CULLEN COLLEGE FACULTY SHINE IN UH RESEARCH AWARDS

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By:
Rashda Khan
The Cullen College of Engineering faculty swept the associate professor category of the University of Houston's Awards for Excellence in Research, Scholarship and Creative Activity for the 2017-18 academic year.

The awards, given each year by the UH Division of Research, recognizes faculty with a growing record of outstanding research, scholarship and creative contributions, who are emerging leaders in their fields. The two associate professors honored this year are: Jacinta Conrad and Yan Yao.

**Jacinta Conrad**, an Ernest J. and Barbara Henley Associate Professor of chemical and biomolecular engineering, focuses her research on the interaction between complex fluids (polymers, colloids, nanoparticles, bacteria and more) and the surfaces that contain them in the context of applications in petroleum engineering, environmental engineering, materials engineering and biodefense.

Her work in colloid and interfacial science — the study of how complex fluids move, including the movement of bacteria across surfaces — led to a $1.8 million grant from the **Gulf of Mexico Research Initiative** in 2015. The project studied how the use of dispersants (chemicals) to break up oil spills affects the natural cleaning role played by bacteria.

She won the National Science Foundation CAREER Award in 2012 for her work to develop surfaces that limit bacterial movement. She is a 2017-2018 UH Energy Fellow and received a UH Women and Gender Resource Center Distinguished Faculty Scholar award in 2015.

**Yan Yao**, with the electrical and computer engineering department, is a renowned name in the energy storage field for his dedication to creating better, safer and longer lasting batteries.

Earlier this year, Yao and fellow researchers won a **Scialog Award** from the Research Corporation for Science Advancement for their work on an alternative non-flammable and rechargeable aqueous battery. Yao and his postdoctoral researchers also made the cover of Angewandte Chemie International Edition, a renowned chemistry journal.

In 2017, Yao's group made a technical breakthrough in aqueous batteries using inexpensive, organic quinone materials. A paper on this was published in Nature Materials. He was also named a Scialog Fellow and received funding from the Department of Energy's Battery500 consortium the same year.

Other accolades earned by Yao include: The Robert A. Welch Professorship by UH's Texas Center for Superconductivity (TcSUH), the Ralph E. Powe Junior Faculty Enhancement Award from the Oak Ridge Associated Universities and the 2013 Office of Naval Research Young Investigator Award.

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