MNTeSIG Program Agenda

Hyatt Regency Hotel, Parkview Room

<https://www.mntesig.net/>

Draft as of July 12, 2019

7:00-8:00 - Check-in if you have not done so, at the HI-TEC registration desk.

7:00-8:00 - Poster setup, *see Poster Committee members for assistance.*

7:45-8:25 - Continental Breakfast – Grand D Foyer - *Bring coffee with you to the MNTeSIG meeting room.*

8:30-9:00 - Welcome, acknowledge committees, & Introductions, review of the asset book.

9:00 – 9:45 Keynote

Micro – Nano and the Emerging Sensor Based Economy  
Todd Christenson, Ph.D.  
CTO, co-Founder & Chairman Emeritus, HT MicroAnalytical Inc.

Few emerging technologies have impacted the world as broadly as the micro-nano field. Enabling to many breakthroughs which are providing ‘abundance’ via democratization of communication, healthcare, transportation, food and water access, energy and clean environment the micro-nano field is proving to be central to the betterment of our future. Having worked as an engineer and researcher in the MEMS field for 35 years the speaker will present a view of what appears to be tremendous untapped opportunity to provide further dramatic positive influences on human welfare. Resulting economic and job growth impact will be discussed and the skillsets required to surmount the challenges in meeting this growth will be outlined.

10:00 – 10:30 Break- Posters available for viewing, Grand D Foyer

10:30 – 11:00 - Lightning Round #1: Moderator - TBN

*Presentations are strictly limited to 7 minutes each*

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| --- | --- | --- | --- |
| 1 | Tony Dalessio | SUNY Erie Community College | Micro-credentials, a life preserver for drowning nano programs? |
| 2 | Elena Brewer | SUNY-Erie Community College | Lessons Learned from a Collaboration with Normandale Community College |
| 3 | Marco Curreli | Omni Nano | Digital Curricula and Textbook for Online and Hybrid Nanotechnology Courses |
| 4 | Jared Ashcroft | Pasadena City College | Combined Fundamental Science and Nanotechnology OER Laboratory Manual |

11:15-noon – Lightning Round #2: Moderator - TBN

*Presentations are strictly limited to 7 minutes each*

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| --- | --- | --- | --- |
| 5 | Zekaria Besir | Pasadena City College | Effectiveness on Nano-based Undergraduate Research in Increasing Student Success |
| 6 | Ahmed Khan | IEEE/WL/NSU | In Quest of Universal Nanotechnology Standards |
| 7 | Salahuddin Qazi | SUNY, NY | Online Visualization and Simulation Tools for Nanotechnology Education |
| 8 |  |  |  |

12:00 – 1:00 Lunch – Park View

1:00 – 1:30 Overview of National Center proposal: Jared Ashcroft

1:30 – 2:30 MNTeSIG moving forward, needs, objectives, activities, measurable outcomes

* Curriculum Development
* Faculty Professional Development
* Outreach and program building, include student input
* Industry involvement
* Growing MNTeSIG community
* Other

2:30 – 3:00 Report of the working groups; how do we move it forward?

* Needs, activities to address needs, outcomes anticipated
* Who, what, when?

3:00 – 3:15 Break – Park View

3:15 – 4:00 Keynote

The Quantum Industry Needs a Skilled Workforce—And Soon

Celia Merzbacher, Associate Director, Quantum Economic Development Consortium

The Quantum Economic Development Consortium (QED-C) is an industry consortium, supported by government, with the mission of enabling a robust U.S. quantum industry, including growing the workforce. Advances in quantum information science and technology (QIST) have broad applications—for sensing, communications, and computing. Companies across the supply chain expect to grow but the pipeline of talent at all levels, from technician to post-doctoral, is insufficient. The type of companies that are part of the quantum industry, as well as the QIST workforce needs will be presented.

4:00 – 4:15 Time for Evaluation (Paper or Plastic)

4:15-4:30 Wrap Up - Feedback – Be ready to be called on!

# Accepted Posters

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| Ahmed | Kamal | Tennessee Tech University | Bio Nano Device for Assessment of autonomic Function of Alzheimer’s Disease |
| Yawen | Li | Lawrence Technological University | Nanotechnology Minor Program at Lawrence Technological University |
| Zekaria | Beshir | Pasadena City College | Active Learning Interdisciplinary Nano-Education Butterfly Lab |
| Vanessa | Wolf | Pasadena City College | The Role of Remote Access Technology in S\*T\*EM Education |
| Nancy | Louwagie | Normandale Community College | Pathways to "and through" a Vacuum Technician Education |
| Elena | Brewer | SUNY-Erie | Addition of a New Plasma Course to EET Program |
| Elwin | Cheung | Pasadena City College | Increasing Student Success in STEM Using Active Learning Pedagogy |
| Pallavi | Sharma | University of New Mexico | Bi-Morph Cantilever – Understanding Micro Sensors and Actuators |

