



LETTER FROM THE CHAIR

Dear Alumni and Friends,

I am delighted to bring you an update on the development and progress in scholastic and research activities in the Department of Chemistry and Biochemistry on SIU's 150th anniversary. We have missed you for the past several years, and a lot has happened in this time. This newsletter will hopefully fill in the gaps with a focus on many of the achievements and activities over the last 12 months or so.

Our award-winning faculty members continue to publish in high-impact, peer-reviewed journals and to secure grants from both federal and private agencies, and our department is one of the top-funded departments on the SIU campus. These funded research activities, in turn, provide exciting opportunities for our graduate and undergraduate students. For example, the NSF Sponsored Research Experiences for Undergraduates program led by Dr. Goodson has continued to provide students from all over the country with unique research experiences in interdisciplinary materials research and the natural beauty of southern Illinois since its inception in 2005!

Our colleagues have taken leadership roles on campus. Dr. Gary Kinsel started his role as Interim Vice Chancellor for Research on July 1st, 2019. Dr. Boyd Goodson continues to serve as Acting Associate Dean of the College of Science. Dr. Matt McCarroll became the founding director of the Fermentation Science Institute. Dr. Punit Kohli leads the Image Center and Dr. Ian Suni is the director of the Materials Technology Center.

At the annual Gower Research Symposium, three graduate students who received the Gower research scholarships over the summer presented their research to the department in the presence of Dr. and Mrs. Gower.

We graduated a large class of undergraduates, and many continued their studies in graduate schools across the country. At the 2018 homecoming, Dr. James E. House was inducted to the Chemistry Alumni Hall of Fame. His induction brought the total number of inductees to 26.

I hope you enjoy this update about the department's development and achievements. I thank many of you for your unweaving support throughout the years and your generous donations and contributions. These donations and gifts have allowed us to strengthen both our teaching and research programs. We greatly appreciate all continued and new support! Please keep in touch. We would love to hear from you.

FACULTY ACCOMPLISHMENTS AND AWARDS

Dr. Qingfeng Ge officially received the 74th Midwest Award from 2018 ACS President Peter Dorhout. He also presented a keynote lecture at the award symposium of the Midwest Regional Meeting in Ames, Iowa, on October 22nd, 2018.

Dr. Boyd Goodson received 2018 College of Science Scholar Excellence Award.



Dr. Qingfeng Ge (left) receiving the 74th Midwest Award at the Midwest Regional Meeting.



Dr. Boyd Goodson (right) receiving the College of Science Scholar Excellence Award.

Qingfeng Ge, Professor, Distinguished Scholar and Chair

FUNDING NEWS

Dr. Zhihua Du and Dr. Xiaolan Huang (Computer Science), NIH-R15, "Structures and Catalytic Mechanisms of Cas13b and Potentially Related Cas9 Endonucleases".

Dr. Keith Gagnon, NIH-R15, "Nuclear Surveillance of Disease-Associated C9ORF72 Expanded Tandem Repeat RNA".

Dr. Keith Gagnon, NIH-RO3, "Discovery of Small Molecules that Block Supt4h1-Supt5h Dimerization for Potential C9TFD/ALS Therapeutics."

Dr. Boyd Goodson and Dr. Ed Chekmenev (Wayne State), with **Drs. Pravas Deria and Yuqing Hou** participating, NSF Collaborative Research: Exploiting Spin Networks and Efficient Catalyst/Substrate Separations for NMR "SABRE"

Dr. Boyd Goodson, 2019 SEED Award from the Research Corporation for Science Advancement.

Dr. Mohtashim Shamsi, NSF-EAGER: "Novel probes for label-free detection of neurodegenerative DNA repeats"

Dr. Punit Kohli, NSF, "MRI: Acquisition of Analytical Atomic Force Microscope for Research and Education at SIU"

Dr. Gary Kinsel continue to receive grants for AY19-20 from SIU Alumni Association to support four Undergraduate Research assistants. This is the second time Gary received the support.

ACCOMPLISHMENTS AND AWARDS – GRADUATE STUDENTS

Gower Research Symposium



Thirty-five Gower Fellowship recipients have been supported over the past 14 years through support from the Gowers' donation. The fellowship provides full stipend support for summer and a monetary award to each student. Each fellowship recipient presents his/her



research to the department in the fall semester in the annual Gower Research Symposium. The symposium also includes a poster presentation, highlighting the departmental research. Pictured above are the 2019 Gower Fellowship Recipients from left to right: **Tianyu Zhang** (Ge), **Hannah Giang** (Suni), and **Jeirui Yu** (Deria) with Dr. Qingfeng Ge (far left) and Dr. Bob Gower (far right). Picture on the right is the poster presentation.

2019 SCHMULBACH GRADUATE TEACHING AWARD: **Hannah Giang** (Suni) and **Matthew Thompson** (Gao).

2019-2020 Dissertation Research Assistantship Awards: **Yachu Du** (Plunkett), **Taylor Hill** (Moran), **Jierui Yu** (Deria), and **Tianyu Zhang** (Ge).

Willis Swartz Graduate Student Scholarship Award: **Xinlin Li** (Deria)

Yuntao Zhao (Ge & Wang), a visiting graduate student from China, received travel award from the Division of Catalysis of American Chemical Society to support her trip to attend and present her work at the American Chemical Society meeting in San Diego.

ACCOMPLISHMENTS AND AWARDS – UNDERGRADUATE STUDENTS

Madison McMinn (BS '19) won the prestigious National Science Foundation Graduate Research Fellowship, allowing her to attend the chemistry Ph.D. program at Northeastern University. While at SIU, Madison, under the guidance of Dr. Gary Kinsel, has investigated the ionization process that occurs in MALDI, aiming at improving MALDI mass spectrometry through a deeper understanding of the underlying chemical reactions. Madison was also nominated as a 2019 Laureate of the Lincoln Academy of Illinois before her graduation in May. The academy selects one senior from each Illinois University who “demonstrate(s) leadership and service in his or her campus or community and excellence in curricular and co-curricular programs...”.



The Beta Psi Chapter of Alpha Chi Sigma and advisors Drs. Mary and Gary Kinsel have organized the Great Cardboard Boat Regatta since 2009. Last spring the Regatta celebrated its 46th consecutive year and welcomed 37 boats to Campus Lake to race (and sink). Several thousand spectators enjoyed the races. The 47th Annual Great Cardboard Boat Regatta will be Saturday, April 25, 2020.



Congratulations to **Scott Benzinger, Savannah Randles, Emily Oakes, Adam White** and **Joseph Fiorino-Matthews** on receiving Undergraduate Research Assistantship awards from SIU Alumni Association. These students will make good use of the support to pursue their interests and academic goals.

Congratulations to **Miranda Limbach** on receiving a REACH award and was a co-author of a paper published in Chemistry: A European Journal.

ALUMNI NEWS

James E. House was inducted to the Chemistry Alumni Hall of Fame at the 2018 Homecoming. James received his BS and MA degrees from SIUC in the early 60's. He earned his Ph.D. at the University of Illinois. He joined the faculty at Illinois State University in the spring of 1966 as Assistant Professor and became Professor in 1974. He held positions of Assistant Dean of Faculties and Associate Dean of the University and was a NSF Science Faculty Fellow in 1969-1970. He served as the President of the Illinois State Academy of Science in 1974-1975 and Editor of the Transactions of the ISAS from 1975-1979. He was elected a Fellow of the Academy in 1984. In 2016, Dr. House was appointed Series Editor for a new series of reference volumes, Developments in Physical & Theoretical Chemistry that is being published by Elsevier.



Navneet Dogra (PhD, Kohli) joined Icahn School of Medicine at Mt. Sinai, NYC, in August as an Assistant Professor of Genetics and Genomic Sciences, and Pathology and is already a co-investigator on a newly funded NIH R01 grant.

Laura Walkup (BS, PhD, Goodson) was recently appointed as Assistant Professor at UC Department of Pediatrics of Cincinnati Children's Hospital.

Nick Whiting (BS, PhD, Goodson) was recently appointed as Assistant Professor in the Department of Physics and Astronomy at the Rowan University.

Jingyun Ye (PhD, Ge) will begin as Assistant Professor of Chemistry at Clarkson University in Potsdam, New York in January 2020.

Krishanthi Weerasinghe (Ph.D, Wang) is an Assistant Professor of Chemistry, Siena Heights University, Michigan.

Chelsea Gemeinhardt (PhD, Wang) started as a tenure track Chemistry Instructor in Wabash Valley College, Illinois.

2018-2019 GRADUATES

Congratulations to our recent graduates. We look forward to what you do in the future!

Kexing Jiao (PhD, Kohli)
Miru Tang (PhD, Ge)
Zachary Kartje (PhD, Gagnon)
Li Fan (PhD, Suni)
Madhavi Pali (PhD, Suni)
Chelsea Gemeinhardt (PhD, Wang)
Gajanan Kulkarni (PhD, Plunkett)
Shendong Jiang (MS)
Michael Molway (MS)
Jamil Mashini (MS)
Jack Pertile (MS)
Liana Bales (MS)
Katie Peterson (BS)
Marcus Bean (BS)

Najiyah Benzabeh (BS)
Andrew Box (BS)
Logan Czerniejewski (BS)
Thomas Gebhardt (BS)
Helen Janis (BS)
Carolyn Katzman (BS)
Paul Kevorkian (BS)
Nicholas Langheld (BS)
Ethan Lesko (BS)
Madison McMinn (BS)
Gabriel Parker (BS)
Blaze Rightnowar (BS)
Allyson Smith (BS)
Jackson Wood (BS)

2019-2020 FACULTY AND STAFF

FACULTY

SENETTA BANCROFT, Assistant Professor, Chemical Education (joint appointment with Curriculum Instruction).

PRAVAS DERIA, Assistant Professor, Inorganic and Materials.

ZHIHUA DU, Associate Professor, Biochemistry.

KEITH GAGNON, Assistant Professor, Biochemistry (joint appointment with School of Medicine).

YONG GAO, Associate Professor, Organic and Materials.

QINGFENG GE, Professor, Distinguished Scholar and Chair, Physical.

BOYD GOODSON, Professor and Acting Associate Dean, College of Science, Physical.

GARY KINSEL, Professor and Interim Vice Chancellor of Research, Analytical.

PUNIT KOHLI, Professor and Director, Image Center, Analytical and Materials Chemistry.

MATT MCCARROLL, Professor and Director, Fermentation Science Institute, Analytical.

SEAN MORAN, Assistant Professor, Biochemistry.

KYLE PLUNKETT, Associate Professor, Vice Chair and Director of Graduate Study, Organic and Materials.

MOHTASHIM SHAMSI, Assistant Professor, Analytical.

IAN SUNI, Professor and Director, Materials Technology Center, (joint appointment with Mechanical Engineering) Materials and Physical.

LICHANG WANG, Professor and Director of Graduate Teaching Assistants, Physical.

JOE DAVIS, Research Professor

MARK BAUSCH, Associate Professor Emeritus.

JOHN KOROPCHAK, Professor Emeritus.

DAVID KOSTER, Professor Emeritus.

GERARD SMITH, Professor Emeritus

RUSSELL TRIMBLE, Professor Emeritus

JAMES TYRRELL, Professor Emeritus

MARY KINSEL, Director of the Mass Spectrometry Facility and Assistant Professor of Practice.

YUQING HOU, Associate Director of Cal Y. Meyers Institute.

IGNACIO GARCIA, Assistant Professor of Practice.

RONG JIANG, Assistant Professor of Practice.

KEVIN SMITH, Senior Lecturer, Director of Undergraduate Study

LEE ELLIOTT, Assistant Lecturer.

STAFF

JEFF HOLMES, Account Technician

CHRIS KRAFT, Stock Room Manager

BRANDON LUSTER, Laboratory Manager

DEBORAH SAWYER, Office Manager