



INDUSTRY ADVISORY MEETING **PROGRAM**

Materials Science & Engineering



April 27, 2016 | Live Oak Event Center, UCF Main Campus

College of
**Engineering &
Computer Science**
Opportunity Starts Here

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INDUSTRY ADVISORY MEETING

AGENDA

12:00 - 12:30 p.m.

Arrivals

12:30 - 2:00 p.m.

Lunch

Research Poster Review

2:00 - 4:00 p.m.

Dean's Address to IAB

State of the Facts: MSE Dept.

Discussions with IAB Members

4:00 - 5:45 p.m.

Reception with the
ASM President

ADVISORY BOARD



ALLISTER JAMES, PH.D.

Senior Expert-Materials, Siemens Energy, Inc.

Dr. James has expertise in high temperature materials and manufacturing for gas turbine components.



DR. LES KRAMER, PE

General Manager, Advanced Materials Professional Services, LLC

Dr. Les Kramer, PE has 44 years of experience as a materials scientist and engineer, a program manager, and an entrepreneur in the defense, power generation and renewable energy, prosthetics, and commercial industries.



ASHLEY NICHOLS, M.B.A.

General Manager, 3D Material Technologies

Mr. Nichols started 3D Material Technologies, a new company within Arc Group Worldwide, or provide rapid prototyping, short run production and engineering consulting to support MIM operations.



BRENDA PRENITZER, PH.D.

President and CEO, NanoSpective

Dr. Prenitzer's areas of expertise include structure-property relationships of materials, semiconductor technologies and advanced materials characterization using electron, ion, photon and mechanical probes.



NATHANIEL R. QUICK, PH.D.

Founder, President CTO, AppliCote Associates, LLC.

Dr. Quick established AppliCote Associates, LLC to develop laser-based technologies that enable the next generation of semiconductor devices.



ISLAM SALAMA, PH.D.

Director- Substrate and Packaging Technology Development, Intel Corporation

Dr. Salama manages a global team of technologists, procurement, and manufacturing, responsible for delivering next generation packaging technologies. His team is focusing on next generation packaging architectures, technology building blocks, intellectual property management, and supplier development.



AMARNAUTH SINGH, PH.D.

Director of Technology, Global Membrane Technology

Dr. Singh is an expert in leading, building and positioning global scientists and engineers in developing technologies across fast-paced environments that have enabled change, driven innovation, increased sales, and elevated organizations as market leaders.



WILLIAM E. SWARTZ, PH.D.

President and Chief Executive Officer
Constellation Technology Corporation

Dr. Swartz possess extensive expertise in all areas of instrumental methods of chemical analysis.



DAVID VANDERPOOL

Sales Manager, SCHOTT North America Advanced Optics

Mr. Vanderpool is responsible for thin glass and wafers sales throughout North America. Market expertise includes semiconductor, biomedical, display, lighting, photo-voltaics, and energy storage.

RESEARCH POSTERS

OMAR AHMED

Advisor: Tengfei Jiang
Title: Thermal Stress Minimization for Harsh Environment Packaging and the Development of Novel Thermal Interface Materials

ANDREW BUFF

Advisor: Kathleen Richardson
Title: Engineering GRIN Profiles in Chalcogenide Glasses

YEJIE CAO & HAO LI

Advisor: Linan An
Title: Polymer-Derived Ceramics and Their Applications for High-Temperature Sensors

JINAN DENG

Advisor: Jiyu Fang
Title: Tailoring the Surface of Liquid Crystal Droplets with Chitosan/Surfactant Complexes for the Detection of Bile Acids

ANKUR GUPTA

Advisor: Sudipta Seal
Title: Carbon Nanostructure Reinforced Plasma Sprayed Composite Coatings for Enhanced Mechanical and Corrosion Protection Properties

CLARA HOFMEISTER

Advisor: Yongho Sohn
Title: Manufacturing and Mechanical Behavior of Aluminum Hierarchical Structural Materials

GOLAREH JALIVAND

Advisor: Tengfei Jiang
Title: Microstructure Evolution and Reliability Impact from Nano-interconnects to Through-Silicon Vias

MINH-CHAU LE

Advisor: Stephen Florczyk
Title: Overview of Research in Biomaterials for Tissue Engineering and Cancer Laboratory

CHAO LI

Advisor: Jayan Thomas
Title: Probing Ternary Solvent Effect in High VOC Polymer Solar Cells Using Sdvanced AFM Technique

DOUG NICHOLSON

Advisor: Raj Vaidyanathan
Title: Shape Memory Alloys

SAMUEL RHODES

Advisor: Jiyu Fang
Title: Synthesis of J-aggregate Nanotubes for Biosensor Applications

SHASHANK SARAF

Advisor: Sudipta Seal
Title: Enzyme-free Detection of Hydrogen Peroxide in Physiological Media Using a Novel Anti-biofouling Platform

CHEN SHEN

Advisor: Lei Zhai
Title: Conjugated Polymer Supramolecular Structures on Graphene

XIAOCHEN WANG

Advisor: H. J. Cho
Title: Hydrophobic Graphene-based Nanosensors for in-situ Monitoring of PAHs

THIWANKA WICKRAMASOORIYA

Advisor: Raj Vaidyanathan, Arvi Kar
Title: Reduced MRI Heating

LE ZHOU

Advisor: Yongho Sohn
Title: Interdiffusion, Martensitic Transformation and Mechanical Properties of NiMnGa Alloys



**SPECIAL THANKS FOR MAKING THIS
EVENT POSSIBLE:**

Jodi Peters
Pamela Ross
Kari Stiles
Sudipta Seal

**MATERIALS SCIENCE &
ENGINEERING**

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