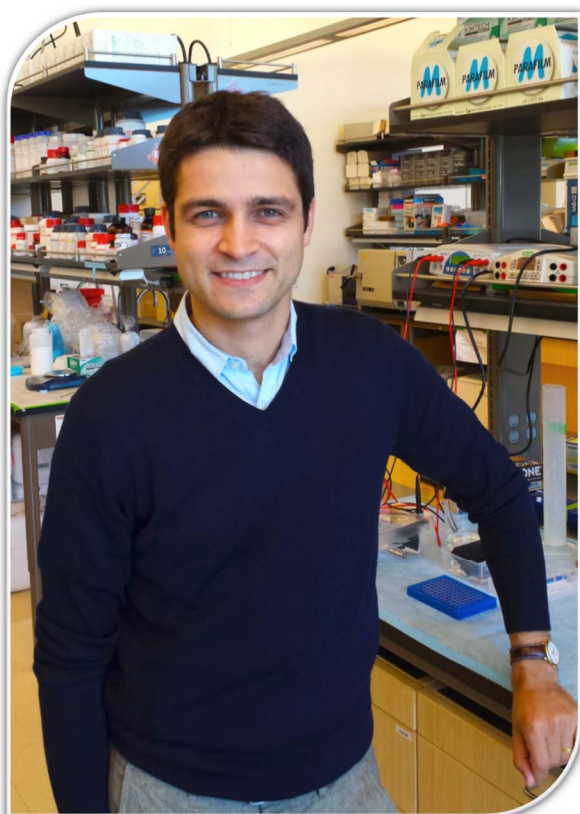


Periodic Tabloid

Chemistry and Chemical Engineering Division at Caltech

Vol 5, No 1, Spring/Summer 2013

CCE Division Welcomes Mikhail Shapiro to Our Faculty



The Division of Chemistry and Chemical Engineering at Caltech is delighted to announce that Dr. Mikhail Shapiro is joining the Chemical Engineering faculty as of Fall 2013. The Shapiro lab will be located in the Spalding Building. The group lab and offices are being remodeled and set up with instrumentation particular to the Shapiro research group.

Mikhail was born in the suburbs of Moscow, Russia and immigrated to Washington, DC at age 11. He received his B.Sc. in Neuroscience at Brown University, where he worked with John Donoghue on implantable brain-computer interfaces. He then moved to MIT for his Ph.D. in Biological Engineering

co-advised by Robert Langer and Alan Jasanoff. For his doctoral thesis, he pioneered the development of biomolecular reporters for non-invasive MRI imaging of neural activity. As a postdoctoral fellow with Francisco Bezanilla at the University of Chicago, Mikhail studied the thermal mechanisms of infrared neural stimulation. He then became a Miller Fellow at UC Berkeley, establishing a research program focused on the use of genetically encoded nanostructures as imaging agents in collaboration with David Schaffer, Alex Pines and others. Alongside his academic work, Mikhail has been involved in several startup companies. Mikhail's research has been recognized by the Hertz, Soros, Miller and Life Science Research Foundation fellowships, the Hertz Thesis Prize, the Burroughs Wellcome Career Award and the TR35 list of top innovators under age 35. Mikhail's group at Caltech will couple molecular and cellular engineering with biologically penetrant forms of energy (e.g. magnetic, mechanical, thermal and chemical) to develop technologies for non-invasive imaging and control of biological function.

Prof. John Seinfeld Elected to NAS



Dr. John H. Seinfeld, the Louis E. Nohl Professor of Chemical Engineering at Caltech, was "among the 84 members and 21 foreign associates newly elected to the National Academy of Sciences. The announcement was made at the 150th annual meeting of the academy in Washington, D.C." This brings to 19 the number of NAS members in CCE.

Dr. Seinfeld is also a member of the National Academy of Engineering and a fellow of the American Academy of Arts and Sciences.

Congratulations to CCE faculty who continue to honor the Division with news of their awards



Dr. William A. Goddard III, Charles and Mary Ferkel Professor of Chemistry, Materials Science, and Applied Physics and Director of the Materials and Process Simulation Center, has received the 7th World Congress on Oxidation Catalysis Award for Distinguished Scientific Achievement in Catalysis.

Dr. Thomas F. Miller, Professor of Chemistry, has been awarded the Camille Dreyfus Teacher-Scholar Award, which "supports the research and teaching careers of talented young faculty in the chemical sciences" and is awarded to researchers with a "promise of continuing outstanding contributions to both research and teaching."



Dr. John D. Roberts, Institute Professor of Chemistry, Emeritus, has been honored with the 2013 American Institute of Chemists (AIC) Gold Medal, AIC's highest award, "for his pioneering research on Nuclear Magnetic Resonance and his unparalleled dedication to mentoring new generations of chemists."

Dr. Harry B. Gray, Arnold O. Beckman Professor of Chemistry and Founding Director of the Beckman Institute at Caltech, has received the 2013 Othmer Gold Medal. This award, named in honor of Donald Othmer, is presented by Chemical Heritage Foundation and four affiliated organizations: the American Chemical Society (ACS), the American Institute of Chemical Engineers (AIChE), the Chemists' Club, and the Societe de Chimie Industrielle. Dr. Gray was "recognized for his revolutionary work in bioinorganic chemistry and his extraordinary contributions to public understanding."



BI Lawn Party 2013

The tradition of the Beckman Institute Lawn Party was once again upheld by a number of research groups who hosted the event of May 17th. A festive gathering of CCE faculty, staff, and students took place on the well-maintained Beckman Institute lawn between 5:00 and 7:00 on a beautiful Friday evening. It was an outdoor event with food, drinks, and exciting contests and games, which included croquet, bocce ball, badminton, horseshoes, and others. As in all the events of our Division, there was good attendance and much cheer.



Visit weekends in 2013 welcoming prospective CCE graduate students with dinners, outings, and poster sessions.

The Chemistry Option invited over one hundred prospective graduate students to visit the Caltech campus, so that they can get to know the campus, faculty, and students. There were two visit weekends, February 28th to March 2nd, and March 14th to 16th, 2013.

Each of the two weekends ran from Thursday evening to Saturday afternoon. Prospective students arrived on Thursday to join Chemistry students and other prospective students for dinner in Old Town Pasadena. On Friday they attended lab tours, met with individual faculty, and had lunch at the Athenaeum with Chemistry students. Agnes Tong, the Graduate Program Administrator, arranged the Friday poster sessions at Dabney Garden, and festive dinners at Dabney Lounge. The event continued on Saturday with students' choice of hiking, beach trips, or a Huntington Library visit. Thanks to the events' success, thirty-five graduate students in Chemistry will be joining us in the Fall of 2013.

The Chemical Engineering Option held their visit weekend on March 22nd to 24th. As a result of their activities, nine Chemical Engineering students will also join us in the Fall.



Congratulations to the CCE grads of 2013!

Caltech's 119th annual commencement ceremony took place at 10 a.m. on Friday, June 14, at Beckman Mall. Mary Sue Coleman, president of the University of Michigan, presented the keynote address. (Complete coverage is available at <http://commencement.caltech.edu/>)



Stephanie Rae Parlade Samson
Kevin Shi
Dong Woo Shin
Seorim Song
Sabrina I-Chyi Sun
Dylan Joshua Sures
Alex J-S Wang
Christine Elizabeth Wu
Ying Xian
Yushu Joy Xie
Alex Wayne Yeh
Jennifer Haijin Zhu

Doctor of Philosophy

David Gregory Abrecht
Nathan Bruce Bennett
Yashodhan Bhawe
Nicholas Boekelheide
Justin William Chartron
Pedro de Souza Leao Coelho
Jill Suzanne Craven
Christopher Scot Daeffler
Leopold Daniel d'Espaux
Nicole Danielle Bouley Ford
Alexander F. G. Goldberg
Han Han
Lisa Marie Hochrein
Nicholas Jeffrey Hoh
Allen Yu Hong
Kiwook Hwang
Benjamin Keith Keitz
Gretchen Eva Keller
Matthew James Kelley
Chithra Krishnamurthy
Chethana Kulkarni
Zuleikha Kurji
Benjamin Chun Yeung Li
Walrati Limapichat
Christine Lauren Loza

Heather Catherine McCaig

James Robert McKone
David Church Montgomery
Matthew Michaels Moore
Natalie Bloom Muren
Arundhati Nag
Roger Rauhauser Nani
Hosea Martin Nelson
Thang Xuan Nguyen
Young In Oh
Claude Joseph Rogers
Elizabeth Anne Santori
Kuang Shen
Daniel Leif Migdow Suess
Christina Lei TIng
Frank Truong
Matthew Martin Van Wingerden
Emily Lowell Warren
Arif Wibowo
Devin Thomas Wiley
Heather R. Williamson
Matthew Steven Winston
Bin Zhang

Bachelor of Science

Avin Daniel Andrade
John Cain Blackwood
Carly Mariah Bond
Reuben Joseph Britto
Sandhya Chandrasekaran
Christine Haejung Chang
Nadine Peyton Currie
Matthew Ross Diamond
Kevin Li Gu
Kelly Mengyu Guan
Matthew Patrick Harrigan
Ying Qiao Hee
Megan Nora Jackson
Karolina Z. Kalbarczyk
Brian T. Kim
Laura Kim
Seohyun Kim
Stacy Yeonchi Kim
Jeffrey Adam Kowalski
Sung Min Kwon
Jomya C. Lei
Nannan Li
Shuaili (Cici) Li
Ee Jane Lim
Eric Liu
Erik Jerry Liu
Megan Lo
Xiaoya Ma
Matthew Zoccoli Mayers
Andrew Chengsi Meng
Rocio Mercado
Rachel Stockton Moore
Melody Ann Morris
Luis Alexander Navarro
Sung Jin Park
Suyeon Pyo
Errika Celine Romero

Master of Science

David Hamilton Case
Katharine Yan Fang
Maxwell Bernard Loewinger
Joseph Holda Rheinhardt
Carolyn Mary Richmonds
Alexander Charles Romero
Matthew Reed Shaner
Jeffrey Owen Smith
Kevin Michael Sutherland
Ma Wang







CCE congratulates the students who received awards in 2013

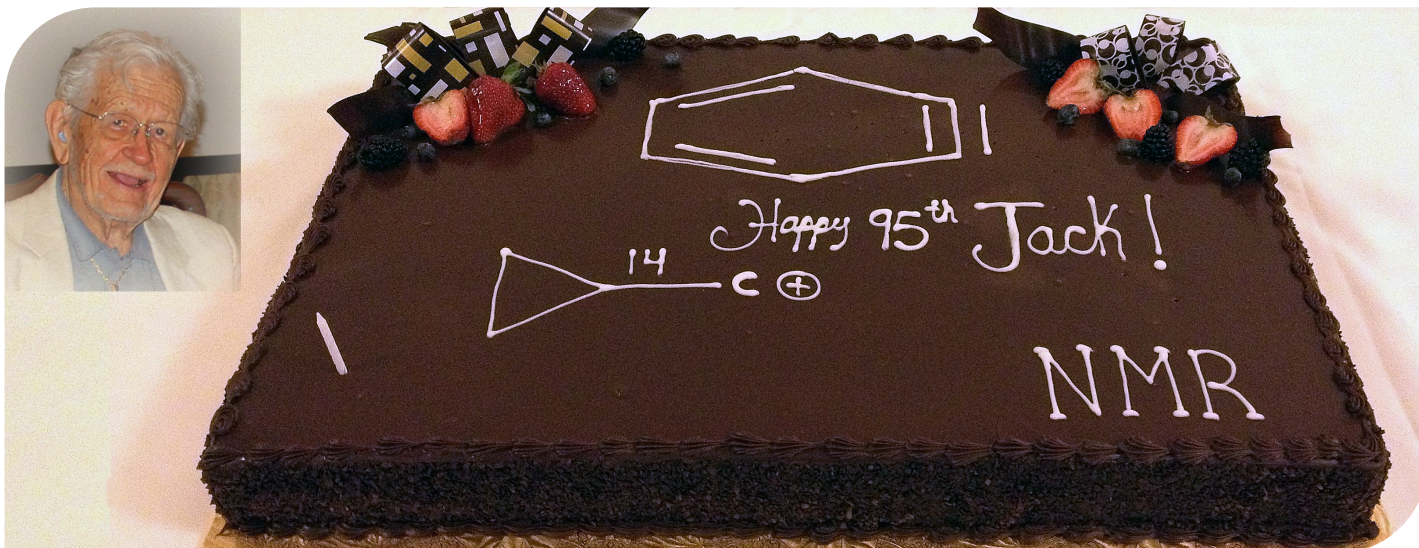
The 2013 Herbert Newby McCoy Award Seminar took place on Thursday, June 13th, at the Sturdivant Lecture Hall (153 Noyes). This cash award is made annually to a graduate student in chemistry to acknowledge an “outstanding contribution to the science of chemistry.” The awardee is chosen by a faculty committee, based on solicited nominating packages, and the award-winning research is presented in a formal divisional seminar given by the awardee. The McCoy award was established in 1965 as a result of a bequest of Mrs. Ethel Terry McCoy to honor her husband, who did pioneering work in the chemistry of rare earths and was associated with Caltech through collaboration with chemists Linus Pauling and Howard Lucas.



This year’s McCoy awardees were Bin Zhang (Miller Group), Pedro Coelho (Arnold Group), Kuang Shen (Shan Group), and Keith Keitz (Grubbs Group). The 3:00 p.m. symposium was followed by a reception at the Schlinger building courtyard.

Undergraduate prizes included the Richard P. Schuster Award, received by Matthew Mayers and Megan Jackson, and the Renuka Sharma Award, received by Darius Teo.





Professor John D. Roberts's 95th birthday is celebrated with a dinner at the Athenaeum

On Sunday, June 9th, 2014, CCE celebrated Professor John D. Roberts's 95th birthday. Held at the Caltech Athenaeum, guests gathered to honor JDR's life and work in the most fitting way: a dinner with friends and



family at his beloved faculty club. Presentations were made by JDR's son John, the Division's Chair Dr. Jackie Barton, Dr. Peter Dervan, Dr. Kendall Houk from UCLA, who presented Professor Roberts with a plaque honoring his contributions to chemistry. Jack himself presented a slide show of his life and his science, and shared many happy memories with guests about his fishing trips, his scientific collaborations, and his experiences at Caltech in different stages of his career.

Professor Roberts was described by C&EN as "a pioneer in physical organic chemistry and nuclear magnetic resonance (NMR)" in a recent article. Jack has given CCE and the chemistry community 75 years of groundbreaking science, and continues to do research and mentoring of students at Caltech as Professor Emeritus. Accompanied by his family and colleagues of many decades, Jack had a wonderful time!

Happy 95th Birthday, Jack!

CCE faculty show their appreciation to the staff in a picnic

Dr. Jackie Barton, CCE Division Chair and Judy Stanton, Division Administrator, invited the staff to attend the annual CCE Staff Appreciation Picnic, which Dr. Barton described as an opportunity for the faculty to come together to acknowledge the staff's many contributions in making our Division great. This event took place at noon on Wednesday, May 22, 2013. CCE faculty and staff enjoyed lunch, soft drinks, ice cream bars, and games in Tournament Park.

Pat Anderson: 45 years in CCE

Pat Anderson was born in Belzoni, Mississippi. She moved to Southern California to live with her aunt and uncle before her senior year in high school. She graduated from Monrovia-Duarte High, and attended Citrus College before beginning work as a floating secretarial assistant at Caltech in 1968. Pat has spent her entire Caltech career in CCE, where she has administered seminars for more than 30 years. She is the senior administrative assistant in Noyes Laboratory. Over the years she has acquired a wealth of knowledge concerning the inner workings of CCE and the Institute. This knowledge, along with her bright personality, has made Pat a valuable resource for faculty, postdocs, students and staff alike. Pat met her husband, David, at Citrus College, and they have two children and three grandchildren.



Other Caltech staff service awardees in CCE this year were: Siddharth Dasgupta (25 years), Carlette Thompson (25 years), Carl Winstead (25 years), Richard Gerhart (20 years), Martha Hepworth (15 years), Xenia Amashukeli (10 years), Paula Higdon (10 years), Jens Kaiser (10 years), Steven Olson (10 years), Sang Park (10 years), and Mirna Santos (10 years).



A New CCE Tradition: Faculty and Staff Monthly Socials

On April 19th, the first faculty and staff social was held in the Gates Library patio and lawn. Light refreshments and wine and beer were provided. The early evening gathering was intended to create an opportunity for all to meet new members of the Division, or staff and faculty with whom they do not regularly interact. The first being a success, it was followed by others, with increased attendance.



Welcoming CCE's Newest Grant Manager



Shannon Yamashita joined the CCE Fiscal Office as their newest grant manager on April 29th, 2013. Shannon came from the University of Southern California, where she held the position of Fund Manager, assisting Principal Investigators in the financial aspect of their research proposals. She is well qualified in the various responsibilities of grants management, and will be a great addition to the present team of five fiscal officers in CCE.

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