

**NJIT 2024 Research Institutes, Centers and Laboratory Showcase
and
NAI-NJIT Forum on
Sustainable Societies: Advances in Material Science and Engineering**

(Sponsored by the National Academy of Inventors (NAI) Chapter at NJIT)

March 21, 2024; 9.00 AM – 3.00 PM
Ballroom A/B and Gallery, Campus Center, NJIT

YouTube Video Streaming Link: TBA

Abstract:

Innovations in material science and engineering are fueling vital advances in diverse sectors, including healthcare, the environment, energy, infrastructure, computing and cyber-communications. Novel building materials that make us more energy-efficient and nanomodified, more sustainable concretes and infrastructure that enhance environmental resilience, for example, are emerging as important tools to manage climate change. Innovations that gave rise to smart implants, medical devices and sensors, and lab-on-a-chip technologies are revolutionizing health care. As we look to the future, quantum materials, plasma and energetic materials that can transform into other states of matter will potentially spur new, innovative technologies for a more sustainable world with precision healthcare, fusion energy, and secure data communication and advanced computing for artificial intelligence applications. To accomplish these technology innovation and translation goals, researchers will need to form transdisciplinary partnerships with collaborators in academia, industry and policy circles. This forum will bring these groups together to discuss new ideas, assets and capabilities and ways to share them most productively. It will also showcase select institutes, centers and labs in the broad spectrum of material science and engineering from leading universities in the region.

The NAI Chapter-NJIT Forum and Research Showcase will feature:

- A Distinguished Keynote Talk by Pradeep Fulay, Program Director, Accelerating Research Translation (ART), National Science Foundation and Professor of Materials Science and Engineering, University of Pittsburgh
- A Distinguished Panel Discussion on Material Science and Engineering Research for Technology Innovations Towards Addressing Global Challenges

- A Distinguished Student Panel Session on Translational Research in Material Science and Engineering
- e-Poster sessions on ongoing research at institutes, centers and specialized laboratories from leading universities in the region. The showcase will provide an open forum to discuss pathways for developing synergistic technology innovation partnerships involving material science and engineering.

Program Agenda

- 9.00 AM – 9.30 AM: Registration, Breakfast and Electronic PPT Poster Set-up
- 9.30 AM – 9.40 AM: Welcome Remarks:
Atam Dhawan, Senior Vice Provost for Research, NJIT
Teik Lim, President, NJIT
- 9.40 AM – 9.45 AM: Program Agenda and Introduction to the Distinguished Speaker
Atam Dhawan, Senior Vice Provost for Research, NJIT
- 9.45 AM – 10.30 AM: Distinguished Keynote Presentation: Thyaga Nandagopal, Division Director ITE, TIP Directorate & Pradeep Fulay, Program Director, Accelerating Research Translation (ART), NSF and Professor of Materials Science and Engineering, University of Pittsburgh (invited)
- 10.30 AM – 11.30 AM: Distinguished Panel Discussion: Trends in Material Science and Engineering Research for Technology Innovations
- 11.30 AM – 12.30 PM: Distinguished Student Panel Session: Applied and Translational Research in Material Science and Engineering
- 12.30 PM – 1.00 PM: Lunch and Networking
- 1.00 PM – 2.45 PM: NJIT-Rutgers-Princeton-Rowan-Stevens-Montclair Research Institutes, Centers and Laboratories Showcase in Material Science and Engineering: Networking and Electronic Poster Session
- 2.45 PM – 3.00 PM: Concluding Remarks
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