

Mechanical engineering associate professor honored with early achievement award

By Meghan Cunningham : June 14th, 2011 UTNews



The American Society of Mechanical Engineers recently recognized Dr. Mohammad Elahinia, a mechanical engineering associate professor at The University of Toledo, for the impact his work has had on his profession.

Elahinia received the 2010 Gary Anderson Early Achievement Award at the society's annual conference in Philadelphia. The award, established in 2007, is given to young researchers with notable contributions to the field of adaptive structures and material systems.

"I am honored and humbled to be recognized with this award," Elahinia said. "I have enjoyed working with my

students and having the support of several of my colleagues at UT. They have had a significant role in the success of our research, and I would not have been able to succeed and be recognized with this award without their inspiration, support and collaboration."

Elahinia is the director of the UT Dynamic and Smart Systems Laboratory, where his research focuses on developing dynamic models and designing control systems for smart and active materials. His current research is concentrating on biomedical application of shape memory alloys.

Elahinia is the principal investigator from the University for the Third Frontier Project "Nitinol Commercialization Accelerator" to advance the development and commercialization of products made from nitinol, which is an alloy of nickel and titanium.

The accelerator project houses the capital equipment needed to overcome the particular challenges that face nitinol product designers in all phases of commercialization, thereby giving Ohio a competitive advantage in this growing market. The project is a \$10 million investment by the state, the Cleveland Clinic, NASA Glenn Research Center, Norman Noble Inc., The University of Toledo and Case Western Reserve University.

"Dr. Elahinia is one of our outstanding young faculty researchers and is most deserving of this award," Dr. Nagi Naganathan, dean of the College of Engineering, said. "This award recognizes not only his expertise and talents as a successful researcher; more importantly, this affirms the importance of his interdisciplinary scholarship. His most recent interdisciplinary research award 'Nitinol

Commercialization Accelerator' (partnering with Cleveland Clinic, Case, NASA and industry) is an early career achievement, with many more to come in the future. We look forward to celebrating the same."

Elahinia has made substantial contributions to the field of adaptive structures and material systems through his work on experimental characterization, modeling and control of shape memory alloys.

The author of more than 100 papers, Elahinia is associate editor for the Journal of Intelligent Material Systems and Structures. He is an investigator on 17 funded projects with a total budget of more than \$5 million from sources that include the National Science Foundation, Environmental Protection Agency and the U.S. Department of Transportation.