

Nanoscience and Advanced Materials Specialty Section

Newsletter

Letter from the President

Dear NAMSS members,

It has certainly been a challenging in the face of the pandemic. Unfortunately, we were unable to meet face-to-face this year at the Annual Meeting and we hope to see you all in person next year in San Diego! I would like to thank all who were able to attend the virtual Annual Meeting and our business reception. Despite the years' challenges, we had a successful program at the Annual Meeting and our reception was very well attended. We also initiated our Trainee Webinar Series with presentations from five of our students and postdoctoral members, and we look forward to continuing this in the future.

As of May 1, we have a new Executive Committee and I welcome all the new members. I also thank the outgoing officers Todd Stueckle (Councilor), Cynthia Browning (Postdoctoral Representative), and Dorothy you (Student Representative). Jared Brown moves into the

President position as I move onto Outgoing President. It was my pleasure to serve our members over the past year and I thank you all for that opportunity.

On behalf of the executive committee I wish you all the best and hope to see everyone in San Diego in 2022!

Jenny Roberts
Past President NAMSS



Postdoctoral and Student SOT Members:

There will be an opportunity to present your research through our trainee webinar series this September and October. See details in our Student and Postdoctoral announcements section below.

Executive committee 2021- 2022:

President	: Jared M. Brown
Vice President	: Salik Hussain
Vice President-Elect	: Christie M. Sayes
Secretary/Treasurer	: Amy K. Madl
Past President	: Jenny R. Roberts
Councilor	: Phoebe Stapleton
Councilor	: Zhoumeng Lin
Postdoctoral Representative	: Alba Garcia-Rodriguez
Graduate Student Representative	: Mariana Farcas
Vice Student Representative	: Rebekah Kendall



Welcome to Our New Officers in 2021

Vice President-Elect: Christie M. Sayes, PhD



Dr. Sayes is an Associate Professor at Baylor University, where she conducts original research in the area of nanotoxicology. She received her doctorate in Chemistry from Rice University in 2004 and was a postdoctoral fellow at Haskell Global Health Centers at the DuPont Company from 2005-2007. Dr. Sayes has served on the SIEE and SCORE study sections at the NIH. She is author/co-author of over 100 publications including peer-reviewed articles and book chapters. She has been a member of the SOT since 2003 and has served the SOT in the following capacities: Councilor of Nanotoxicology SS; Secretary, VP, President, and Past President of North Carolina RC, Gulf Coast RC, and Lone Star RC.

Councilor: Zhoumeng Lin, BMed, PhD, DABT, CPH



Dr. Zhoumeng Lin is an Associate Professor in the Department of Environmental and Global Health and a member of the Center for Environmental and Human Toxicology at the University of Florida. He received a BMed. in Preventive Medicine from Southern Medical University in 2009 and a PhD in Toxicology from the University of Georgia in 2013. He completed his postdoctoral training in the Institute of Computational Comparative Medicine at Kansas State University in 2016. He was an Assistant Professor from 2016 to 2021 and then an Associate Professor from March to May 2021 at Kansas State University, prior to joining the University of Florida as an Associate Professor in May 2021. Dr. Lin's research is focused on the development and application of computational technologies, especially physiologically based pharmacokinetic (PBPK) modeling, to study food safety, nanoparticle and chemical risk assessment. He is a co-author of more than sixty peer-reviewed publications. His publications have received several awards, including the Society of Toxicology Biological Modeling Specialty Section Best Paper Award in 2020. Dr. Lin teaches a graduate level course on PBPK modeling every year. He is a co-editor and a co-author of five chapters of a recently published textbook entitled "Physiologically Based Pharmacokinetic (PBPK) Modeling: Methods and Applications in Toxicology and Risk Assessment". Dr. Lin has served as an ad hoc grant reviewer for several agencies, including USDA and NIH. He is an ad hoc member of the Science Advisory Committee on Chemicals (SACC) of US EPA. He has served as an external reviewer on several risk assessment documents on different environmental chemicals for different agencies, including EPA, CDC, and FDA. He has been a member of Society of Toxicology since 2011. He served as a Sunday Host Mentor for the Sunday Undergraduate Education Program organized by the Committee on Diversity Initiatives of Society of Toxicology from 2016 to 2017 and he was a Secretary/Treasurer of Central States Society of Toxicology (CSSOT) from 2018 to 2020. He is now the Vice President-Elect of the Biological Modeling Specialty Section (BMSS) and a Councilor of the Nanoscience and Advanced Materials Specialty Section (NAMSS) of Society of Toxicology.

Welcome to Our New Officers in 2021

Postdoctoral Representative: Alba Garcia-Rodriguez, MSc, PhD



Dr. Alba García-Rodríguez is a postdoctoral research assistant at SUNY Binghamton University, where she focuses on developing biomedical devices and new methodologies of the human gastrointestinal tract (GIT) for its use in nanotoxicology. She utilizes human-derived gut cells as well as bacteria to build 3D systems that physiologically mimic the human GIT environment in a more realistic scenario. The ultimate purpose is to elucidate the effect of metal oxide nanoparticles and micro- and nano-plastics in the bacteria-GIT epithelium interphase. Dr. García-Rodríguez received her doctorate in Genetics and Mutagenesis from the Universitat Autònoma de Barcelona (Barcelona, Spain) in 2018 and was a predoctoral fellow at the Environmental Mutagenesis Group in the Genetics and Microbiology Department from 2014-2018. She has been a member of the SOT since 2018, where she presents research at SOT Annual Meetings and is an active member of the Nanoscience and Advanced Materials and *In Vitro* and Alternative Methods Specialty Sections, as well as the Women in Toxicology special interest group. Dr. García-Rodríguez was awarded with the NAMSS outstanding Postdoctoral Award in 2020.

Vice Student Representative: Rebekah Kendall, BA



Rebekah (Becky) L. Kendall is a PhD candidate at the University of Montana in Missoula, MT where she studies mechanisms of inhalation toxicity using a cSiO₂ exposure model. Becky received a BA in chemistry from Carroll College in 2003. Her work is centered around pulmonary inflammation, in particular the mechanisms that contribute to lysosome membrane permeabilization and the activation of the NLRP3 inflammasome in alveolar macrophages following exposure to cSiO₂. Becky has authored a review in the Journal of Inhalation Toxicology exploring lysosomal ion channel activity in lysosome dysfunction. She heads the Toxicology Journal Club at the University of Montana and has been a member of SOT since 2021.

Outgoing Officers: Thank you for your service!

President: Jenny R. Roberts, PhD

Councilor: Todd A. Stueckle, PhD

Postdoctoral Representative: Cynthia Browning, PhD

Student Representative: Dorothy You, BS

Annual Meeting Highlights

Although we could not meet face-to-face this year, we thank all those members that attended our annual business meeting. A special thank you to our guest speaker, Dr. Andrew Nelson, who presented "Advances in the Area of Safer and Sustainable by Design in Nanotechnology and Advanced Materials".

Thanks also to our Program Committee for 2021 chaired by Jared Brown and our 2021 awards committee listed to the right.

Congratulations to all the award winners this year!

We look forward to seeing you in San Diego in 2022!!!!

NAMSS Website:

<http://www.toxicology.org/groups/ss/nano/>

2021 Award Winners

Dorothy You – Best Publication Award for the paper entitled "Sex Differences in the Acute and Subchronic Lung Inflammatory Responses of Mice to Nickel Nanoparticles" published in *Nanotoxicology*.

Saeed Alqatani - Best Publication Award Runner-Up for the paper entitled "Exacerbation of Nanoparticle-Induced Acute Pulmonary Inflammation in a Mouse Model of Metabolic Syndrome" published in *Frontiers in Immunology*.

Wei-Chun Chou – Outstanding Postdoctoral Award

Antonella Marrocco – Runner-up Outstanding Postdoc Award

Mariana T. Farcas - Outstanding Graduate Student Award

Awards committee members:

Salik Hussain, Chair
Jared Brown
James Bonner
Jenny Roberts
Todd Stueckle

Andree Holian
Vamsi Kodali
Phoebe Stapleton
Amy Madl

2021 NAMSS-Sponsored and Related Program:

Symposium: From Inhaled Particles to Neurodegeneration and Toxicity: Evidence from Studies in Volunteers, Experimental Animals, and Cell-Based Systems

Chair: Flemming Cassee, Rijksinstituut voor Volksgezondheid en Milieu (RIVM), Netherlands

Co-Chair: Deborah Cory-Slechta, University of Rochester Medical Center

Workshop: Tackling the Potential Human Health Impacts of Microplastics and Nanoplastics: Challenges for Toxicologists in the Assessment of Real-World Complex Mixtures

Chair: Nigel Walker, NIEHS/NTP

Co-Chair: Anil Patri, US FDA/NCTR

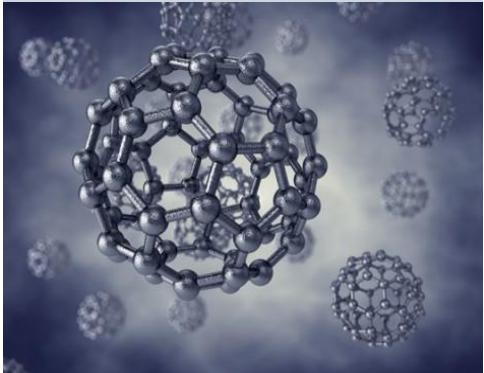
Poster Sessions: Nanotoxicology: *In Vitro*, Nanotoxicology: *In Vivo*, Nanotoxicology: Methodologies and Assessments

Future Conferences/Workshops/Webinars

Other News:

NIOSH has just published a current intelligence bulletin on nano-silver.

NIOSH [2021]. Current Intelligence Bulletin 70: health effects of occupational exposure to silver nanomaterials. By Kuempel E, Roberts JR, Roth G, Dunn KL, Zumwalde R, Drew N, Hubbs A, Trout D, and Holdsworth G. Cincinnati, OH: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 2021-112, <https://doi.org/10.26616/NIOSHPUB202112>external icon.



- **Webinar: Nanotoxicology of Food Ingredients – July 29th, 2021, 3:00 PM EDT. For more information and to register visit the website: <https://register.gotowebinar.com/register/2508168957864474123>.**
- **TechConnect World Innovation Conference and Expo, October 18-20, 2021, Washington DC. <https://www.techconnectworld.com/World2021>**
- **Particles & Health 2021: An International conference addressing issues in science and regulation. October 20-21, 2021, Paris, France. [Home | Particles & Health 2020 \(particlesandhealth.org\)](https://www.particlesandhealth.org/)**
- **10th Sustainable Nanotechnology Organization Conference, November 3-5, 2021, Virtual. [Sustainable Nanotechnology Organization \(susnano.org\)](https://susnano.org/).**
- **13th International Particle Toxicology Conference; August 28-30th, 2022. Santa Fe, New Mexico. Look for more information soon at The University of New Mexico's Webpage for the Center of Biomedical Research and Excellence.**
- **Inhaled Particles XII and the 10th International Symposium on Nanotoxicology, Occupational and Environmental Health (NanoEH) will be held jointly in Manchester, UK, in September 2022, hosted by the British Occupational Hygiene Society (BOHS).**
- **ICEENN2020: 15th International Conference on the Environmental Effects of Nanoparticle and Nanomaterials, Montreal, Quebec, Canada. This meeting has been postponed until 2022. See website for details. <https://www.iceenn202.ca/>**

Postdoctoral and Student Announcements:

The Nanoscience and Advanced Materials Specialty Section (NAMSS) is planning a webinar for September/October, 2021, that will showcase trainees who are conducting research related to toxicity, dosimetry, risk assessment of nanoscale, and advanced materials. Our goal is to provide an opportunity for trainees to gain experience presenting their research on a national platform in the greater toxicology community and to connect with experts in the field. Please forward the following message to any graduate students or postdocs who may benefit from presenting in our webinar. Membership in the specialty section is not required to be a presenter.

Those interested should email NAMSS Postdoctoral Representative Alba Rodriguez (albag@binghamton.edu) and copy NAMSS President Jared Brown (jared.brown@cuanschutz.edu) by August 15th, 2021.

Financial Report for Spring NAMSS Newsletter

Our most recent financial report posted for April 2021 states we have \$8,530.00 in available funds. The cost of annual meeting this year, including awards, totaled \$2,310.00. As of March, our membership consisted of 149 members. We thank RJ Lee Group for their donation to our Annual Meeting this year in support of our award winners!

