2009 interview with KIII TV 3 – Information regarding coastal safety and rip currents in the Coastal Bend.

Bill Vessey KIII TV 3 TV interview with Waylon Collins and the rest of the DNR team on a new artificial intelligence based model to predict thunderstorms, aired spring 2008

During a July 14th 2006 interview for KRIS TV discussed results of research on rip currents. Results on rip currents were also discussed in a Corpus Christi Caller Time article on July 18 2006.

Research on impact of rip currents featured in spring 2006 Texas Shores magazine (edited by Texas Sea Grant).

During a September 25th TV interview for Channel 3, described the research effort at the University to forecast storm surges with a neural network based model.

May 2002 Interview on Swiss TV discussing the relocation from Switzerland to Texas and my research activities in the area of water level forecasts during storm events.

OTHER SERVICE ACTIVITIES

General Service Activities

Sigma Xi Science Café, October 2, 2014, Texas A&M University-Corpus Christi

Head Judge (oral presentations) for the 12th (spring 2013) and 13th (October 2013) TAMUCC/Sigma Xi Undergraduate Research Symposia, Texas A&M University-Corpus Christi.

Activity participant and grader for the 2013 edition of the Science Olympiad, February 23, 2013, Corpus Christi, TX.

Activity participant and grader for the 2012 edition of the Science Olympiad, April 13-14, 2012, Corpus Christi, TX.

Judge for the 2011 11th Undergraduate Research Symposium, September 23, 2011, Texas A&M University Corpus Christi.

Judge for the 2010 10th Undergraduate Research Symposium, September 25, 2010, Texas A&M University Corpus Christi.

Member of organizing committee of the 2009 9th Undergraduate Research Symposium, October 10, 2009, Texas A&M University Corpus Christi, Head Judge for poster session.

Organized 2009 summer internship for PhD student Roberto Chavez from the Instituto Tecnologico y de Estudios de Monterrey, including supervision of a research project at the Conrad Blucher Institute and set up of a collaboration with Corpus Christi Weather Forecasting Office.

Member of the organization committee of the Data Integration and Management on the Gulf of Mexico Workshop, Corpus Christi, TX, May 14-15, 2009.

Coordination of 1-day visit to TAMUCC of Dr. Oliver Probst, Chair for Wind Energy, Instituto Tecnologico y de Estudios de Monterrey (Jan. 23 2009).

Organization with NSTA student of a set of activities related to space science and engineering for the 6th grade Cunningham T-STEM Innovation Academy. About 60 students. Dec 2008, TAMUCC.

Mentored and assisted NSTA students organize and conduct TEKS referenced ½ Day activities for local school children entitled "Kids's Day Out". Four events from 2006-2008. Events were held at the TAMUCC Early Childhood Center Science Wing during Saturdays.

Head Judge for the 2008 Coastal Bend Science Fair for grades K,6,7,8

Judge for the 13th-18th Coastal Bend Science Fair.

Judge for the 2008 Montclair Elementary School Science Fair

Organization with NSTA student of a set of activities related to space science and engineering for the 6th grade Cunningham T-STEM Innovation Academy. About 60 students. Dec 14, 2007, TAMUCC.

Presentation to the Haase Middle School Science club, "Estuaries, TCOON, and Coastal Modeling", Thursday October 25, 2007.

Second alternate for the safety (incl. hurricane evacuation) for the Science and Technology building, Aug 07 - present

Field trip to Choke Canyon Reservoir with 3 undergraduate researchers (Felischa Cullins, Brendan Hughes, Ben Draper): Extraction of cores from the sediments of Choke Canyon Reservoir and surrounding creeks to investigate potential historical NORM transport from former Texas Uranium mines. Field trip sponsored by the TAMUCC SURF program and CBI/DNR.

Field trip to the former Bargmann Uranium mine with undergraduate researchers (Felischa Cullins, Brendan Hughes, Ben Draper): Collection of core samples and topographical measurements to estimate NORM migration from the former mine. Field trip in Collaboration with the Texas Railroad Commission. Faculty

Presenter at the Careers in Science day organized by the Earth Mobile project, Physics based activity for groups of 6th graders (Monday May 14, 2007)

Participant to the organization of the 2007 CBB Science Fair (traffic and security for K-2 scientists and parents)

Mentor (with Galina Reid) for the TAMUCC student group competing in the 2006 NASA competition: "NASA Means Business". The team "Students Today NASA Tomorrow (STNT)" was selected for the finals held in Orlando, Florida in May 2007.

Judge for the Galvan Elementary fall 2005 science fair, the Early Childhood Development Center spring 2006 science fair.

Judge for the 2nd annual TAMUS Symposium, Corpus Christi, Texas, October 15-16, 2004

Organized with NSTA and SMTE students overall Science activities including very successful stomp rocket and stomp car assembly and launching for the contestants of the 2003 to 2006 Coastal Bend Science Fairs. (Rockets and other physical science activities in 2003,2005,2006, space cars in 2004).

Helped NSTA students organize (and participated to 2 sessions) to a series of activities at Mireles Elementary school. The activities were designed based on a provided theme and implemented for typically 3 groups of about 50 students each session and a total of 6 sessions during the fall 2005 semester.

Reviewer for the 2003 and 2004 TAMUCC Undergraduate Research Proposal competition.

Co-sponsor initially with Dr. Robert and Dr. JoAnn McDonald then Dr. Kit Price Blunt, presently Dr. Cherie McCollough of the NSTA (National Science Teacher Association) Texas A&M University-Corpus Christi chapter 2003-present.

Faculty mentor for the 2002 Sigma Xi Grants-in-Aid of Research proposals of Crystal Smith "Investigation of Transport of Radionuclides From Abandoned Uranium Mines to Watershed " and Wade Williams "A GIS Database with Stockpond Radionuclide Measurements to Assess the Local Impact of Uranium Mining". Crystal Smith was awarded a grant.

Faculty mentor for the 2003 Sigma XI Grants-in-Aid of Research proposals of Brion Dolan "Soil Radon Exhalation within the Context of a Decommissioned Uranium Mine". Brion Dolan was awarded the grant.

RECENT PROFESSIONAL DEVELOPMENT & VISITS

Attended the 2022 American Meteorological Society Meeting, Houston, January 23-27, 2022

Attended the AGU Fall Meeting, New Orleans, December 13-17, 2021.

Attended the ASBPA Conference, New Orleans, September 29-October 1, 2021.

Attended the 3rd NOAA Workshop on Leveraging AI in Environmental Sciences, virtual meeting, September 13-17.

Attended the 2021 GICA Annual Seminar, New Orleans, August, 4-6, 2021

Attended the 2021 NCAR/AI2ES Summer School: Trustworthy Artificial Intelligence for Environmental Science (TAI4ES) Virtual Scummer School organized by the National Center of Atmospheric Research and the NSF AI2ES Institute, July 26-29, 2021.

Completed the Machine Learning in Python for Environmental Science Problems, April 8-9, 2021

Completed the Coastal Zone's "Communications" short course 4/7/2021

Attended most sessions of the NOAA Leveraging AI Workshop in Slow most on '7/2020-2/2021

Attended the AMS Annual Meeting, January 10-15, 2021.

Completed the Coastal Zone's "Water Quality" short course 10/20/2020

Attended the virtual workshop on Knowledge Guided Machine Learning on August 18-20, 2020

Attended the Southeast Regional Sea Turtle Network Conference, February 2020, Corpus Christi, TX

Attended the 100th annual meeting of the American Meteorological Society, January 2020, Boston, MA

Attended the 2019 AGU meeting, December 2019, San Francisco, CA

Attended the 2019 American Shore and Beach Preservation Association Annual meeting, Myrtle Beach, SC, October 2019.

Attended the 2019 MOMACS conference, Washington, DC

Attended the 2019 NGS summit, Silver Spring, Md

Attended the 2019 Hurricane Coastal Bend Conference, Robstown, 5/1-2/2-2019

Attended the 1st NOAA Workshop on Leveraging AI

Attended the 99th annual meeting of the American Meteorological Society, January 2019, Phoenix, AZ

Attended the 2018 AGU meeting, December 2018, Washington, DC

Attended the 2018 American Shore and Beach Preservation Association Annual meeting, Galveston, TX, October 30 – November 2, 2018.

Attended the 2018 Coastal Bend Hurricane Conference, Robstown, Texas, May 2-3.

Attended the 2018 Gulf of Mexico Climate and Resilience Outreach Community of Practice Workshop, Port Aransas, April 30-May 1, 2018.

Attended the 98th annual meeting of the American Meteorological Society, January 2018, Austin, Tx.

Attended the 2017 AGU meeting, December 2017, New Orleans, LS

Attended (and co organized) Resilient Texas: Planning for Sea Level Rise Workshop, Port Aransas, Texas, August 8.

Attended the Regional Sea Level Changes and Coastal Impacts Conference, pre-IPCC International conference, New York, NY, July 10-14.

Attended the 2017 Coastal Bend Hurricane Conference, Robstown, Texas, May 3-4.

Attended the 2017 Meeting of the Texas Section of the American Shore and Beach Preservation (ASBPA), Port Aransas, Texas, April 27-28, 2017.

Attended the 2017 Gulf of Mexico Alliance (GOMA) All Hands Meeting, March 29-31, Houston, Tx.

Attended the 97th annual meeting of the American Meteorological Society, January 2017, Seattle, Wa.

Attended the 2016 American Shore and Beach Preservation (ASBPA) National Meeting, Long Branch, New Jersey, October 2016.

Attended the 2016 Meeting of the Texas Section of the American Shore and Beach Preservation (ASBPA), Port Aransas, Texas, March 31, April 1, 2016.

Attended the ASBPA's Coastal Summit 2016: Healthy Coasts: A Wise Investment, February 23-25, Washington, D.C.

Attended the 96th annual meeting of the American Meteorological Society, January 10-14, 2016, New Orleans, Ls.

Attended the Beaches and Dunes Forum, Corpus Christi, TX, September 24-25, 2015.

Attended the 2015 American Shore and Beach Preservation (ASBPA) National Meeting, New Orleans, Louisiana, October 13-16, 2015.

Attended the first meeting of the Texas Section of the American Shore and Beach Preservation (ASBPA) Meeting, Corpus Christi, Texas, March 20, 2015 (gave the first talk).

Attended the Space4Houston Workshop organized by the UK Consulate (UK Science & Innovation Network) and the Catapult Network, January 12-13, 2015, Rice Campus, Houston, TX.

Attended the 95th annual meeting of the American Meteorological Society, January 4-8, 2015, Phoenix, Az.

Attended the 2014 American Shore and Beach Preservation (ASBPA) National Meeting, Virginia Beach, Virginia, October 15-17, 2014.

Attended Oceans'14 conference, St Johns', New Foundland, Canada, September 15-18, 2014.

Attended the 2014 Coastal Bend Hurricane Conference, Robstown, Texas, May 7-8.

Attended the 94th annual meeting of the American Meteorological Society, Atlanta, Georgia, February 2-6, 2014.

Attended the 2013 American Shore and Beach Preservation (ASBPA) National Meeting, South Padre Island, Texas, October 22-24, 2013.

Attended the 2013 Coastal Bend Hurricane Conference, Robstown, Texas, May 14-16.

Attended the 93rd annual meeting of the American Meteorological Society, Austin, Texas, January 5-10 2013.

Attended the workshop "AMS Short Course on Interpretation and Use of Climate Monitoring and Prediction Information" AMS 93rd Annual Meeting, January 6, 2013, Austin, Texas.

Attended the 2012 UT's Energy Institute and the Bureau of Economic Geology Sea Level Rise Workshop, UTMSI, September 17, 2012.

Attended the 2012 Texas Ports & Waterways Conference, Corpus Christi, Texas, August 1-3, 2012.

Participated (and presented) at the Texas Center for Climate Studies meeting "Gulf of Mexico Regional Climate Modeling Workshop", May 30-31, 2012, College Station, Texas.

Participated (and presented) at the Interdisciplinary Multi-Stake holder Kick-off meeting for the NSF sponsored Research Coordination Network (RCN) for Science, Engineering and Education for Sustainability on Climate, Energy, Environment and Engagement in Semiarid Regions (CE3SAR), May 23-25, 2012, San Antonio, TX.

Participated to the AMS Committee on Improving Climate Change Communication (CICCC) discussion workshop on climate change communication. New Orleans, Jan. 21, 2012.

Attended the 92nd annual meeting of the American Meteorological Society, New Orleans, Louisiana, January 22-26 2012.

Attended the NOAA workshop "Primer on Data Management" held as part of AMS 92nd Annual Meeting, January 22, 2012, New Orleans, Louisiana.

Attended the Twelfth International Conference on Estuarine and Coastal Modeling, St. Augustine, Fl, Nov. 7-9, 2011.

Attended the NOAA Environmental Cooperative Science Center (ECSC) 2011 Annual Meeting, Tampa Bay, Florida, April 17-19, 2011.

Attended the 2011 State of Texas Workshop on the Integration and Streaming of Coastal Atmospheric and Oceanographic Environmental Data, Austin, TX, March 4, 2011.

Attended the 91st annual meeting of the American Meteorological Society, Seattle, Washington, January 23-27 2011.

Attended the Short Course on Energy Meteorology at the AMS 91st Annual Meeting, January 23, 2011, Seattle, Washington.

Attended the 2010 Coastal Bend Workshop on Streaming Atmospheric and Oceanographic Environmental Data, Texas A&M University-Corpus Christi, Corpus Christi, TX, August 27, 2010.

Attended the 2010 Texas Coastal Ocean Observation Network, Austin, TX, June 2-4.

Attended the 2010 Corpus Christi Weather Forecast Office Marine Workshop, Corpus Christi, Friday May 14, 2010.

Attended the NOAA Environmental Cooperative Science Center (ECSC) 2010 Annual Meeting, Jacksonville, Florida, January 31-February 3, 2010.

Attended the 90th annual meeting of the American Meteorological Society, Atlanta, Georgia, January 17-21 2010.

Attended the Short Course on "Datasets for Use in Climate Applications: Access, Use and Tools" at the AMS 90th Annual Meeting, January 17, 2010, Atlanta, Georgia.

Visited to National Ocean Service headquarters in Silverspring, Md, November 17-18, 2009. Presentation of research work and discussions with researchers involved in hydrodynamic model implementation, hurricane surge prediction, long term sea level rise and ocean observatory operational issues. Included meetings with Dick Schmalz and Eugene Wei from the Coast Survey Development Lab (CSDL) and Steve Gill and Chris Zervas regarding long term sea level rise and tidal analysis.

Attended (organization committee member) the Data Integration and Management on the Gulf of Mexico Workshop, Corpus Christi, TX, May 14-15, 2009.

Attended the 2009 Sargassum Symposium, April 29-30, 2009, Port Aransas, Texas

Attended the 2009 Texas Bays and Estuaries Meeting, April 28-29, 200, UTMSI, Port Aransas, Texas

Attended the NOAA Environmental Cooperative Science Center (ECSC) 2009 Annual Meeting, Jacksonville, Florida, February 8-11, 2009

Attended the 89th annual meeting of the American Meteorological Society, Phoenix, Arizona, January 2009.

Attended the workshop "Statistics of Extreme Events", AMS 89th Annual Meeting, January 11, 2009, Phoenix, Arizona.

Attended "Gulf Coast Hurricane Preparedness, Response, Recovery & Rebuilding Conference", November 11-14, 2008, Mobile Alabama.

Attended the conference "Severe Storm Prediction and Global Climate Impact on the Gulf Coast", October 29-31, 2008 at Rice University

Successfully completed the online class "Time Series Forecasting" from Statistics.com, September 19 - Oct. 17, 2008, Instructor: Dr. Marietta Tretter, TAMU - 5.0 C.E.U.s.

Attended the fall 2008 TAMUCC series of workshop on WebCT and its implementation

Attended "Technology Transfer in the A&M System — From Discovery to Commercialization" and online presentation and panel discussion organized by the TAMU Council of Principal Investigators (CPI) and the Office of Technology Commercialization (OTC). September 25, 2008.

Attended the 2008 Sargassum Symposium, May 12-14, Corpus Christi, Texas

Attended the 2008 Texas Bays and Estuaries Meeting, April 16-17, 2008, UTMSI, Port Aransas, Texas

Attended the 88th annual meeting of the American Meteorological Society, New Orleans, Louisiana, January 2008.

Attended the workshop "Statistical Methods and Software for Hurricane and Tropical Storm Prediction", AMS 88th Annual Meeting, 20 January 2008, New Orleans, Louisiana.

Attended the NOAA ECSC annual meeting, Jacksonville, Florida, January 6-9, 2008

Attended 3-day conference "Civilian Applications of Unmanned Aircraft Systems (CAUAS)", the first Community Symposium dedicated to civilian applications of Unmanned Aircraft Systems, October 1-3, 2007, Boulder, CO.

Attended the seminar "Severe Storm Prediction and Evacuation for the Gulf Coast" organized by the Severe Storm Prediction, Education and Evacuation from Disaster Center (SSPEED), Rice University, August 22, 2007.

Attended IOCARIBE, International Conference on Ocean Security in the Wider Caribbean, Solomon Ortiz International Convention Center, Corpus Christi, February 10-12, 2007 (conference implemented by the Ocean Security Initiative-OSI)

Attended the GCOOS-SECOORA-NOAA CSC Storm Surge and Inundation Workshop, New Orleans, January 24-26, 2007. (http://ocean.tamu.edu/GCOOS/Office/meetings/2007_Jan/minutes.htm)

Attended the 84th annual meeting of the American Meteorological Society, San Antonio, Texas, January 2007.

Attended Workshop on the Application of Artificial Intelligence to Environmental and Geospatial Sciences Texas A&M University, Corpus Christi, TX, January 12-13, 2007

Attended the NSTA Web Seminar "The influence of the Atlantic ocean on climate, from Atlantic hurricanes to African drought", Tuesday, December 12, featuring Dr. Tom Delworth from the Geophysical Fluid Dynamics Laboratory/NOAA in Princeton, NJ.

Attended the NSDL/NSTA Web Seminar 1: Hurricanes, May 16, 2006

Attended the Texas Bays and Estuaries Meeting, UTMSI, Port Aransas, Texas, April 20-21, 2006.

Attended the 14th Annual South Texas, Mathematics Consortium, Texas A&M University-Corpus Christi, February 25th, 2006, Corpus Christi, Texas.

Attended the TxCETP 2006 Spring Forum at UTMSI, Port Aransas, Texas, Feb. 17-18 2006.

Attended the TEES TTVN "CAREER Workshop", Corpus Christi, Texas, February 16, 2006.

Attended the TAMUCC Office of Graduate Studies sponsored workshop "NIH Funding Opportunities, Peer Review and Grant Writing" presented by Anthony Coelho, Ph.D., February 10, 2006, TAMUCC, Corpus Christi, Texas.

Attended the 83rd annual meeting of the American Meteorological Society, Atlanta, Georgia, January 10-13, 2006.

Attended to the short course "Neural Network Applications to Environmental Sciences", Atlanta, Georgia, January 28-29, 2006.

Attended the National Groundwater Association 2005 Ground Water Summit, San Antonio, Texas, April 17-20

Attended the NISS/SAMSI Workshop on Collaborations in the Mathematical Geosciences (CMG), Research Triangle Park, October 6-7, 2005.

Attended the First International Conference on Children's Rights & Education for the 21st Century, Corpus Christi, Texas, July 26-30.

Attended the TEES Workshop "PI's Introduction to Evaluation for Proposals", Corpus Christi, Texas, March 4, 2005

Attended the 85th annual meeting of the American Meteorological Society, San Diego, California, January 9-13, 2005.

Attended the American Meteorological Society Short Course entitled "Probabilistic Forecasting", San Diego, California, January 9, 2005.

Attended the 2004 Corpus Christi National Weather Service Weather Forecasting Office (WFO) Coastal Flood Workshop November 17, 2004.

Attended Texas Engineering Experiment Station (TEES) CCLI Workshop, Texas A&M University-Corpus Christi, October 15, 2004.

Attended the ASCE PORTS 2004 conference in Houston, Texas, May 23-26.

Attended NASA Means Business 2004 Final competition, May 18-20, Houston, Texas.

Attended the Accessing NASA's Educational and Research Funding Opportunities Workshop in San Antonio, Texas, April 26, 2004.

Attended a proposal development and evaluation workshop that helps attendant prepare for the Faculty Early Career Development (CAREER) Program of the National Science Foundation (NSF). Workshop conducted by

the Quality Education for Minorities (QEM) Network, with support from the National Science Foundation, January 9-10, 2004, Washington, DC.

Attended the 24th SETAC (Society for Environmental Toxicology and Chemistry) North American Meeting, Austin, Texas, November 9-13, 2003.

Attended the Fourth Annual Chancellor's Invitational Conference, Houston, Texas, June 12-14, 2003.

Attended the Fourth Seminar on Selected Topics of Applied Mathematics on Ocean Engineering, Mexico City, Mexico, May 28, 2003.

Attended NASA Means Business 2003 Final competition, May 4-7, Houston, Texas.

Attended NSF day at University of Texas Pan American, an NSF workshop, Monday March 3, 2003.

Attended the Center for Educational Development Evaluation and Research First Annual Mini-Conference: "Education 2003: Moving Forward", Corpus Christi, Texas Saturday March 1, 2003.

Attended the 2003 Corpus Christi National Weather Service Weather Forecasting Office (WFO) Coastal Flood Workshop January 30, 2003.

Attended the 83rd annual meeting of the American Meteorological Society, Long Beach, California, February 10-13, 2003.

Attended the Short Course entitled "Remote Sensing Methods and Application in Air-Sea Interaction", Long Beach, California, February 9, 2003.

Attended the 2002 Sigma Xi Annual Meeting, Galveston, Texas, November 14-15.

Attended the 19th conference on Weather Analysis & Forecasting, San Antonio, Texas, August 12-16, 2002 (presented and had a student present)

Attended the 2002 Texas Ports & Waterways Conference, Corpus Christi, Texas, August 7-9, 2002

Attended the 2002 TAMUS Regent's Initiative Chancellor's Invitational Conference, Houston, Texas, June 13-15.

Participation to the short course "Neural Network Applications to Environmental Sciences", Orlando, Fl, January 12-13, 2002.

TAMU-CC Undergraduate Research symposium, TAMU-CC, October 2001.

Attended (and presented) the Fourth International Symposium on Ocean Wave Measurement and Analysis, San Francisco, CA, September 2001.

Internship at the Process Characterization and Analysis Laboratory (pcal), Advanced Micro Devices (AMD), Austin, June-August 2001.

OTHER QUALIFICATIONS, AFFILIATIONS & AWARDS

2015: Conrad Blucher Institute Employee Excellence Award recognizing an employee who has made truly distinctive contributions to the advancement of the mission and vision of the Institute. The goal is to celebrate those who model, exemplify, and promote outstanding leadership qualities and work ethic.

2007: Who's Who Among America's Teachers® (honors those educators nominated by students from Who's Who Among American High School Students®, Who's Who Among American High School Students-Sports Edition and students honored in The National Dean's List®.

Selected as faculty member of The Academy for Educator Development, member of cohort 3, a Texas A&M University System Regents initiative for excellence in education, 2002-2005.

Identified as a researcher involved in particularly promising scientific work in the 1997-98 Houston's guide to the technology industry (p. 20) a publication of the Greater Houston Partnership.

Certified Radiological Safety Officer: completed the 40 hour radiological safety officer course at the Texas A&M University Office of Radiological Safety, April 9, 1996.

Practical experience in nuclear engineering simulations using the Monte-Carlo Code MCNP (also completed the 40 hour class, introduction to MCNP, at the Los Alamos National Laboratory).

Continued education through seminars such as: Charles Evans & Associates Surface Analytical Techniques Seminar, Nicolet Spectroscopic Solutions 1997 Seminar, Fred Prior Management seminar for technical persons in leadership roles.

40 Hour OSHA/RCRA Certified, January, 2000, National Spill Control School, Corpus Christi, Texas.

Member of Alpha Nu Sigma honor society, the Association for Environmental Studies and Sciences (AESS). the American Meteorological Society (AMS), the American Nuclear Society (ANS), the American Physical Society (APS), the National Science Teacher Association (NSTA) and Sigma Xi.

Honorary member of Alpha Epsilon Delta, the premedical Honor Society.

Bossard Consultants 1st prize winner as the "entrepreneur of the class" (L'entrepreneur de la Volee), Nov. 6, 1986, Swiss Federal Institute of Technology, Lausanne, Switzerland.

Passed EIT Fundamentals Examination, April 13, 1991. Fluent in English and French. US Resident.

PREVIOUS SELECTED PROPOSALS (Declined)

"Coastal Bend Barrier Islands and Beaches Dynamic Assessment: A 5-year Comprehensive Assessment to Further Develop and Support Beach Management and Planning in Collaboration with Nueces Coastal County Parks" - \$2,992,188, Nueces County – 9/1/2020-8/31/2024 – submitted.

Project/Proposal Title: SCC-PG - Developing a Resiliency Toolkit for Decision-Makers and Residents of Small Coastal Communities - Source of Support: NSF - Co-I (Katya Wowk, TAMUCC< PI) - Total Award Period Covered: 10/01/2019-09/30/2022 - Location of Project: Texas A&M University, Corpus Christi - Work Effort: 1.0 calendar months per year

Project/Proposal Title: Design and Deployment of Fog Prediction System for the Corpus Christi Ship Channel - Source of Support: Port of Corpus Christi - Co-I (PI: James Rizzo, TAMUCC) - Total Award Period Covered: 1/1/2020-12/30/2022 - Location of Project: Texas A&M University, Corpus Christi - Work Effort: 6.0 calendar months per year

Project/Proposal Title: Healthy Ecosystems Grants 4 - Source of Support: National Academies of Sciences, Engineering and Medicine, Gulf Research Program - Co-I (PI: Jennifer Pollack, TAMUCC) - Total Award Period Covered: 1/1/2020-12/31/2022 - Location of Project: Texas A&M University, Corpus Christi - Work Effort: 1.0 calendar months per year

Several Nueces County Proposals

"A Deep Learning Operational Model to Predict Thunderstorms with up to 24 Hours Lead Time" - \$335,211 – NOAA, submitted 12/2018, PI, Co-PI Scott King.

"Assessment of Harvey Surge, Storm Tide Reach" - \$80,000 - NOAA SeaGrant, submitted 9/5/2017, Philippe Tissot, PI.

"Oil Spill Response Toolkit: Integrate Geospatial Databases and Improve Interactive Access" - \$222,977 – Texas General Land Office Oil Spill Prevention and Response Program, 10/1/2017-9/30/2019, submitted, Richard Smith, PI, Philippe Tissot, Co-PI.

"Innovative New Technologies for Assessment of Petroleum Spill, Transport and Degradation" - \$399,232 – Texas General Land Office Oil Spill Prevention and Response Program, 10/1/2017-9/30/2019, submitted, Richard Coffin, PI, Tony Wood, Philippe Tissot, Michael Starek, Paula Rose, Michael Montgomery Co-PIs.

"Long-term sea level change along the Texas and Gulf Coasts: Role of ocean dynamics" - \$192,218 – Texas Sea Grant, 2/1/2018-1/31/2020, submitted, Toshiaki Shinoda, PI (Feiqin Xie & Philippe Tissot Co-Is).

"RESTORE: Texas Coastal Observations and Models for Oil Spill Response, Beach Management, Workforce Development, and Economic Resiliency" - \$5,112,194 - TCEQ/RESTORE, submitted, PI, CoPIs: Deidre Williams, Mike Starek, James Rizzo, Darek Bogucki, Jens Figlus, Meri Davlasheridze, James Naismith.

"RESTORE Collaborative Protection of Laguna Madre Marine Fauna during Cold Water Events" - \$73,000 – TCEO/RESTORE – submitted, PI.

"Measurement/Modeling of Aeolian Sand Transport on North Padre and Mustang Islands at Packery Channel" - \$83,894 – Texas General Land Office, Coastal Management Program – Deidre Williams, PI, Philippe Tissot Co-Pi.

"Baffin Bay Past 200+ Years: Core Analysis for Radio Chronology and Correlated Physical and Biological Events" – PI, Marc Besonen, Paul Zimba & Erin Hill, Co-PIs. Coastal Bend Bays Estuary Program (CBBEP) FY 2017 Project, Water & Sediment Quality Implementation Team - \$44,000 – declined.

"Upper Laguna Madre Water Temperature Prediction System for Management of Activities during Cold Water Events" – PI, Coastal Bend Bays Estuary Program (CBBEP) FY 2017 Project, Water & Sediment Quality Implementation Team - \$56,000 – declined.

"Long-term sea level change along the Texas and Gulf Coasts: Role of ocean dynamics" - , Co-PI, Toshiaki Shinoda, PI and Feiquin Xie Co-PI, Texas Seagrant, \$198,218, 2/1/2016-1/31/2018, submitted 6/26/2015.

"Development and Implementation of Rapid Update Water Level and Flooding Predictions with Mobile Apps for Improved Coastal Resiliency" - \$307,172 - NOAA Research 2 Operation Initiative, PI, 5/1/2015-4/30/2017, submitted 9/30/2014 – Declined.

"Coastal SEES Collaborative Research: Crowdsourcing Inundation Boundaries, Predictions, and a Dynamic Planning Method for Local Adaptations to Sea Level Rise" - \$1,508,264 – NSF, Co-PI, 01/01/15-12/31/17.

Aquarium proposal, submitted spring 2012, declined

SERDP Pi, Kim Withers, Co-PI.

"Establishing a Research Center of Excellence in Integrated Ecosystem Management at Bethune-Cookman University" - \$179,077 – Bethune-Cookman University (NSF Prime), PI, 09/01/13-08/31/18.

"CyberSEES: Type 2: FloodSense: A Computational Infrastructure for Coastal Sustainability with Situational Awareness" - \$1,198,649 - NSF, Ruizhi Chen, PI, Co-PI (9/1/2013 – 8/31/2017).

"Coastal SEES (track 1), Collaborative: Impact of Climate Change and Sea Level Rise on Water Resources along the Coast of the Gulf of Mexico" - \$596,945 - NSF, Jianhon Jennifer Ren, Collaboratorive PI, PI for TAMUCC/CBI \$179,832 (9/1/2013 – 8/31/2015).

"II-NEW: Enabling Computing Infrastructure for Marine and Coastal Informatics" - \$583,592.00 - NSF, Project PI, Ahmed Mahdy, co-PI (4/01/13-3/31/16).

"Rapid Response Capabilities for Harmful Algal Bloom (HAB) species in Texas" - \$92,740 - Coastal Management Program, PI, Paul Zimba, co-PI (10/01/13-09/30/14).

"Establishing a Center of Research Excellence in Integrated Ecosystem Management at Bethune-Cookman University" - \$4,937,759 - NSF CREST proposal (proposal 1242114) - Research Track 3 Collaborator, Lead for TAMUCC - PI Mike Reiter (BCU) - 09/01/12 to 8/31/17 - submitted 4/23/2012.

"Oceanographic and Atmospheric Observations and Predictions for Gulf of Mexico Oil Spills and Tropical Storms" – 3,000,000 - GRI RFP-II, LOI submission GoMRI2012-II-317, Co-PI, Gary Jeffress PI –submitted 12/2011.

NOAA UAS Proposal (Stacey,...) 2012

"Conservation Design Considering Sea Level Impacts on Coastal Wetland Carrying Capacity and its Effects on Aquatic Birds", \$100,000, proposal to the Gulf Coast Prairie Landscape Conservation Cooperative (GCPLCC), submitted January 2012, Co-PI, Kim Withers PI.

- "Rapid Response Observations and Predictions for Gulf of Mexico Oil Spills" \$16,094,277 Gulf of Mexico Research Initiative (GRI2011-I-045) Co-PI Gary Jeffress PI 9/1/2011-8/31/2014 submitted 7/11/2011 declined.
- "IGERT: Environmental Technology (EvTech) as Basis for Graduate Students Training" \$1,053,659 for TAMUCC portion of the grant NSF IGERT LOI Number: L02274891 Co-PI, PI for TAMUCC, Mohamed Abdelrahman, PI for lead institution, TAMUK pending submitted July 5, 2011.
- "Integrated Sensor Modeling for Critical Infrastructure: Storm Surge Risk Analysis" \$400,000 Los Alamos National Laboratory Lead Institution, J. Holland, PI \$75,000 for TAMUCC portion of the proposal, P. Tissot PI submitted to Department of Homeland Security, May, 2011 declined.
- "Improving tropical cyclone forecast duration and reliability" \$4,088,844 NASA ROSE program Co-PI James Ochoa, PI 9/1/11-8/31/13 pending submitted 3/22/2011.
- "Essential Information for the Development of the Texas Offshore Wind Energy" \$240,000 white paper developed in collaboration with the National Center for Atmospheric Research circulated spring 2011.
- "Scientific Environmental Technology Cooperative Science Center" \$15,000,000/5 year NOAA -SEC-OED-2011-2002684 TAMUK Lead institution, K. Jones PI \$1,100,000 for TAMUCC subcontract Senior Investigator, Thrust area leader for sensor development 09/01/2011 to 08/31/2016 submitted 11/15/2010 declined.
- MRI: Acquisition of a High Performance Computational Cluster for Computational, Mathematical, and Natural Science Applications NSF Co-PI, M. Scherger, PI.
- MRI: Acquisition of a Laser Diffraction Particle Size Analyzer and a High-Purity Germanium Well-Detector System \$135,802 NSF 9/1/10-8/31/11 Co-PI, M. Besonen, PI.
- Development and Optimization of a Remote Sensing Array for Detection and Monitoring of Texas HAB Taxa \$399,406 NASA, Co-PI, Paul Zimba, PI. 7/1/10-6/30/12.
- "Real Time and Historical Wave Information from Texas Water Level Monitoring Stations" \$157,797 a proposal to the Coastal Management Program, grant cycle #14, October 2008.
- "SMTE Teacher Development Fund" \$150,000 a proposal to the Greater Texas Foundation proposed May 2008.
- "CAREER: Development of AI based Storm Surge Predictive Models and Integration of Science Teacher Preparation and Learner Centric Activities Using Real Time Observations" \$450,000 NSF Submitted July 2006.
- "CMG: Nonlinear Generalized Regression Models for Geosciences Modeling--Applicability, Design and Limitations" \$580,396 NSF PI, Co-PI Beate Zimmer, submitted January 2006.
- "MUST: Mobile Underwater Sensor-networking Techniques" TAMUCC Subcontract \$210,353 NSF proposal with UTA Qilian Liang, Frank Lewis, and Dan Popa PIs at UTA, Gary Jeffress at TAMUCC Project Scientist, composed TAMUCC portion of proposal submitted October 2005.
- "White paper paper for proposed research on hurricanes Katrina and Rita, impact in the US Gulf of Mexico (GOM)" SOL 0106RP39559 about \$250,000 submitted to the Mineral and Management Services (MMS) Technology, Assessment and Research (TA&R) Program on Hurricanes Katrina and Rita pending, submitted December 30th 2005.
- "Acquisition of an Elemental Analyzer/Isotope Ratio Mass Spectrometer to Enhance Geoscience Research at Texas A&M University-Corpus Christi" 369,267 NSF Co-PI, Jim Silliman, PI submitted August 2005.
- "CAREER: Development of AI Based Environmental Forecasting Methods and Integration of Science Teacher Preparation and Learner Centric Activities Using Real Time Observations" \$663,398 NSF submitted July 2005.
- "Framework for Mission-Aware Adaptive Sensor Networks with Applications to Secure Perimeters and Underwater Environments" NSF Co-PI for TAMUCC, Frank Lewis, University of Texas At Arlington PI for multi-University proposals Sept 2005 Aug 2009.

"Development of a predictive model for beach water quality assessment and public advisories" - \$ 407,074 - NOAA Oceans and Human Health Initiative – Jan 2006 – Dec 2008 – PI with Joanna Mott.

"Undergraduate Interdisciplinary Research: Mathematical and Predictive Modeling of a Marine Ecosystem" – NSF Proposal 0531937 - \$1,249,588.00 – Sept 2005 – Aug 2009 - Co-PI, Lillian Waldbeser, PI.

"AMC-SS: Modeling and Analysis of Coastal Systems Based on the Data Provided by Texas Coastal Observation Network" – NSF – Co-PI, Alexei Sadovski, PI.

"South Texas Earth Explorers Program (STEEP): Undergraduate Research and Outreach Experiences in Earth Systems Science" - \$ 806,707 –NASA Earth Explorer Program – June 2005 – May 2008 - Co-PI, Jennifer Smith-Engle, PI.

"CAREER: New Environmental Forecasting Methods and Integration of Science Teacher Preparation with Learner Centric Activities Using Real-Time Data and Artificial Intelligence"- \$ 634,765 -National Science Foundation – March 2005 – February 2010 – PI (3 reviewers: 1 Excellent, 1 very good, 1 fair).

"Modeling and Analysis of Coastal Systems Based on the Data Provided by Texas Coastal Ocean Observation Network AMC-SS" – NSF - Sept 2005 – Aug 2008 – Co-PI, Alex Sadovski, PI.

"Development of a predictive model for beach water quality assessment and public advisories" - \$ 425,000 - NOAA Oceans and Human Health Initiative – Jan 2005 – Dec 2007 – PI with Joanna Mott.

"Neural Network Based Predictions of Coastal Flooding for the Texas Gulf Coast" - \$ 114,000 - COMET (NOAA) - June 2004 - June 2007 - TAMUCC PI, Scott Duff, TAMUCC Co-PI, Andrew Patrick, NWS PI, Waylon Collins NWS Co-PI.

"Neural Networks and Statistical Modeling and Analysis of Coastal Systems Based on the Data provided by Texas Coastal Ocean Observation Network" - \$ 500,404 - NSF - Sept 2004 - Aug 2007 - Co-PI, Alex Sadovski, PI.

Proposal to the National Science Foundation, "Science in the Colonias: A texas Partnership" (1/7/2003), co-PI with several other colleagues, Dean Diana Marinez, PI (\$ 12,365,282)

Co-PI for the Proposal to the NSF MRI-RUI program entitled "Acquisition of a Powder X-ray Diffraction System", Thomas Naehr (PI), spring 2003.

Proposal to the National Science Foundation (spring 2002): "Real-Time Nowcast/Forecast model of Coastal and Estuarine Water Level Anomalies for the Western Gulf of Mexico", (NSF no 0221422 - \$ 441,554), co-PI, Daniel Cox, PI, Patrick Michaud co-PI.

The proposal "Red de Observaciones y Predicciones de Variable Oceanicas (ROPVO) en las Costas y Puertos del Golfo de Mexico" submitted by Mexican colleagues to their funding agency (spring 2002) is closely related to the previously mentioned NSF proposal. The two proposals are linked and were proposed within the framework of NAFTA collaborations.

Proposal to the Texas Higher Education Coordinating Board Advanced Technology Program (ATP), supplemental high school teacher grants (spring 2002): "Contamination from South Texas Uranium Mines" in collaboration with Pat Michaud (CAMS) and Vinay Dulip (high school chemistry teacher at Foy H. Moody High School).

Proposal to the Texas Higher Education Coordinating Board Advanced Technology Program (ATP, Summer 2001): "Web-Based Real-Time Processing and Dissemination of Coastal Data Forecasts Based on Neural Networks", PI, Patrick Michaud (CAMS) and Dan Cox (TAMU), co-PIs. This proposal was selected for the second round evaluation, received top rankings by the reviewers, was judged to be "a very good proposal — comparable to those being funded in national programs" but was finally ranked 25th in its category and only the top 20 proposals were funded.

Proposal to the Texas Higher Education Coordinating Board Advanced Research Program (ARP, summer 2001): "Arsenic and Radionuclides in South Texas: A GIS Approach to Link Environmental Impact and Health" PI, Patrick Louchouarn co-PI.

CLASSES TAUGHT

General Physics I and associated laboratories-PHYS 1401. 4 sem. hrs. (3:3)

Introduction to Newtonian physics. Topics include Aristotelian physics and its overthrow, Newton's Laws of motion and gravitation and the motion of particles and rigid bodies. The idea of the universe as a law governed system will be developed. Laboratory activities provide introduction to empirical methods in physics.

General Physics II and associated labs- PHYS 1402. 4 sem. hrs. (3:3)

This course covers the study of oscillations, wave motion, fluids, electricity and magnetism, topics in modern physics and applications related to the various topics

University Physics I and associated labs - PHYS 2425, 4 sem. hrs. (3:3)

Cacluculus based Introduction to Newtonian physics. Topics include Aristotelian physics and its overthrow, Newton's Laws of motion and gravitation and the motion of particles and rigid bodies. The idea of the universe as a law governed system will be developed. Laboratory activities provide introduction to empirical methods in physics.

University Physics II and associated labs - PHYS 2426. 4 sem. hrs. (3:3)

Calculus based introduction to oscillatory and wave phenomena, electricity and magnetism as well as other selected topics. The classical theory of fields will be used to study electric and magnetic phenomena, including light, and their role in modern technology.

Foundational Approaches to the Physical Sciences SMTE 3315 (formerly PSCI 3315). 3 sem. hrs (2:2) Physical science topics such as simple machines, atoms, molecules, electricity and magnetism, sound, and light. Laboratory involvement will emphasize techniques of problem solving, data gathering, and data application. The course is taught following an inquiry based format and is recommended for future K-8 level science educators.

Environmental Physics - PHYS 3490 3 sem. hrs (2:2)

A similar class, "Techniques in Environmental Physics" is generally taught as an independent study, listed as ESCI 4496. The Designated Independent Study (DIS) is designed to assist the student in developing skills and mastery of Environmental Physics techniques. The DIS includes (1) self studies from the course book "Environmental Physics" by Clare Smith with the students putting together presentations which will then be discussed and graded by the instructor (2) the development of computer models based on environmental physics concepts and (3) field collection of soil or sediment samples and work on gamma ray analysis of the samples in the laboratory.

Seminar in Earth System Science - CMSS 6102. 1 sem. hrs. (1:0)

Co-teaches (fall 2006) with Ian MacDonald (main instructor), a seminar series for CMSS PhD students to help them with research and other skills useful to their progression in the program.

Environmental Forecasting - CMSS 6352. 3 sem. hrs. (3:0)

Statistical techniques (classic and Bayesian) and new artificial intelligence based techniques, such as neural networks, for the analysis of environmental systems with large datasets.