SDNI-NNCI Education Symposium - September 12-13, 2020

"Integration of Nanotechnology Contents with Current State-Wide K-12 Science Curricula: Challenges & Strategies"

Presentation Schedule

Saturday, September 12, 2020

8:45 - 9:00 Welcoming Remarks

Yuhwa Lo, SDNI Faculty Director and Professor of Electrical and Computer Engineering, UCSD, La Jolla, CA

Yves Theriault, PhD, PMP, Executive Director, Education Programs and Outreach, SDNI, UCSD, La Jolla, CA

9:00 - 9:20 "The California NanoTech 2025 Project"

Yves Theriault, PhD, PMP, Director, Education Programs and Outreach, SDNI, UCSD, La Jolla, CA

9:20 - 9:40 "Using Phenomena to Drive NGSS Lessons"

John Spiegel, Director of Curriculum and Instruction, San Diego County Office of Education, San Diego, CA

9:40 - 10:00 "Redefining Equity in STEM"

Alberto Vasquez, Community Outreach and Engagement Coordinator, CREATE STEM, UCSD, La Jolla, CA

Oscar Vasquez Mena, Associate Professor, Nanoengineering, UCSD, La Jolla, CA

10:00 - 10:10 Break

10:10 - 10:30 "Would You Care for A Sparkle of Nano with your Bio?"

Lesli Horowitz, Science Teacher, Kearny High School, San Diego, CA

10:30 – 10:50 "Nanoscience for Teachers and their Students"

Angela Hwang, PhD, Education and Outreach Manager, nano@stanford, Stanford University, Stanford, CA

10:50 – 11:10 "Promoting the importance of nano on a multi-disciplinary scale: A Virginia Tech hosted professional development workshop for high school teachers"

Tonya Pruitt, Assistant Director, National Center for Earth and Environmental Nanotechnology Infrastructure, Virginia Polytechnic Institute and State University, Blacksburg, VA

11:10 – 11:30 Panel Discussion (All morning speakers as panelists and Yves Theriault as moderator)

Sunday, September 13, 2020

9:00 - 9:20 "Overview of the National Nanotechnology Initiative's Education Efforts"

Lisa E. Friedersdorf, PhD, Director, National Nanotechnology Coordination Office, Alexandria, VA

9:20 - 9:40 "Digital Curricula and Textbook for Online and Hybrid Nanotechnology Courses"

Marco Curreli, PhD, Executive Director and Founder, OMNI NANO

9:40 – 10:00 "High School Nanoscience- A Sustainable, Public-Private Partnership Model for Increased STEM and Environmental Literacy"

Daniella Duran, Honors Nanoscience and Chemistry Teacher, Valencia High School, Valencia, CA

10:00 - 10:10 Break

10:10 - 10:30 "Connective Tissue Networks for Nanotechnology Education"

Robert K. Ehrmann, Managing Director, Center for Nanotechnology Education & Utilization (CNEU), NSF National Nanotechnology Applications and Career Knowledge (NACK) Network, Penn State University, University Park, PA

Jared Ashcroft, Center Director, Micro Nano Technology Education Center, Professor of Chemistry, Pasadena City College, Pasadena, CA

10:30 – 10:50: "Immersive Research Experiences in Nanotechnology—Using the Research Laboratory as a Classroom."

Michael J. Sailor, PhD, Distinguished Professor, Department of Chemistry and Biochemistry, UCSD, La Jolla, CA

10:50 – 11 10 "Teacher Professional Development during the NNIN: Lessons learned and resources now at NNCI"

Nancy Healy, Institute for Electronics and Nanotechnology, Georgia Institute of Technology, Atlanta, GA

11:10 - 11:30 Panel Discussion (Panelists: all morning speakers; Moderator: Yves Theriault)

11:30 – 11:40 Concluding Remarks

Yves Theriault, PhD, PMP, Director, Education Programs and Outreach, SDNI, UCSD, La Jolla, CA

