Aug. 10, 2015

MSU to host American Society for Composites 30th Annual Technical Conference

Modern composites help create everything from skateboards to space satellites. This multibillion-dollar industry develops the products that make automobiles and boats stronger and lighter, and baseball, golf and tennis equipment perform better.

The latest developments in composites, its new challenges, and where the industry is headed will be examined at Michigan State University during the American Society of Composites (ASC) 30th Annual Technical Conference, Sept. 28-30, at the Kellogg Hotel & Conference Center in East Lansing, Mich.

Xinran (Sharon) Xiao, Alfred Loos, and Dahsin Liu, three professors of mechanical engineering at the MSU Composite Vehicle Research Center, are the organizers for ASC2015.

“This event will provide a communication forum for the composite community,” she said. “We will hear about the latest developments and what the future holds for the field of composite materials and structures.”

Three plenary speakers will be featured. They are:

- **Dave Bank**, the R&D Fellow at Dow Automotive, presenting on light weight composites development: turning fast curing chemistries into high performance automotive components, on Monday, Sept. 28, at 8 a.m.

- **Ramesh Talreja**, the Tenneco Professor of Engineering at the Department of Aerospace Engineering, Texas A&M University, speaking on multi-scale modeling of damage and failure in composite materials, on Tuesday, Sept. 29, at 8 a.m.

- **David W. Trop**, chief engineering, BCA Structures - Product Development and Technology, The Boeing Company, addressing challenges and opportunities in application of advanced composites to large aircraft structures, on Wednesday, Sept. 30, at 8 a.m.

During the conference, ASC members will honor MSU’s Lawrence Drzal for his lifetime achievements. Drzal is a University Distinguished Professor of chemical engineering and materials sciences; the head of MSU's Composite Materials and Structures Center, and in January was named the director of the Michigan Center of Excellence for the Institute for Advanced Composites Manufacturing Innovation (IACMI), a 122-member consortium of institutions across the country. MSU will lead the light-and-heavy-duty vehicle component of IACMI.
Xiao said the conference welcomes papers on a long list of topics in composite engineering and science, including material development, processing, design and manufacturing, functional materials and structure, analysis, computation, testing, non-destructive evaluation, structure health monitoring, durability and damage tolerance, failure and fracture, fatigue, impact, blast, lightning, crashworthiness, composite applications in aerospace, automotive, transportation, civil structures, energy generation and storage, and repair technology.

The conference’s preliminary program can be viewed at http://www.egr.msu.edu/asc2015/program along with the tentative schedule of 65 technical sessions.

Students can compete for three awards:

• Cytec Student Paper Award for Composite Processing,

• Dow Chemical Student Paper Award on Innovative Composites, and

• The Student Simulation Challenge.

More information on the technical conference, including the student competitions, is available at: http://www.egr.msu.edu/asc2015/

Xiao added that she expects a record number of participants from local industries, along with representatives of the U.S. Air Force Research Lab and NASA Research Centers.