

# AIChE



The Global Home of Chemical Engineers

# MESD

Materials Engineering & Sciences Division  
<http://www.aiche.org/community/sites/divisions/mesd>

## MESD Division Newsletter

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### *Notes from the Chair*

Dear MESD Members and Friends,

Thank you for supporting our division in so many different ways, with your volunteering, participation and continued membership! I would like to start this note by characterization, morphology, and processing of nanostructured block copolymer films.

We have had an eventful and highly productive year, and I am really pleased to report that we have an exciting program for the 2014 Annual meeting in Atlanta, GA. I would like to thank Prof. Bryan Vogt, our 1

<sup>st</sup> Vice Chair in charge of our program this year, and the MESD Area Chairs and Co-Chairs, Session Chairs and Co-Chairs for all their efforts. To ensure high quality programming for MESD this year we cut the total number of MESD sponsored sessions by 11% from last year, based on the submission demands, and decreased the acceptance rate of our abstracts. The number of MESD sessions will continue to decrease in the near future to ensure that we provide interesting, well attended sessions, with cutting edge research papers. In addition to the extensive cosponsoring of sessions (including those of topical conferences), our poster session on Monday evening, and the successful MESD plenary session on Wednesday morning (11/19/2014, 8:30-11am), organized in part to recognize the recipients of the Charles M. A. Stine

## Candidates for 2<sup>nd</sup> Vice Chair (Vote for 1)

### Julie C. Liu, Purdue University



**Julie C. Liu** is an Associate Professor in the School of Chemical Engineering at Purdue University. She received her B.S.E. degree in Chemical Engineering from Princeton University. Julie earned her Ph.D. in Chemical Engineering from the California Institute of Technology where she worked with David Tirrell

on elastin-based biomaterials for small-diameter vascular graft applications. She was an NIH post-doctoral fellow in Cell Biology at the University of Massachusetts Medical School.

Julie's research group focuses on designing protein-based biomaterials for tissue engineering and biomedical applications. Her group has investigated material-based microenvironments to direct adult stem cell differentiation for cartilage, bone, and vascular tissue engineering. In addition, her group is developing new soft-tissue surgical adhesives. Her work has been funded by a 3M Nontenured Faculty Award, an American Heart Association Scientist Development Grant, the National Science Foundation, the National Institutes of Health, and the Department of Defense Congressionally Directed Medical Research Program.

Julie has been a member of AIChE since 2001 and has chaired and co-chaired materials-related sessions in Areas 8b (Biomaterials) and 15d/e (Engineering Fundamentals in Life Science). She was elected as the Area 15d/e programming chair and also served as the chair of the AIChE Women's Initiatives Committee (WIC). In her role with WIC, she was instrumental in increasing WIC's impact through the development and implementation of new professional development workshops. Julie served the materials community by organizing a symposium at the 2011 Materials Research Society Spring meeting and hosting a regional Biomaterials Day meeting at Purdue. She has also organized sessions and served in leadership positions in the Society for Biomaterials (SFB). In particular, she is the chair of the Biomaterials Education special interest group and has served on the SFB Membership Committee, Finance Committee, and Education & Professional Development Committee.

As 2<sup>nd</sup> Vice Chair of MESD, Julie's goals are to create professional development opportunities, promote participation of early career chemical engineers, increase visibility of the materials research community, and facilitate communication. First, Julie plans to leverage her experience in developing AIChE workshops to increase the professional development opportunities at the annual meetings and through webinars. Her goal is to provide mentorship opportunities and promote MESD participation of graduate students, post-doctoral researchers, assistant professors, and early-career engineers who work in industry and governmental labs. Another priority is increasing the visibility of the materials community's research through new programming initiatives; one example is to expand the Faculty Candidate sessions in Area 8B (Biomaterials) to other Areas so that they may highlight engineers seeking jobs and also provide one convenient session for those who are hiring. Last, Julie plans to update the website with new developments within the MESD Division and community and to regularly update members about new initiatives.

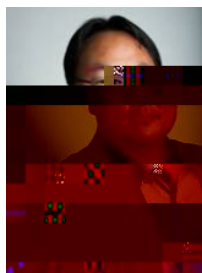
### Sankar Nair, Georgia Institute of Technology



**Sankar Nair** is Professor and James F. Simmons Faculty Fellow in the School of Chemical & Biomolecular Engineering at Georgia Tech. His research interests are in the chemistry and engineering of nanoporous materials and membranes for separations and catalysis. He received his B.Tech. and Ph.D. degrees in chemical engineering from IIT Delhi and UMass Amherst, respectively.

Sankar is an AIChE member since 1999, and an active organizer of MESD (Section 8D) and NSEF sessions on inorganic materials and thin films at Annual Meetings since 2004. He also serves the Materials community in other roles. He is a staff member of the Institute for Materials (IMat) at Georgia Tech, and has contributed substantially to IMat's organization of the Southeast Regional Materials Genome workshop (May 2014) and the National Materials Accelerator workshop (June 2014). Through these avenues, he has been active in promoting the strong role that chemical engineers can play in the Materials Genome Initiative (MGI), which seeks to dramatically accelerate new materials discovery and development. Sankar has also been an Executive

Editor of *Chemical Engineering Science* since 2013, and is mainly focused on the Materials Engineering content of the journal. He is the managing editor of a Special



molecular design and synthesis of MOF-based CO<sub>2</sub> adsorbents, functional nanosheets composites for separation, and structure modification of porous materials for membrane preparation.

Since 2004, Sunho has been a member of AIChE and carried out active roles of the co-chairs and chairs in a number of oral sessions in Area 8D (Inorganic Materials) and others. Since he became a faculty at Northeastern in 2011, he elevated the level of his service and served as a Vice-Chair and Chair of Area 8D. Sunho's goal as Director of MESD is aiming at finding new opportunities to improve engagement, interaction, and experiences of MESD members. To enhance members' engagement, he would like to promote opportunities for graduate students and young faculty to participate in MESD activities more actively. More than often, these early career chemical engineers cannot contribute to MESD only because they don't know how and where to start. His current position and experience as a young faculty member will be helpful to associate these young chemical engineers to our community. He is also interested in promoting interactions between members as well as between programs. To increase the interactions between members, for example, he would like to promote communications between members by increasing the number of issues of the MESD newsletters, which is currently issues annually. To increase the interactions between areas of MESD, he is

