**AIChE NSEF Newsletter**

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| |  |  |  | | --- | --- | --- | | **Spring 2019**   |  |  | | --- | --- | | |  | | --- | | **Message from the Chair**    As we approach the 2019 Spring Meeting in New Orleans and submissions for the 2019 Annual Meeting in Orlando are underway, I would like to thank all of our members for their involvement in NSEF since its inception in 2003. In particular, I thank our recent Past Chair Geoff Bothun for his hard work leading NSEF over the past two years and Jessica Winter for her work in leading the NSEF Forum Awards during this time. Over the winter, we held elections for the Executive Committee and I am pleased to announce the **new leadership** for 2019-2020, including:   * Dr. Reginald Rogers as Vice Chair * Dr. Nigel Reuel as Secretary/Treasurer * Dr. Anju Gupta and Dr. Jung-Sheng Wu as At-Large Members * Dr. Amir Farnoud as Director of Programming * Dr. Evan Wujcik as Director of Membership   For the 2019 Annual Meeting, NSEF has added a **new sub-area** to our programming. We welcome you to submit an abstract to one of three areas:   * 22A - Carbon Nanomaterials * 22B - Bionanotechnology * 22C - Nanomaterials for Energy Applications   **Abstracts are due Friday, April 12, 2019**.  2018 was a productive year for NSEF with an excellent cohort of forum winners, plenary sessions, and graduate student awards. I invite you read about these exciting events below!  **NSEF Forum Award nominations are due by May 30, 2019**. More information can be found further down in the newsletter. Please consider nominating yourself or a colleague for NSEF Young Investigator or NSEF Forum Award!  NSEF officially has a **social media** presence thanks to our new Director of Membership! Details regarding our Twitter and LinkedIn accounts are below. NSEF is always looking for increased membership involvement and feedback, so feel free to reach out to myself or the other Executive Committee members at any time. You can reach me at [smeenach@uri.edu](mailto:smeenach@uri.edu).  Sincerely,  - Dr. Samantha A. Meenach, NSEF Chair  **News and Announcements**  **2018 Young Investigator Award Winner:**  At the 2018 annual meeting in Pittsburgh, **Dr. Christopher M. Jewell** was presented with the 2018 NSEF Young Investigator Award for his work in engineering and immunology. Dr. Jewell’s talk was entitled “Nanotechnology as a tool to study and direct immune function.”  Christopher M. Jewell is Associate Professor and Associate Chair in the Fischell Department of Bioengineering at the University of Maryland. Dr. Jewell has authored over 75 manuscripts and patents, including papers in *ACS Nano*, *Cell Reports*, *Nature Materials*, *PNAS*, and *Nature*. Some of Dr. Jewell’s honors include selection as a Damon Runyon-Rachleff Innovator, receipt of the NSF CAREER Award, appointment as an Associate Scientific Advisor for *Science Translational Medicine*, and receipt of the University’s Graduate Faculty Mentor of the Year. Chris was also selected as the state of Maryland’s Outstanding Young Engineer by the Maryland Academy of Science, the state’s highest honor for an engineer under 36. Dr. Jewell graduated from Lehigh University in 2003 with high honors, earning dual degrees in Chemical Engineering and Molecular Biology. He received his PhD in 2008 from the University of Wisconsin – Madison, working with Professor David Lynn. Chris then joined the Boston Consulting Group in New York City, where he worked in R&D strategy for global pharmaceutical companies. Dr. Jewell carried out his postdoctoral training as a Ragon Fellow working with Dr. Darrell Irvine at MIT and as a Visiting Scientist at Harvard with Dr. Dan Barouch in the division of Vaccine Research.  **2018 NSEF Forum Award Winner:**  At the 2018 Annual Meeting in Pittsburgh, **Dr. Sharon C. Glotzer** gave the 2018 NSEF Forum Plenary entitled “Nano 2.0: From Discovery to Design.”  Sharon C. Glotzer is the Anthony C. Lembke Department Chair of Chemical Engineering at the University of Michigan in Ann Arbor. Glotzer is also the John Werner Cahn Distinguished University Professor of Engineering and the Stuart W. Churchill Collegiate Professor of Chemical Engineering, and Professor of Materials Science and Engineering, Physics, Applied Physics, and Macromolecular Science and Engineering. She is a member of the National Academy of Sciences and the American Academy of Arts and Sciences, and a fellow of the American Physical Society, the American Association for the Advancement of Science, the American Institute of Chemical Engineers, the Materials Research Society, and the Royal Society of Chemistry.  Professor Glotzer’s research on computational assembly science and engineering aims toward predictive materials design of colloidal and soft matter, and is sponsored by the NSF, DOE, DOD, Simons Foundation and Toyota Research Institute. Among other notable findings, Glotzer invented the idea of “patchy particles,” a conceptual approach to nanoparticle design. She showed that entropy can assemble shapes into many structures, which has implications for materials science, thermodynamics, mathematics, and nanotechnology. Glotzer has published over 235 refereed papers and presented over 350 plenary, keynote and invited talks around the world. She has served on boards and advisory committees of the National Science Foundation, the U.S. Department of Energy, and the National Academies, and is currently a member of the National Academies Board on Chemical Sciences and Technology. She is a Simons Investigator, a former National Security Science and Engineering Faculty Fellow, and the recipient of numerous other awards and honors, including the 2016 Alpha Chi Sigma Award from the American Institute of Chemical Engineers, the 2014 MRS Medal from the Materials Research Society and the 2008 Charles M.A. Stine Award from the American Institute of Chemical Engineers.  **2018 NSEF Graduate Student Awards**  Congratulations to the excellent students awarded honors at the 2018 conference!  *Oral Carbon Nanomaterials*  1st Place - Ananth Govind Rajan  2nd Place - Gozde Sultan Demirer  3rd Place - Tianxiang Liu  *Oral Bionanotechnology*  1st Place - Khalid Hajj  2nd Place - Mythreyi Unni  3rd Place - Darwin Yang  *Poster Session*  1st Place - Elisa Torrico-Guzaman  2nd Place - Karthik Pushpavanam  **NSEF Programming for 2019 AIChE Annual Meeting:**  NSEF is pleased to announce many exciting scientific sessions at the 2019 Annual Meeting in Orlando, Florida from November 10 to 15. The proposed session topics are listed below. Don’t miss the abstract deadline submission of **April 12, 2019**!  **2019 NSEF Young Investigator and Forum Awards**  Nominations for the Young Investigator and Forum Awards are due by **May 30, 2019**. The Young Investigator Award recognizes outstanding scholarship, commercialization, education, or service in nanoscience and nanotechnology by engineers or scientists in the early stages of their professional careers (within 10 years of completion of highest degree). The NSEF Forum Award recognizes outstanding contributions to the advancement of nanoscale science and engineering in the field of Chemical Engineering through scholarship, education or service. Application and submission requirements can be found in the links below and can be sent directly to Past Chair Dr. Geoff Bothun at [gbothun@uri.edu](mailto:gbothun@uri.edu).  **Young Investigator**: <https://www.aiche.org/community/awards/nsef-young-investigator-award>  **Forum Award**: <https://www.aiche.org/community/awards/nanoscale-science-and-engineering-forum-award>  **NSEF Reception 2019:**  NSEF invites all current members to attend the NSEF Reception at the AIChE Annual Meeting in Orlando this fall. Date and location to be determined. In addition to some wonderful food and beverages, announcements will be made for the NSEF Award winners, graduate student awards, and poster session awards. We hope to see you there!  **2019 AIChE Annual Meeting Graduate Student Award Sessions:**  NSEF is sponsoring two award sessions at the 2019 AIChE Annual Meeting in the areas of Bionanotechnology and Carbon Nanomaterials. These sessions honor graduate students whose research achievements are in these areas and who demonstrate a high level of excellence in their work. At the end of each session, a panel of judges will determine 1st - 3rd place awards. More information on applying to present in these sessions is available in the session description for abstract submissions.    **2019 AIChE Annual Meeting NSEF Poster Session:**  The NSEF poster session will be scheduled by AICHE. Scores of high quality posters addressing fundamental science and engineering issues associated with nanoscale science, engineering and technology will be presented. The poster session will be judged, and student awards will be given to the best three posters.  **NSEF Social Media Platforms:**  NSEF has officially joined social media! Check out our LinkedIn and Twitter accounts, linked below:  Twitter:<https://twitter.com/AIChE_NSEF?s=09>  LinkedIn: <https://www.linkedin.com/groups/12229160/>  **Summary of 2019 Programming Activities**  Nanoscale Science and Engineering Forum (22):   * 22000 Division Plenary: Chemical Engineering Principles for Nanotechnology (Invited Talks) * 22001 Poster Session: Nanoscale Science and Engineering * 22002 Nanofabrication and Nanoscale Processing I * 22003 Self and Directed Assembly at the Nanoscale I   Carbon Nanomaterials (22A):   * 22A00 Area Plenary: Carbon Nanomaterials (Invited Talks) * 22A01 Carbon Nanomaterials Graduate Student Award Session * 22A02 Carbon Nanofibers and Related Structures from Renewable and/or Cheap Feedstock * 22A03 Graphene 2-D Materials: Synthesis, Functions and Applications I * 22A04 Graphene and Carbon Nanotubes: Absorption, Separations, and Transport Processes * 22A05 Graphene and Carbon Nanotubes: Characterization, Functionalization, and Dispersion I   Bionanotechnology (22B):   * 22B00 Area Plenary: Bionanotechnology * 22B01 Bionanotechnology Graduate Student Award Session * 22B02 Bionanotechnology for Gene and Drug Delivery I * 22B03 Nanobiotechnology for Sensors and Imaging I * 22B04 Nanomaterials for Biological Applications * 22B05 Nanostructured Biomimetic and Biohybrid Materials and Devices * 22B06 Nanotechnology and 3D Printing: The Intertwined Technologies * 22B07 Nanotechnology for Biotechnology and Pharmaceuticals I * 22B08 Self-Assembled Biomaterials   Nanomaterials for Energy Applications (22C):   * 22C00 Nanomaterials for Energy Storage Applications * 22C01 Nanomaterials for Hydrogen Production and Fuel Cells * 22C02 Nanomaterials for Light Harvesting and Novel Photophysical Phenomenon   **Again, abstracts are due April 12, 2019**! We hope to see your work in this conference  **Member Awards & Highlights**    If you have a recent high impact publication, honor, or award that you would like to have highlighted in the next NSEF Newsletter please submit these to the NSEF Treasurer/Secretary, Nigel Reuel, at [reuel@iastate.edu](mailto:reuel@iastate.edu).  **Upcoming Events**    For an up to date list of nano related workshops, symposia, and conferences we recommend looking at the Nano.gov event calendar:  <https://www.nano.gov/events/meetings-workshops>  ***Membership Column***    Not a member of AIChE or NSEF? In order to guarantee that you are included in our current email list so that you will have updated access to NSEF materials and award eligibility make sure you are a current NSEF and AIChE member. NSEF membership is an additional $10/year to the AIChE membership. You can follow the steps of one of the following options below to join:  1.    Visit AIChE’s membership website to sign up online: <http://www.aiche.org/membership>  2.    Download the following file from the AIChE website: Membership Application PDF and send your application and payment directly to AIChE.    ***2018-19 NSEF Leadership***    **Chair**  Dr. Samantha A. Meenach, Assistant Professor of Department of Chemical Engineering  University of Rhode Island  215A Pastore Hall, 51 Lower College Road, Kingston, RI 02881  401.874.4303, [smeenach@uri.edu](mailto:smeenach@uri.edu)    **Vice Chair/Director of Programming (through spring 2019)**  Dr. Reginald Rogers, Associate Professor of Chemical Engineering  Rochester Institute of Technology  160 Lomb Memorial Drive, Rochester, NY 14623  585.475.4157, [rerche@rit.edu](mailto:rerche@rit.edu)    **Treasurer/Secretary/Newsletter Editor**  Nigel F. Reuel, Assistant Professor of Chemical and Biological Engineering  Black & Veatch Building a World of Difference Faculty Fellow in Engineering  Iowa State University of Science and Technology  3051 Sweeney, Ames, IA, 50011  515-294-4592, [reuel@iastate.edu](mailto:reuel@iastate.edu)  **Director of Programming (beginning summer 2019)**  Dr. Amir M. Farnoud, Assistant Professor of Chemical and Biomolecular Engineering  Ohio University  168 Stocker Center, Athens, OH 45701  [farnoud@ohio.edu](mailto:farnoud@ohio.edu)  **Director of Membership**  Dr. Evan Wujcik, Assistant Professor of Chemical and Biological Engineering  The University of Alabama  1114 Tom Bevill Energy, Mineral, and Materials Science Research Building, Tuscaloosa, AL 35487  205.348.2216, [evan.wujcik@ua.edu](mailto:evan.wujcik@ua.edu)  **Past Chair**  Dr. Geoffrey Bothun, Professor of Chemical Engineering  University of Rhode Island  129 Pastore Hall, 51 Lower College Road, Kingston, RI 02881  401.874.9518, [gbothun@uri.edu](mailto:gbothun@uri.edu)  **Director of Technology/At-Large Member**  Dr. Jung-Sheng Wu  Corporate Research Process Laboratory, Particle Processing  3M Center, 208-1-1, St Paul, MN 55144-1000  651.733.2973, [jswu@mmm.com](mailto:jswu@mmm.com)  **At-Large Member**  Dr. Anju Gupta, Assistant Professor of Chemical Engineering  Rochester Institute of Technology  073 Lomb Memorial Drive, Rochester, NY 14623  585.475.4093, [argche@rit.edu](mailto:argche@rit.edu)  **CTOC Representative**  Dr. Jessica Winter, Professor of Chemical & Biomolecular Engineering  The Ohio State University  453 CBEC, 151 W. Woodruff Avenue, Columbus, OH 43210  614.247.7668, winter.63@osu.edu  **AIChE Staff Liaison**  Darlene Schuster  [darls@aiche.org](mailto:darls@aiche.org) | | | |