

# ME Welcomes Perspectives from External Advisory Board

**M**E's External Advisory Board is designed to provide insights from industry professionals to help guide the department's efforts to prepare students for careers in the field. The most recent additions to the EAB, Ashok Nayak, Paul Nuyen and Alan Woodliff are welcome contributors to the continual improvement process for ME.

## Dr. Ashok L. Nayak

Since joining Alcoa as a Director at the Alcoa Technical Center in 1997, Dr. Ashok L. Nayak has advanced rapidly in the company. In the first four years since he joined Alcoa, he held positions of increasing responsibility, including Vice President of Business Development of Alcoa Mill Products and General Manager of Alcoa's Automotive Closure Panel Operations. He was elevated to the position of Executive Director, Development & Applied Engineering, Alcoa Technical Center in 2001, and he is currently the Director, External Innovations and Technology Strategy at the Alcoa Technical Center.

Prior to joining Alcoa, Nayak had been Director of Technology at Corning Incorporated, where he worked in several of the company's business units. In his role as Director of Technology, he was responsible for many of the firm's product, process, and manufacturing developments. During his career at Corning, he was recognized with several awards, including the company's Best Idea Award in 1986. He also holds three patents.

These and other honors are evidence of his ability to see a problem and solve it. Nayak has been recognized throughout his career for innovation, and it is this blend of solid engineering and creative approaches that make him a valuable member of the EAB.

Nayak completed his undergraduate work at the Indian Institute of Technology. He earned his M.S. in Mechanical Engineering

from the University of Hawaii and a Ph.D. in Mechanical Engineering from the University of California at Berkeley.

## Paul D. Nuyen

In his role as Director-Auburn, Paul Nuyen is responsible for manufacturing operations at the Auburn, Washington site, which is part of the Boeing Commercial Airplane company's Fabrication Division. In this role, he oversees the Emergent Manufacturing Facility, Integrated Aerostructures, Auburn Machining, and Tube and Duct Center Manufacturing Business Units. These Manufacturing Business Units produce components and assemblies for all current Boeing Aircraft in production. While his Boeing position might seem to tie him more closely to aerospace engineering than mechanical engineering, he sees it as an excellent opportunity to build on the interconnections between several engineering disciplines.

"Of course, Boeing is known for its aviation expertise," said Nuyen, "and ME's historical expertise has been in automotive, but we hire many mechanical engineers, and it's important to us as a company and to me as an individual that we work together as closely as possible to prepare students for their professional careers."

Nuyen's ties to U-M — he earned a B.S. in Mechanical Engineering 1980 — made him a natural choice to be Boeing's representative to U-M. In that role, he visits the campus regularly, and has led the partnership in several areas.

"Boeing has had many interactions with ME over the years and most recently became an industry partner with the [NSF] Engineering Research Center for Reconfigurable Manufacturing Systems," said Nuyen. "We also have been providing scholarships to the College of Engineering, so as a company, we are quite familiar with the quality of the students here."

Being asked to join the EAB was an obvious extension of the existing relationship, and a welcome one for Nuyen. "I was quite pleased and honored to be invited to join the EAB," he said. "It's a honor to be able to give back to a school that has given me so much. On a professional level, I appreciate the opportunity to present Boeing's views about what ME can do to make the program even stronger. I think it's always important to be able to see and hear different perspectives in order to determine the best course of action."

That course of action, in his eyes, should be all encompassing. "We need to talk about how ME can contribute in areas like energy, the environment and ecology," he said. "Most important, we need to concentrate on educating students not only in technical terms, but also in the need to have a continuing thirst to learn and to put that knowledge to work in practical terms."

In addition to his degree from U-M, Nuyen also completed the Executive Program at the HAAS School of Business at the University of California at Berkeley in 1992.

## Dr. Alan Woodliff

Dr. Alan Woodliff, Director of Advanced Business Development at Visteon, has been actively involved in maintaining a tight connection between ME and the automotive design and engineering firm. Since 2003, he has been instrumental in building the relationship between ME and Visteon through the company's program to support its connections to leading university automotive departments. He welcomed the invitation to serve on the EAB as a way to further develop that relationship.

"We are involved in working with and recruiting from many universities," said Woodliff. "We determined that we should focus on working with the best, and, naturally, that led us to concentrate on schools like the University of Michigan."



**The 2005 ME External Advisory Board: Chuck Hutchins, Richard Heglin, Roger McCarthy, Roberta Zald (seated), Marshall Jones, Professor Dennis Assanis, Walt Bryzik, Paul Kern, Ward Winer, Paul Nuyen, David Pekarek (ME student), Alan Woodliff, Mike Korybalski, and Eric Dayringer (ME student).**

Woodliff's relationship with the university dates from his student days. When Visteon established its corporate/university relationships committee, of which he is the co-chair, he was a natural choice for role of "executive champion" for the U-M Steering Committee. He credits Daryl Weinert, Visteon's Director of Corporate Relations/College of Engineering, and ME Chair Dennis Assanis for their work in helping him achieve his goal of strengthening the ties between the two organizations.

"I was quite honored when Dennis asked me to join the EAB," said Woodliff. "I see commonality in how Visteon moves forward in its business growth and how the ME Department moves forward in its growth. I see my role as being a bridge for both organizations to grow together."

In his role at Visteon, Woodliff leads a global team responsible for ensuring that the company's key new technology developments are customer driven and

become commercialized with an emphasis on speed to market. This provides him with a focus that emphasizes the practical aspects of mechanical engineering and the way students are prepared to enter the field.

"I see my role as one of advisor and mentor," he said. "As an advisor, I expect to be able to help guide the ME department in terms of future roles, curriculum and research in terms of what industry would expect. As a mentor, I expect to be able to offer direct help from Visteon in terms of initiatives in the ME department, and the College of Engineering as an extension of that."

"Ultimately, I would like to see the ME department continue to be regarded as one of the premium programs in the country, if not the world, and to see its students continue to excel in their ability to contribute to technical development, whether in industry, academia or elsewhere. I am proud to be able to help in that effort."

Woodliff holds a B.S. in Aerospace Engineering, an M.S. and Ph.D. in Mechanical Engineering, and an M.S. in Business Administration, all from U-M.