

NanoFlorida 2025 International Conference

March 14-16, 2025

FIU Ernest R. Graham Center

Friday, March 14

5:30 – 5:45PM	Registration
5:45 – 5:50PM	Welcome Reception <i>The Faculty Club inside the Graham Center</i>
5:45- 5:50	Welcome and Introduction
5:50 - 7:00PM	Bridging the Gap: Perspectives and Challenges in University-Industry Collaboration <i>Moderator: Dr. Shyam Mohapatra & Dr. Heidi Mansour</i>
5:50 - 6:00	Mr. Robert Hacker, Co-Founder & Director StartUP FIU
6:00 - 6:10	Dr. Dipanjan Pan, Professor Pennsylvania State University
6:10 - 6:20	Dr. Ezharul Hoque Chowdhury, Founder NanoFlex LLC
6:20 - 6:30	Mrs. Erin Kidder, Director Johnson & Johnson
6:30 - 7:00	Q & A
7:00 - 7:30PM	Closing remarks and Reception

Saturday, March 15

7:30 – 8:00AM	Registration, Poster Setup and Breakfast <i>Graham Center Ballroom</i>
8:00 – 9:15AM	Conference Inauguration <i>Moderators: Dr. Heidi Mansour & Dr. Nezhir Pala</i>
8:00 – 8:15	Dr. Shyam Mohapatra, President of FAN Univ. of South FL - Opening Remarks
8:15 – 8:25	Dr. Andres Gil, Senior Vice President of Research and Dean University Graduate School FIU- Opening Remarks
8:25 – 8:35	Dr. Yesim Darici, Associate Provost for Faculty Success Initiatives FIU - Opening Remarks
8:35 – 8:45	Dr. Stephen Black, Associate Dean for Herbert Wertheim College of Medicine FIU - Opening Remarks
Keynote 8:45 - 9:15	Dr. Dipanjan Pan, Professor Pennsylvania State University - “Advanced 2D Nanomaterials for Next Generation Biodiagnostics Application”
9:15 - 11:15AM	Session 1: Nanosynthesis Applications <i>Moderators: Dr. Swadesh Santra & Dr. Subhra Mohapatra</i>
9:15 - 9:35	Dr. Reginald Rogers, Jr., Associate Professor Univ. of Missouri - “Responsible Development of Nanotechnology for Educating the Next Generation of Scientists and Engineers”
9:35 - 9:55	Dr. Jiabing Fan, Assistant Professor Univ. of Maryland Eastern Shore - “Engineering Mesenchymal Stem Cell-Derived Exosome Mimetics for Bone Regeneration”

9:55 - 10:15	Dr. Mandip Sachdeva, Professor FAMU - “Bioengineered PDL1 targeted exosomes for Cancer Immunotherapy”
10:15 - 10:35	Dr. Mei He, Associate Professor Univ. of FL (Live Virtual) - “Nanotechnology and Extracellular Vesicles for Precision Therapeutic Development”
10:35 - 10:55	Dr. Jason C. White, Director The Connecticut Experiment Station - “Nanobiotechnology-based Strategies for Enhanced Phosphorus and Nitrogen Delivery to Crop Species”
10:55 - 11:15	Dr. Nitin Kumar Singhal, Scientist National Agri-Food Biotechnology Inst (Virtual-live) - “Administration of PCK-1 siRNA and G-ELNs improves insulin sensitivity and glucose metabolism in Type 2 diabetes mellitus experimental model”
11:15AM - 12:15PM	Session 2: Artificial Intelligence Applications
	<i>Moderators: Dr. Sylvia Daunert & Dr. Mandip Sachdeva</i>
11:15 - 11:35	Dr. Prem Chapagain, Professor FIU - “AI-driven biomolecular structure modeling and simulations”
11:35 - 11:55	Dr. Saif Islam, Professor University of California, Davis - “Nanostructure-enhanced AI: Unlocking the Power of Light for Precision Healthcare and Cybersecurity Innovations”
11:55 - 12:15	Dr. Shyam Mohapatra, Professor Univ. of South FL - “Convergence of Nanotechnology and Artificial Intelligence: What's in the Future”
12:15 – 1:15PM	Lunch
12:15 - 1:05	FAN meeting (8th Street Kitchen)
1:15 -1:25PM	Photo session
1:25 – 2:25PM	Session 3: Nano Devices
	<i>Moderators: Dr. Sapna Deo & Dr. Jack Judy</i>
1:25 - 1:45	Dr. Wei Gao, Professor California Inst. of Technology (Virtual-live) - “Skin-Interfaced Wearable Biosensors”
1:45 - 2:05	Dr. Ajeet Kaushik, Assistant Prof FL Polytechnic Univ. - “Electrochemical Sensing of Microplastics in Point-of-care Settings”
2:05 - 2:25	Dr. Yvonne Perrie, Professor Univ. of Strathclyde - “Developing mRNA-LNP vaccines: Considerations of formulation and function”
2:25 – 4:15PM	Session 4: Student Oral Presentations
	<i>Moderators: Christia Lomas, Chair & Vianessa Andion Camargo, Co-Chair, Student Organizing Committee</i>
2:25 - 2:35	Jorge David Tovar Castro Univ. of Miami - “Intranasal Vanilloid Nanodrugs”
2:35 - 2:45	Elise Neubarth FAU - “Development of a Portable Device”
2:45 - 2:55	Navdeep Kaur Univ. of South FL - “Impact of Marigold-Silver Nanoparticles”
2:55 - 3:05	Nina Erwin Univ. of FL - “Nano-transfection for Cargo Loading”
3:05 - 3:15	Sandeep Ramteke FIU - “Study and Investigation of particle-wall interactions”
3:15 - 3:25	Sandeep Padakanti FAMU - “Pharmacokinetic Evaluation and Computational Modeling”
3:25 - 3:35	Oscar Sang UCF - “Nano-scale Spectroscopy and Imaging”
3:35 - 3:45	Santosh Khatri FIU - “Conductive Pulse-Based Nanopore Sensing”
3:45 - 3:55	Unaisah Vorajee FSU - “Surface Passivation of Blue-Emitting Perovskite Nanoplatelets”

3:55 - 4:05	Dr. Karthick Mayilsamy <i>Univ. of South FL - "Sh-RNA Dendriplexes for Treatment"</i>
4:05 - 4:15	Coffee Break
4:15 - 5:15PM	Global Academy of Nanotechnology Ceremony
5:15 - 7:00PM	Poster Sessions

Sunday, March 16

8:00 – 8:30AM	Registration and Breakfast <i>Graham Center Ballroom</i>
8:30 – 8:35	Dr. Shyam Mohapatra, Dr. Heidi Mansour & Dr. Nezhil Pala - <i>Opening Remarks</i>
8:35 – 10:40AM	Session 5: Nanoscale Interactions <i>Moderators: Dr. Arti Vashist & Dr. Anthony McGoron</i>
8:35 - 8:55	Dr. Tejal Desai, Professor <i>Brown University (Pre-recorded lecture) - "Nanostructured Materials for Therapeutic Delivery"</i>
8:55 - 9:15	Dr. Mustafa Culha, Professor <i>Augusta Univ. & SUNUM (Virtual-live) - "Hexagonal boron nitrides in nanomedicine and nanophotonics"</i>
9:15 - 9:35	Dr. Steven Lenhart, Associate Professor <i>FSU - "Lipid-based molecular recognition"</i>
9:35 - 9:55	Dr. Sakhrat Khizroev, Professor <i>Univ. of Miami - "MagnetoElectric NanoParticles for Precision Biomedical Applications"</i>
9:55 - 10:15	Dr. Avi Schroeder, Associate Prof <i>Israel Inst of Technology (Virtual-live) - "Brain-targeted liposomes for treating Parkinson's disease"</i>
10:15 - 10:35	Dr. Jay Panyam, Dean <i>Univ. of Washington (Virtual-live) - "Anticancer Nanovaccines for Reprogramming the Immune System"</i>
10:35 - 10:40	Break
10:40 - 11:40AM	Wrap up and Closing Remarks <i>Moderators: Dr. Heidi Mansour, Dr. Nezhil Pala, & Dr. Shyam Mohapatra</i>
11:40AM - 12:00PM	Lunch