### **NanoScience Technology Center**

# **Industrial Affiliates Symposium**

## Thursday, August 15

## Reception

Location: NanoScience Technology Center (Research Pavilion-Suite 400)

Poster Session, Research Pavilion Lab Tours & Exhibits 5.00 PM-7.30PM

**Dinner** (Invited guests)

## Friday, August 16

Location: Research 1 (Suite 101)

## Registration and continental breakfast (7.45AM - 8.25AM)

### **OPENING SESSION (8.30AM – 9.10AM)**

8.30AM – 8.40AM: Welcoming remarks Liz Klonoff, UCF VP for Research, Dean

of Graduate Studies

8.40AM- 8.50AM: NSTC Overview Lei Zhai Director, NSTC

8.50AM-9.00AM: Goal of NIA Jayan Thomas Symposium chair

9.00AM- 9.10AM: Technology transfer Svetlana Shtrom Director, Technology

Commercialization

#### **TECHNICAL SYMPOSIUM**

Session 1: Talks by invited speakers (9.10AM – 10.35AM)

9.10AM-9.30AM: Jeff Bullington, CTO, Garmor

"Industrial Commercialization of Graphene

Oxide"

9.30AM-9.50AM: Georg von Freymann AG Optische

Technologien und Photonik, Germany "3D μ-Printing: An Enabling Technology"

9.50AM-10.10AM: Jason Eichenholz, Co-founder and CTO

**Luminar Technology** 

"Building the Vision for Autonomous

Mobility"

10.10AM-10.35AM: Dr. Jose Nunez, Chief, Flight Technology

Branch, Exploration Research and

Technology Programs Office, NASA KSC.

### Dr. Nunez presentation:

 A three minute YouTube video – We are Going – Provides a quick top level overview of going to the Moon

- A 10 minute presentation Artemis Program (NASA's new Program on going to the Moon)
- A 10 minute presentation KSC's Research Organization, who we are and what we do

## Photo session and coffee break (10.35AM-11.00AM)

### Session 2: NSTC faculty technical talks- 6 minutes each (11AM – 12.30PM)

- 1. Debashis Chanda Turning One Atomic Layer Thick Material into a "Color" Night Vision Camera
- 2. Lei Zhai Polymer Nanocomposites
- 3. Yajie Dong Luminescent Nanomaterials and Devices
- 4. Swaminathan Rajaraman Makerspace Micro/Nanofabrication Technologies for Biomedical and Agricultural Applications
- 5. Swadeshmukul Santra: Zinkicide<sup>TM</sup> nanotechnology for crop protection
- 6. Tania Roy -Electronic devices for artificial intelligence

- 7. Yang Yang Advanced Manufacturing of Nanosctuctured Thin-Film Materials for Renewable Energy Devices
- 8. Arkadiy Lyakh High Performance Quantum Cascade Lasers
- 9. Laurene –
- 10. Akihiro Kushima In-situ transmission electron microscopy to probe electrochemical and mechanical properties of materials at nano-scale
- 11. Jayan Thomas Fibers and ribbons for wearable energy harvesting and storage devices
- 12. Nadine (J. Hickman) Development of human body-on-a-chip system for efficient translational study and missions of Hybrid System Laboratory
- 13. Jihua 'Jan' Gou Science and Technology of Buckypapers and Their Composites
- 14. Masahiro Ishigami "Advanced prototype and characterization of nanoelectronics devices"

#### Lunch: 12.30PM- 1.30PM

### Session 3: Short presentations from industrial affiliates - 8minutes each (1.30PM-3.00 PM)

- 1. Dr Aina Olaleye Ball Aerospace: Sensor payload and Geiger-mode Lidar Camera technology
- 2. Dr. Debasish Banerjee Toyota Corporation: Lexus Structural Blue-world's first structural color based car
- 3. Dr. Gautam Parthasarathy GE Global Research: GE K<sub>2</sub>SiF<sub>6</sub>:Mn<sub>4</sub><sup>+</sup> (PFS/KSF) Phosphor: Market Leading Wide Color Gamut Technology & Path Towards Enabling Next Generation Displays.
- 4. Mr. Joe Sleppy Capacitech Energy LLC: Building a Capacitech Enabled Future
- 5. Dr. Binh Duong Urbix: Advanced graphite refining technology
- 6. Dr. Isaiah Oladeji Sisom Water based chemistry for the fabrication of energy harvesting and energy storage devices
- 7. Salvatore J. Monte- Kenrich Petrochemicals, Inc: The Application of 1.5-Nanometer Heteroatom Titanates and Zirconates
- 8. Christopher Long- Hesperos: Human On a Chip systems for Drug Screening and Toxicity Evaluations

- 9. Alex Oliferenko- EigenChem Technologies Inc.:
- 10. Bert Gyselinckx IMEC: imec and UCF: partners in research

# Coffee break (3.00PM-3.15PM)

Session 4: Breakout session/Panel discussion (3.15PM-4.00PM)

Lead – Dr. Lei Zhai

Symposium adjourns