Dissertation Institute Announcement

We are pleased to announce the 4th Dissertation Institute (DI), an interactive workshop for underrepresented (African American, Native American, Pacific Island and Hispanic American) graduate students in engineering. The 2020 DI will take place June 7th – 12th on the University of Michigan campus. The Institute is funded by the National Science Foundation and hosted by University of Texas, Dallas and Virginia Tech. The primary goal is to address issues that prolong completion times for those at the dissertation proposal preparation and dissertation completion stages of the targeted population.

The week-long event will focus on skills and strategies needed to successfully complete the dissertation process as well as provide networking opportunities to build connections for future collaborative career advancement. Institute participants will build new writing habits, work on their dissertation or dissertation proposal, and learn skills that will help them continue making progress when they return to their institutions. Participants will be housed in a private room; will share a bathroom with one other participant; receive meals; and be reimbursed for travel costs up to $500. As a part of the application process, participants will be asked to identify barriers that have impeded their progress to completing their dissertation and to provide suggestions for additional topics to be presented.

We seek your assistance in identifying students who might benefit from participating in the Institute. The **application deadline is March 8th**. Please share the following link with students, faculty and any other colleagues who might assist us in announcing this wonderful opportunity: [https://www.dissertationinstitute.com/](https://www.dissertationinstitute.com/)

If you have questions, please email them to dissertationinstitute@gmail.com.

CEE Seminar Announcement | Metabolic Versatility Of Autotrophic N-Cycle Organisms And Their Application In Engineered Water Cycling

**Professor Kartik Chandran,**  
*Environmental Engineering, Columbia University*  
**Friday, Feb. 7, 12:30 p.m., Room B-136**
Dr. Kartik Chandran is Professor of Environmental Engineering at Columbia University. The main focus of Dr. Chandran’s work is on understanding and re-engineering the microbial nitrogen cycle while exploring its links with the carbon, water and energy cycles. Applications of his work include energy and resource efficient technologies and approaches for biological wastewater treatment and sanitation. More details on Dr. Chandran’s work can be found online: [www.columbia.edu/~kc2288](http://www.columbia.edu/~kc2288).

The engineered nitrogen cycle provides a rich framework to study the structure, function and interactions within mixed microbial communities. The knowledge obtained from such studies also allows us to harness the potential of such communities towards achieving multiple goals including the production of clean water, treatment of drinking water and the synthesis of commodity chemicals and fuels, among others. Within the spectrum of engineered nitrogen cycling processes, autotrophic biological nitrogen removal (BNR) offers an energy and resource efficient alternate to conventionally followed approaches. The successful implementation of autotrophic BNR processes is contingent upon the selective retention of aerobic and anaerobic ammonia oxidizing organisms over nitrite oxidizing organisms. While significant work has been conducted examining the microbial ecology, metabolism and modeling aspects relating to autotrophic BNR processes, the focus has mainly been on the nitrogen cycle. Discussions on organic and inorganic carbon (the preferred substrate for several communities in these processes) are somewhat uncommon. In this work, we first consider the impact of organic and inorganic carbon supply as a driver for interactions amongst different communities present in autotrophic nitrogen removal processes. The metabolic basis for some of these interactions is then evaluated based on a more fundamental look at select members of such communities. Further, the interplay between conventionally understood protagonists of the microbial N-cycle and some newly discovered bacteria, including those catalyzing complete ammonia oxidation (comammox) is also discussed.

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**Engineering Open House 2020: The Science of Speed**

[Image of Engineering Open House 2020 poster]
5th Annual FAMU-FSU Engineering Shark Tank: A Technology Business Pitch Competition

Thursday, April 23, 2020
7 p.m. - 8:30 p.m.
AME Seminar Room 106
2003 Levy Avenue, Innovation Park

Informational Meeting:
Thursday, February 6, 4:30 p.m.- 5:30 p.m., FAMU-FSU Engineering, A115

Eligibility: Teams of two-four students. At least half the team should be undergraduate engineering students.

Deadline to Apply: Friday, February 28, 2020. Send brief description of your idea and list of team members to: mdevine@eng.famu.fsu.edu

Prizes Include: $1,200 for Best Overall, $800 for Most Impactful, $600 for Most Innovative and $400 for the “People’s Choice Award.”

Spring 2020 funding: Laura Bassi Scholarship

The Laura Bassi Scholarship, which awards a total of $8,000 thrice per annum, was established by Editing Press in 2018 with the aim of providing editorial assistance to postgraduates and junior academics whose research focuses on neglected topics of study, broadly construed. The scholarships are open to every discipline and the next round of funding will be awarded in April 2020:
Spring 2020  
Application deadline: 25 March 2020  
Results: 15 April 2020

All currently enrolled master’s and doctoral candidates are eligible to apply, as are academics in the first five years of their employment. Applicants are required to submit a completed application form along with their CV through the application portal by the relevant deadline. Further details, previous winners, and the application portal can be found online here.

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**FSAEF Scholarship Opportunity**

We are pleased to announce the availability of [stormwater scholarships](https://www.fsaef.org) from the [Florida Stormwater Association Educational Foundation (FSAEF)](https://www.fsaef.org) in 2020. Please help us spread the word by sharing this information!

Graduate students studying water quality, stormwater management or stormwater finance at a Florida college or university are eligible to receive the scholarships.

The [Florida Stormwater Association](https://www.fsaef.org) (FSA) is a non-profit, professional association of local governments, engineering and consulting firms, water management districts, and academic institutions that have an interest in stormwater management and finance. Its goals are to improve water quality and enhance the stormwater management profession in Florida. The [FSA Educational Foundation](https://www.fsaef.org) is a parallel organization that supports FSA through stormwater research and the scholarship program.

The **deadline** to [submit an application](https://www.fsaef.org) for this year’s scholarships is **August 7, 2020**.

Visit the [Scholarship Page](https://www.fsaef.org) for information on the program.

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**NYU Tandon Smart Cities Postdoctoral Positions**

[NYU Tandon](https://www.nyu.edu) is in the process of recruiting for this year’s cohort of [Smart Cities Postdoctoral Research Associates](https://www.nyu.edu). They expect to make 3-4 new hires this year to join our current cohort of five Smart Cities postdocs. [Application online here](https://www.nyu.edu). The **application deadline** is **February 1st**.

Applications received by **February 1st, 2020** will receive full consideration. Any questions may be directed to [Daniel Neill](mailto:Daniel.Neill@nyu.edu).

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**Equal Employment Opportunity Statement**

For people in the EU, [click here](https://www.nyu.edu) for information on your privacy rights under GDPR.

*New York University is an Equal Opportunity Employer. New York University is committed to a policy of equal treatment and opportunity in every aspect of its hiring and promotion process without regard to race, color, creed, religion, sex, pregnancy or childbirth (or related medical condition), sexual orientation, partnership status, gender and/or gender identity or expression, marital, parental or familial status, caregiver status, national origin, ethnicity, alienage or citizenship status, veteran or military status, age, disability, predisposing genetic characteristics, domestic violence victim status, unemployment status, or any other legally protected basis. Women, racial and ethnic minorities, persons of minority sexual orientation or gender identity, individuals with disabilities, and veterans are encouraged to apply for vacant positions at all levels.*

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Christine Battaglia, Manager of Mobility  
NYU CUSP - Center for Urban Science and Progress
April-May 2020 New Zealand PREEMPTIVE Multidisciplinary Natural Hazards Engineering Institute Series for Advanced Graduate Students

PREEMPTIVE Advanced Studies Institute – New Zealand

April 22 – May 1, 2020  Te Papa Wellington / Univ. of Canterbury

The PREEMPTIVE (Pacific Rim Earthquake Engineering Mitigation Protective Technologies International Virtual Environment) will host six Advanced Studies Institutes (ASIs) for graduate students over several years:

- Resilience of Aging Infrastructure — Costa Rica, Feb. 2019;
- Tsunami Hazards & Infrastructure Resilience — Thailand, June 2019;
- Structural Control & Geotech. Challenges — New Zealand, Apr.–May 2020;
- Interdisciplinary Disaster Science — Japan, Sept. 2020;
- Hurricane and Multi-Hazards — Puerto Rico, Jan 2021; and
- Extreme Earthquake & Tsunami Hazards — Chile, May 2021

The goal of the PREEMPTIVE ASIs is to build a diverse community of researchers across the Pacific Rim, and beyond, who share a focused interest in understanding, promoting and accelerating the adoption of protective systems to provide resilience for building and infrastructure systems and ensure sustainable societies.

Each week-long institute will consist of 2–3 days of workshops and presentations by local and U.S. faculty to highlight protective systems success, 1–2 days of cultural and technical tours to give the U.S. students context to the performance of protective systems in recent natural hazards, and 2–3 days of collaborative group projects providing guided experiential learning experiences to implement a multidisciplinary project. To provide an introduction to the material, students will be expected to complete some online modules prior to departing for their ASI.

U.S. graduate students will be joined by U.S. faculty mentors and local student and faculty hosts. To increase participation in the program, each graduate student will typically participate in only one ASI; a select few graduate students will be asked to participate in a second ASI.
Call for NASA Fellowship Activity 2020 Proposals

NASA Office of STEM Engagement (OSE) opened a call for graduate research proposals on December 23, 2019. The NASA Research Announcement (NRA) NNH20ZHA001N: NASA Fellowship Activity 2020 is seeking student-authored and independently conceived graduate research proposals responding to a NASA Research Opportunity listed in the solicitation. The 2020 NASA Fellowship Activity is designed to support OSE objectives and provide academic institutions the ability to enhance graduate-level learning and development. The program details and requirements are outlined in the solicitation document.

To be eligible to submit a proposal, candidates must be U.S. citizens or a national who hold a bachelor's degree in a STEM field earned before Aug. 31, 2020. Candidates must be enrolled in a master's or doctoral degree program no later than Sept. 1, 2020, and intend to pursue a research-based Masters or Ph.D. program in a NASA-relevant field.

Proposals are due February 21, 2020.

For full program details, visit: 2020 NASA Fellowship Activity. An informational webinar about this fellowship will be presented on January 8, 2020 and February 5, 2020 – time to be announced. The telecom number is 1-844-467-6272, and the passcode is 549325. The information to join the meeting via the web will be posted on the solicitation webpage once the information is available.

Questions concerning these program elements may be directed to Vandhana Lal at NASA.fellowships@nasaprs.gov.

Spring Data Science Fellowship Opportunity
Application Link: https://www.thedataincubator.com/fellowship/apply.html

**Early Deadline:** 2020-01-30.
**Regular Deadline:** 2020-02-11
We are assessing and interviewing candidates who apply for the Early Deadline first and then based on remaining availability, will take candidates who applied for the Regular Deadline on a first-come first-serve basis.

**Data Science in 30 minutes:** Learn how to build a data-science project in our upcoming free Data Science in 30-minutes webcast. Signup soon as space is limited.

**Learn More:** You can learn about our fellows at The New York Times, LinkedIn, Amazon, or Capital One. To read about our latest fellow alumni, check out our blog. To learn more about The Data Incubator, check us out on Venture Beat, The Next Web, or Harvard Business Review.

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**Spring 2020 COE Library Workshops**

**MEASURING RESEARCH IMPACT**  
February 12, 2–3 p.m.  
B202 - College of Engineering

To register, visit: fsu.libcal.com/event/6029520
Please bring a laptop.

**ENGINEERING ENTREPRENEURSHIP**  
February 19, 2–3 p.m.  
A115 - College of Engineering

To register, visit: fsu.libcal.com/event/6029521
Please bring a laptop.
SAFETY TIP: Novel Coronavirus advice for the public from World Health Organization

- Frequently clean hands by using alcohol-based hand rub or soap and water;
- When coughing and sneezing cover mouth and nose with flexed elbow or tissue – throw tissue away immediately and wash hands;
- Avoid close contact with anyone who has fever and cough;
- If you have fever, cough and difficulty breathing seek medical care early and share previous travel history with your health care provider;
- Avoid unnecessary travel to areas currently experiencing cases of novel coronavirus;
- When visiting live markets in areas currently experiencing cases of novel coronavirus, avoid direct unprotected contact with live animals and surfaces in contact with animals;
- The consumption of raw or undercooked animal products should be avoided. Raw meat, milk or animal organs should be handled with care, to avoid cross-contamination with uncooked foods, as per good food safety practices.


UNIVERSITY NEWS

FAMU Graduate Student Poster and 3MT Competition April 7-8, 2020

CALL FOR ABSTRACTS
Poster Competition and Three Minute Thesis (3MT®)
April 6-10, 2020

As a part of the activities celebrating Graduate Student Appreciation Week, April 6-10, 2020, the School of Graduate Studies, Research and Continuing Education will host its Annual Research Competitions on Tuesday, April 7, 2020 and Wednesday, April 8, 2020. All master’s and doctoral students are invited to participate in the Research Poster competition by submitting an abstract of 300 words or less and one static slide to the Graduate
Research Poster Competition
The research poster competition will take place on Tuesday April 7, 2020 at 10 a.m. in the Grand Ballroom. Graduate students are responsible for printing their own posters for the poster competition. Posters must be formatted in PowerPoint with dimensions of 36 by 48 inches. Students must upload their 300 word or less abstract & slides to the Graduate Student Appreciation Week Blackboard Portal under research poster assignment. Students must set up their posters on Monday April 6, 2020 between 4:00-5:00 p.m.

3MT™ Competition
The Three-Minute Thesis (3MT®) Competition will take place on Wednesday, April 8, 2020 beginning at 11:00 a.m. in the Grand Ballroom. The 3MT celebrates the exciting research that is being conducted by our master’s and doctoral students. Developed by the University of Queensland, this exercise cultivates students’ academic, presentation, and research communication skills. The competition supports their capacity to effectively explain their research in three minutes, in a language appropriate to a non-specialist audience using a single static PowerPoint slide that will be displayed during their three-minute presentation. The slide must not contain animations, transitions, video or audio files, and it must be submitted to the 2020 Graduate Student Appreciation Week Blackboard Portal under the “3MT” assignment. If you have questions please send an email to gradstudies@famu.edu. Please visit www.threeminutethesis.org/ for more information on the 3MT™ Competition.

FSU: Accepting nominations for Global Citizen Award
English Pronunciation Tips: Reduced Speech
Monday, February 3, 2020 – 3:30 – 4:30 p.m.
310 Hecht House

Presenter: Dr. Jennifer Grill, EAP Program
Description: As a non-native speaker of English, you may notice that your English sounds different from native speakers, but you’re not sure why. In this workshop, we’ll explore two aspects of pronunciation: reduced speech and linking. We’ll learn what these are and how they function, and we’ll practice these aspects through several short listening and speaking activities.

Register: https://fsu.qualtrics.com/jfe/form/SV_3shanHkTeVv17Jb

Using Online Pronunciation Resources
Wednesday, February 19, 2020 – 3:00 – 4:00 p.m.
102 Hecht House (Computer Lab)
Presenter: Dr. Maria B. Mendoza, EAP Program
Description: Improving pronunciation requires practice and repetition. If you want to work on your pronunciation by yourself, this workshop is for you. You will learn about online resources that are helpful for independent pronunciation practice. The workshop will be held in a computer lab to give you the opportunity become familiar with the resources and practice.

Register: [https://fsu.qualtrics.com/jfe/form/SV_dd1QDiDDuvlG9T](https://fsu.qualtrics.com/jfe/form/SV_dd1QDiDDuvlG9T)

SPEAK Test Information Session
Tuesday, March 24, 2019 – 3:30 to 4:30 p.m.
310 Hecht House

Presenter: Dr. Maria B. Mendoza, EAP Program
Description: This session will include a discussion of the test format and scoring procedures. The presenter will go over the practice test questions and discuss the different competencies taken into account when grading. The standards for teaching assistants will also be discussed. This session is open to faculty and staff.

Register: [https://fsu.qualtrics.com/jfe/form/SV_cCMR30YgTuALH9P](https://fsu.qualtrics.com/jfe/form/SV_cCMR30YgTuALH9P)

**UPCOMING EVENTS**

Engineering Campus: Mark Your Calendars

**[February 2020]**

**RAZOR Lecture Series** - Sastry Pamidi, Ph.D., Tuesday, February 4 | Challenger Learning Center, 6:30 p.m.

**Library Workshop: Measuring Research Impact**, Wednesday, February 12 | FAMU-FSU Engineering, B202, 2 p.m. - 3 p.m.

**Engineers Week**, Sunday, February 16 - Saturday, February 22

**RAZOR Lecture Series** - Bruce Locke, Ph.D., Tuesday, February 18 | Challenger Learning Center, 6:30 p.m.

**Library Workshop: Engineering Entrepreneurship**, Wednesday, February 19 | FAMU-FSU Engineering, A115, 2 p.m. - 3 p.m.

**E-Week Girl Day**

**Engineering Open House – MagLab Open House**, Saturday, February 22

**Library Workshop: Plotting & Function Discovery w/MATLAB**, Wednesday, February 26 | FAMU-FSU Engineering, A115, 2 p.m. - 3 p.m.

**Grad Preview 2020**, Thursday and Friday, February 27-28

**[March 2020]**

**Spring Break** | March 16 - March 20

**Library Workshop: Intro to Patent Searching**, Wednesday, March 4 | FAMU-FSU Engineering, B202, 2 p.m. - 3 p.m.

**RAZOR Lecture Series** - Samuel Grant, Ph.D., Tuesday, March 10 | Challenger Learning Center, 6:30 p.m.
World Engineering Day, Friday, March 20

Senior Design Day, Thursday, April 9 | TBD

Shark Tank Competition, April 16, 7 p.m. - 8:30 p.m. | AME Seminar Room 106

LAUNCH! Spring 2020, April 16, 4 p.m.-6 p.m. | FAMU-FSU Engineering, Connector lawn

Transportation Day, Friday, April 17 | TBD

FAMU STEM Day w/Architecture, Saturday, April 18

RAZOR Lecture Series - Eren Ozguven, Ph.D., Tuesday, April 28 | Challenger Learning Center, 6:30 p.m.

THINGS TO DO

CLC RAZOR Lecture: Superconducting Technologies for Electric Aircraft, Feb. 4 @6:30 p.m.
Free Planetarium Show: February Skies | Saturday, February 1 | 10 AM

"February Skies over Tallahassee" is a live show presented by the Tallahassee Astronomical Society. The February sky will be reviewed including prominent constellations, stars and planet positions. Includes a special presentation by the Mechanical Engineering Graduate Student Association (MEGSA): Learn More

www.challengerTLH.com

Want to add something to the next issue? Email us! Deadline is Friday for Monday publication.

FAMU-FSU College of Engineering
2525 Pottsdamer St, Tallahassee FL 32310

STAY CONNECTED