WORKSHOP: FHE APPLICATIONS FOR STRUCTURAL HEALTH AND ASSET MONITORING SYSTEMS

OCTOBER 28-30, 2019 • WEST LAFAYETTE, IN

About the Workshop

Join us at Purdue University for this workshop that will include over 20 speakers discussing FHE in AgTech, industrial asset monitoring, and composites. There will be three sessions on agricultural technology, industrial asset monitoring, and monitoring for composites. Talks will include: An Internet-of-Things Platform Giving Farmers Real-Time Data, Asset Monitoring, Structural Health Monitoring, Sensors in Manufacturing Equipment, Monitoring Composites, Material State Sensing and Estimation, and Process Monitoring.

Workshop Organizing Committee

- Dr. Giorgio Bazzan, Program Manager, Air Force Research Laboratory
- Jeffrey Bergman, Technical Lead – Asset Monitoring, NextFlex
- Dr. Amrita Kumar, Executive Vice President, Acellent Technologies Inc.
- Dr. Jan-Anders Mansson, Distinguished Professor of Materials & Chemical Engineering, Purdue University
- Dr. Scott Miller, Director of Strategic Programs, NextFlex
- Chris Minnella, Manager, DPHM Technologies, Diagnostics, Prognostics & Health Management, Lockheed Martin
- Dr. Ali Shakouri, Mary Jo and Robert L. Kirk Director of the Birck Nanotechnology Center, Professor of Electrical and Computer Engineering, Purdue University

Registration Fees

- NextFlex Member | Workshop and Welcome Reception $350
- NextFlex Member | Workshop Only $300
- Non-Member | Workshop and Welcome Reception $450
- Non-Member | Workshop Only $400

All government partner attendees admitted free of charge

See the reverse side of this handout for the workshop schedule.
Workshop Schedule

Monday, October 28, 2019 – Welcome Reception and Dinner
We will kick off the Workshop at the Ross-Ade Football Stadium where you will mingle with workshop attendees while taking in scenic views of Purdue's campus and the Ross-Ade Stadium. Dinner will include a guest speaker from Purdue University:

Impact Analysis in Sports: Helmet Impact Monitoring with Sensors
- Eric Nauman, Professor of Mechanical Engineering, Professor of Basic Medical Sciences and Biomedical Engineering, Purdue University

Tuesday, October 29, 2019
Workshop Day One at Discovery Park, Purdue University

Session I: Agricultural Technology
Topics Include:
- Out-of-field asset tracking/products
- In-field technology/communication
- Sensors (stand alone and on-the-go sensors)
- Remote monitoring and data communications
- Open Ag data/digital monitoring interface

Speakers Include:
- Purdue University
- Solinftec

Session II: Industrial Asset Monitoring
Topics include:
- Agricultural equipment
- Industrial equipment
- Sensors in manufacturing equipment
- Motors and turbine engines
- Bearing monitoring

Speakers include:
- Fluke Corporation
- Acellent Technologies, Inc.
- Purdue University

Tour of Birck Nanotechnology Center in Discovery Park at Purdue University

Wednesday, October 30, 2019
Workshop Day Two at the Composites Manufacturing & Simulation Center

Session III: Monitoring for Composites
Topics include:
- The need and use of sensors in composite manufacturing
- Structural health
- Fiber optics
- Monitoring equipment
- Manufacturing metrology

Speakers include:
- Vanderbilt University
- Acellent Technologies, Inc.
- Purdue University
- Lockheed Martin

Tour of Composites Manufacturing & Simulation Center Lab

Technical Breakout Sessions
- For NextFlex Members and Government only