Press Release CDIO™ March Meeting

The Department of Aerospace Engineering Sciences of the University of Colorado (CU) is hosting the *CDIO™ Region of the Americas Meeting* at the Engineering Center, Boulder campus, March 17-19, 2009. This particular meeting has the theme, "*Involving Industry in Project-Based Learning*"

The CDIO™ INITIATIVE (http://www.cdio.org/), based out of the Massachusetts Institute of Technology (MIT), continuously refines an innovative educational framework for producing the next generation of engineers. It provides students with an education stressing engineering fundamentals set in the context of ***C****onceiving — **D**esigning — **I**mplementing — **O**perating* real-world systems and products.

The CDIO™ Initiative was developed with input from academics, industry, engineers, and students. It is universally adaptable for all engineering schools and branches. CDIO™ Initiative collaborators throughout the world (~42 participating universities) have adopted CDIO™ as the framework of their curricular planning and outcome–based assessment. The participating departments share their experiences with project-based learning regularly at national and international meetings which leads to continuous improvements of educational programs.

The *CDIO™ Region of the Americas Meeting* will begin (March 17) at the University of Colorado with an "*Overview of the CDIO Approach to Engineering Education*" by Prof. E. F. Crawley (MIT). Dr. D. R. Brodeur (MIT), will present the "*Characteristics and Rationale for Project-Based Learning*" and will lead discussions on project-based learning and learning assessment. Captain R. Niewoehner, PhD. (USNA), will discuss "*Teamwork Organization and Management*" and "*Enhancement of Students' Communication Skills*"

Prof. Ed Crawley (MIT) will give the audience a hands-on project-based learning experience using a design entitled, "*Skyscraper.*"

In context with the theme, "*Involving Industry in Project-Based Learning*", an industry panel, led by NAE member Dr. David Wisler (GE/MIT), will discuss industry expectations for graduates, as well as university-industry collaborations. The panel will present an industry overview and discussion on how to close the pedagogical gap between theory and practice.

Attendees will have the opportunity to tour the *Integrated Teaching and Learning Laboratory* (ITLL) facilities at CU which has been cited for its excellent project-based learning environment.

Dr. Bill Lucas, Gordon-MIT Engineering Leadership Program, will give a keynote lecture on self-efficacy-based student assessment, a novel approach to analyze student performance and achievements.

The meeting also serves as the kick off on Thursday, March 19, for the *North American Aerospace Project*, a collaborative project between MIT, USNA, and CU to improve the preparation of students for the workforce. The project is funded by NASA and several major aerospace engineering companies (Boeing, Lockheed Martin, Raytheon, Northrop Grumman, GE Aviation, Orbital Sciences). In order to counter effects by the upcoming retirement wave, these industries want to improve the productivity of the young engineering graduates as they enter the workforce. Interested universities and other aerospace industries are invited to join this project, focused on aerospace engineering workforce development.

Faculty members and industry engineers who are interested in project-based learning, student assessment, and industry participation in education are encouraged to attend.

Registration info: http://www.cdio.org/meetings/march09boulder/index.html