



# Women in Engineering Graduate Steering Committee

March, 2014

102 Dupont Hall • Newark, DE 19716 • USA  
[Sites.udel.edu/wie](http://sites.udel.edu/wie) • (302) 831-2401

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## Our Mission

*Our goal is to promote, mentor, and enable the participation of women students and faculty in engineering studies and the workplace. WIE provides activities that bring together female and male engineering students, faculty, and administrators -- as well as external representatives from industry, government agencies, and other academic institutions -- with the goal of promoting a healthy institutional climate for all members of the engineering community at UD.*

## Upcoming Events

### *Pizza Lunch and Panel for Students Considering Graduate School -- March 26<sup>th</sup>*

Are you considering conducting research as a career? Do you find yourself wondering about advantages and disadvantages of graduate school? Do not worry anymore, all your questions are to be answered in this graduate panel. Two panelists from each engineering department will be willing to share their experiences with you.

If you are an undergraduate student considering applying for graduate school, come and join us at our graduate panel to be held on March 26th. Details will be announced soon on our website: [sites.udel.edu/wie](http://sites.udel.edu/wie).



### *Meet Your Faculty Lunch - April 25<sup>th</sup>*

Dr. Hui Fang is an assistant professor in Electrical and Computer Engineering department, who received an Excellence in Teaching Award in 2013. She is going to have a lunch with us on April 25<sup>th</sup> in DuPont 102 where she is going to answer graduate female students' questions about work and life.

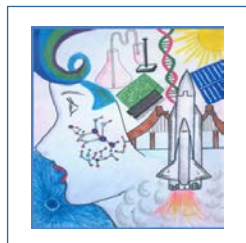
Please join us in DuPont 102 from 12:30 - 1:30 pm.

## Your 2013 – 2014 Committee

### Biomedical Engineering

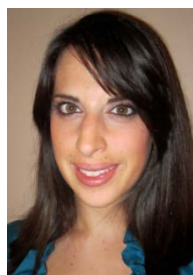
### Chemical & Biomolecular Engineering

*"Graduate students, mentors and scientists fostering success."*



[sites.udel.edu/wie](http://sites.udel.edu/wie)

Our goal is to promote and mentor graduate women in the College of Engineering at UD. Please do not hesitate to contact us with any questions you might have.



Jilian Melamed



Rachel Edelstein



Bahar Ipek



Michelle Calabrese

### Civil & Environmental Engineering

### Computer Science



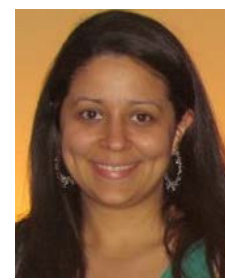
Mengyin Yao



Keira Zhang



Irene Gutierrez



Priscilla Moraes  
(Chair)

### Electrical & Computer Engineering

### Materials Science & Engineering

### Mechanical Engineering



Anagha Kulkarni



Elpiniki Apostolaki-Iosifidou



Danning Zhang



Liang Gong



Amy Bucha



Hatice Sas



**Pam Cook**

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**Heather Doty**

Mechanical Engineering  
and UD ADVANCE  
[hdoty@udel.edu](mailto:hdoty@udel.edu)

**WIE Faculty  
Advisors**

## WIE Calendar of Events, Spring 2014

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Feb 21 <sup>st</sup> 2:30-3:30 pm	International Student Workshop	SPL 114
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Mar 14 <sup>th</sup> 3:30 - 5pm	Spring Coffee Break	Colburn 2 <sup>nd</sup> floor lobby
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Mar 26 <sup>th</sup>	Panel for Students Considering Graduate School	TBD
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Apr 25 <sup>th</sup> 12:30-1:30 pm	Meet Your Faculty Lunch with Hui Fang	DuPont 102
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## WIE Can! Nominations, achievements, and awards



### Unidel Professor of Mathematical Sciences

Pamela Cook-loannidis, professor of Chemical and Biomolecular Engineering and Mathematics, has been named Unidel Professor of Mathematical Sciences at the University of Delaware

L. Pamela Cook-loannidis, professor of mathematical sciences and associate dean of engineering, has been named Unidel Professor of Mathematical Sciences at the University of Delaware.

An applied mathematician, her research focuses on mathematical modeling of fluids and the prediction of flow properties, with a current emphasis on complex (visco-elastic) fluids.

Cook-loannidis chaired UD's Department of Mathematical Sciences for nine years and chaired the University's Commission on the Status of Women for six years.

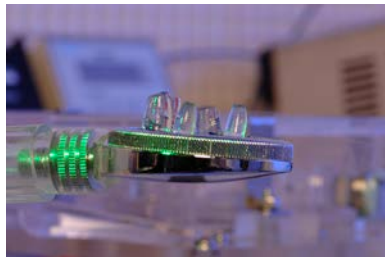
As a co-principal investigator on UD's National Science Foundation ADVANCE PAID award, she has directed efforts to improve the recruitment and retention of women faculty in science, technology, engineering and mathematics (STEM) disciplines. She received the 2012 University Change Agent Award from the Women in Engineering ProActive Network (WEPAN) and the 2009 University of Delaware Trabant Award for Women's Equity.

Cook-loannidis earned her doctorate in mathematics at Cornell University, received a NATO postdoctoral fellowship to Utrecht University in the Netherlands and then was a mathematics department faculty member for 10 years at the University of California Los Angeles (UCLA) before joining UD.

Unidel professorships are awarded by the Unidel Foundation, which was established by Amy E. du Pont, a noted sportswoman and philanthropist who supported women's education at Delaware and bequeathed her estate to create the foundation.

Please join us in congratulating Prof Cook, who is also a WIE advisor for her new title!

*This article was adapted from the UDaily announcement by Artika Rangan Casini (Photos by Ambre Alexander) on Nov 20, 2013. For the full article please visit: <http://www.udel.edu/udaily/2014/nov/cook-unidel-professor-112013.html>*



## Smart Hydrogels

Prof. Jia's group and collaborators have developed a "smart" gel that can deliver medicine on demand in response to force.

"The idea of a smart hydrogel that can release medicine over time is not new," said Xinqiao Jia, UD professor of materials science and engineering and biomedical engineering. "What's new is our ability to have medicine released in response to force — a major challenge for people with osteoarthritis and other 'wear and tear' injuries that compromise a person's ability to perform everyday activities."

Prof. Jia also said the hydrogel could help with a variety of conditions beyond osteoarthritis, including ligament tears or other injury areas under high tension.

"I have even considered whether we can leverage this hydrogel platform to reduce inflammation in patients with vocal fold disorders," Jia said.

UD collaborators on the project include Darrin Pochan, professor of materials science and engineering; Chandran Sabanayagam, an associate scientist at the Delaware Biotechnology Institute; and Longxi Xiao and Zhixiang Tong, Jia's former students, and Yingchao Chen, a current student.

The research team is now investigating whether future iterations of the hydrogel can be imbued with properties that would stimulate tissue regeneration and repair. The researchers published their findings in *Biomacromolecules*, a publication of the American Chemical Society (ACS).

Please join us in congratulating Prof. Jia and her group for this development!

*This article was adapted from the UDaily announcement by Karen B. Roberts (Photos by Kathy F. Atkinson) on Jan 14, 2014. For the full article please visit: <http://www.udel.edu/udaily/2014/jan/smart-gel-medicine-011414.html>*

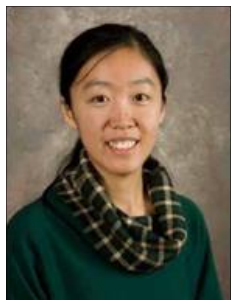
## Electrical and Computer Engineering



**Luisa Polania**, a Ph.D. student in electrical and computer engineering and a former graduate representative of the WIE program has received The University Graduate Fellow Award. Her interests are in compressed sensing and sparse approximation, biomedical signal processing, signal and image processing, and harmonic analysis.  
Congratulations, Luisa!



**Nuha Ahmed**, a part time Ph.D. student in electrical and computer engineering, has received the Graduate Scholars Award. Her interests are Efficient Solar Cells, Nanophotonics, Nanoelectronics Device Fabrication and Optical-Electronic Devices.  
Congratulations, Nuha!



**Xin Ma**, a Ph.D. graduate student in electrical and computer engineering and former graduate representative of the WIE program has received the University Dissertations Fellow Award. Her research interests are the development of ultra-low-cost light-emitting devices (LEDs) based on novel solution processed conjugated polymer and semiconductor nanomaterials.  
Congratulations, Xin!

## Chemical and Biomolecular Engineering

**Angela Holmberg**, a graduate student of chemical and biomolecular engineering working with Prof. Epps, received The American Chemical Society (ACS)'s Ciba Travel Award in Green Chemistry. She was chosen for her research on "bio-based alternatives to petroleum based polymers".  
Congratulations, Angela!



## Efforts in Improving the Diversity

Henry Luce Foundation funded the Clare Boothe Luce professorship for a female junior faculty member in Mechanical Engineering or Materials Science

With the efforts of the University of Delaware's College of Engineering, the Henry Luce Foundation has funded a \$460,000 grant for The Clare Boothe Luce professorship, which will support a female junior faculty member in the area of hard materials such as semiconductors or ceramics.

"We are grateful to the Henry Luce Foundation for this important gift," said Dean Babatunde A. Ogunnaike. "This investment is part of an ongoing effort within the college to drive a cultural shift for women in traditionally male-dominated science, technology, engineering and mathematics fields."

Recent gifts to the college supporting this initiative total more than \$2.5 million including the supports from UD alumni and industrial partners.

Since 2002, the College of Engineering's female faculty representation has increased from 4.5 percent to 16.3 percent. The American Society for Engineering Education reports the national average of female engineering professors is 14 percent.

According to Associate Dean Pam Cook, the college's strong track record is due in part to proactive programs designed to mentor faculty, department chairs and deans on best practices for faculty recruitment and retention, and even more critically, to robust faculty support.

Cook was instrumental in developing a strong UD ADVANCE program, an intercollege effort supported by core faculty from engineering and arts and sciences. Originally funded through a National Science Foundation grant, UD ADVANCE provides workshops for faculty on best practices in recruitment and retention of STEM faculty with a particular focus on women faculty.

Another key program in the college, Women in Engineering (WIE) also supports female students and faculty through workshops, guest speakers, networking opportunities and mentoring. Over the past decade the percentage of women doctoral recipients in the college has increased from 23 to 35 percent.

*This article was adapted from the UDaily announcement by Karen B. Roberts on November 19th, 2013. For the full article please visit: <http://www.udel.edu/udaily/2014/nov/women-engineering-111913.html>*

### WIE Graduate Steering Committee

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