



# COLUMNS NEWSLETTER

CHEMICAL & BIOMOLECULAR ENGINEERING  
A. JAMES CLARK SCHOOL OF ENGINEERING  
UNIVERSITY OF MARYLAND

FALL 2019

## CHAIR'S MESSAGE

During this, the 125th holiday season of our College, we at ChBE proudly continue to deliver cutting-edge research and novel educational opportunities that drive innovation. We thank you for taking time to read our newsletter to learn more about our initiatives, and we especially thank you for your gifts, both big and small, that make such a tremendous impact on our department and student experience. We look forward to hearing from you! Please send any questions and comments to **Peter Kofinas** ([kofinas@umd.edu](mailto:kofinas@umd.edu)) and happy holidays!

## REMODELED SUITE OFFERS FRESH START

Using a large pair of scissors with Maryland-red handles, the Clark School of Engineering Dean, **Darryll Pines**, cut a red ribbon September 13 to commemorate the opening of the recently remodeled ChBE suite.

The remodel, which started in June, was completed in time to welcome faculty members, staff and students back to campus for the start of the fall 2019 semester. Roughly \$100K was spent to better meet the needs and expectations of employees, students and visitors alike. The refreshed suite offers a contemporary feel, with grey accents and plenty of light. "This

building is nearly 70 years old, and our space was in

desperate

need of a

face-lift," said **Kathy Gardinier**, ChBE Assistant Director for Undergraduate and Graduate Studies. "The office is so much more open now, and has a more welcoming atmosphere. We'd like to thank Dean Pines for funding the remodel, and doing the ribbon-cutting honors – we couldn't have done it without him!"



## A LETTER FROM CHBE ALUMNAE, CHERYL GINYARD-JONES & KIMBERLY BROWN



As the end of the calendar year approaches, many of us find ourselves reflecting on what we are thankful for, and the causes near and dear to our hearts.

One of the things we are both extremely grateful for is our time spent at the A. James Clark School of Engineering, and the education we received in Chemical & Biomolecular Engineering. It is one of many reasons we've become so involved,

and in turn, have decided to give back, and are encouraging you to do the same.

We are asking you, our fellow alumni and friends, to join us in supporting the **ChBE Travel Fund**, an area of particular importance to the student experience. The professional development of our undergraduate and graduate students hinges on networking, and the ability to showcase their research and design projects at national conferences such as the AIChE annual and regional conferences, and the American Chemical Society Annual Conference.

The average budget is roughly \$1,500 per trip, per student. The newly established Travel Fund is dedicated to covering the cost of airfare, conference registration, lodging and meals.

Please join us in supporting the Department and the next generation of leaders in the Chemical and Biomolecular Engineering field by [making a gift today](#). Go Terps!



- Cheryl & Kim

## ALUMNI PROFILE: GEORGE ROBINSON

The entrepreneurial spirit runs in **George Robinson's** blood. Robinson (B.S. '87), originally from Seaford, Delaware, moved with his family to Cambridge, Maryland, where his father opened a chemical distribution business - this fostered an interest in chemistry and engineering from a young age.

"Having always had a knack for math and science, in addition to problem-solving, I chose chemical engineering, thinking I would follow in my father's footsteps," Robinson said. "UMD was a good, affordable in-state school and the best value."

After adjusting to life in College Park, George recalls having to retake an entry level ChemE course during his sophomore year, consequently putting him on the five-year track. "It actually ended up being a good thing," Robinson said, "the additional time provided plenty of opportunity to get my act together!"

Post commencement, Robinson went to work for his dad at Robinson Chemical Company. Then in 1994, he started Intercoastal Trading, a water treatment chemical distribution company, an achievement he credits to the preparation UMD gave him.

Learn more: [go.umd.edu/robinson](https://go.umd.edu/robinson)

To share your story or offer a gift, send an email to **Peter Kofinas** ([kofinas@umd.edu](mailto:kofinas@umd.edu)).



## A RETIREMENT, A SCHOLARSHIP & SOME RESEARCH

After over 40 years of teaching in the field of higher education, ChBE Professor **Richard Calabrese** retired this past summer.

Calabrese became a UMD professor in 1981. He focused his research on applied fluid dynamics and transfer phenomena - anything from atmospheric to chemical processes. In 1986, he was named one of the 21 most influential people at UMD for his contributions to mixing research. Over the past four decades, Calabrese has seen numerous changes to the department. He helped mold its current structure. He was the architect of the undergraduate curriculum, as well as the engineer of the graduate research aptitude exam. Moreover, Calabrese served as the acting chair of Chemical Engineering from 1992-1994, and is now professor emeritus.

ChBE Senior **Qixuan "Leo" Hu** is the 2019 recipient of the Roberta Ma Scholarship. "A big thank you to Prof **Asa-Awuku** - this scholarship is a big encouragement for me to pursue my goals," said Hu. Hu's research focuses on making biopolymer-based gels with enhanced stability under physiological conditions. The work is conducted in Prof. **Srinivasa Raghavan's** Complex



Fluids and Nanomaterials lab, and may be used in the pharmaceutical arena.

Prof. **Chunsheng Wang** - who has been identified as a 2019 Highly Cited Researcher by the Web of Science Group - and team been hard at work bolstering battery technology. In October alone, Wang's team published studies on a method of breaking the bond between solvents and Li-ions into non-polar stable solvents giving way to a 'super electrolyte' capable of operating in extreme temperatures (Learn more: <https://go.umd.edu/super-electrolyte>).

The team also created a high-performance polymer (based on pyrazine) cathode for a sodium-ion battery that is highly stable, eco-friendly and cheap to produce. NIBs are expected to be the next big thing in battery technology.

Learn more:

<https://go.umd.edu/polymer-cathode>

## UPCOMING DEPARTMENTAL EVENTS

**DECEMBER 13:**

**ChBE 2019 Holiday Party -**

Join students, faculty members and staff for some festive holiday fun!

RSVP required:

[go.umd.edu/chbe-event-dec2019](https://go.umd.edu/chbe-event-dec2019)

**APRIL 2, 2020:**

**ChBE Research Showcase -**

This event is designed to highlight recent undergraduate and graduate student research - join us!

