

Math, Science and Technology in Control Engineering Education

44th IEEE Conference on Decision and Control
and European Control Conference ECC 2005

6:00-7:30 pm, Tuesday, December 13, 2005
The Terrace Room

Organizer and Chair: Bozenna Pasik-Duncan, Technical Committee on Control Education

The session will address important education issues of balancing math, science and technology in engineering education.

The session has been organized as a part of the ongoing national and international dialogue after some "alarming reports" have been issued in the United States.

- "In September, IBM said it would back 100 employees financially to leave the company and become math and science teachers.
- In October, the National Academy of Science, the National Academy of Engineering and the Institute of Medicine in USA issued a report titled "Rising Above the Gathering Storm."
- It urged the nation to recruit 10,000 students to science and math teaching each year by creating scholarships. In return, program graduates would teach in the public schools for five years.

The invited international control engineering scholars and educators will share a word of wisdom in addressing the following and other related questions:

- **What we, scientists and educators, should do about cultivating student interest in science, math and engineering, in particular, control engineering?**
- **Is it important for control engineering students to know math and science?**
- **Should control engineering education focus mostly on technology?**

Panelists Include:

Michael Athans

Instituto Superior Tecnico, Lisbon

Alain Bensoussan

University of Texas, Dallas

John Baras

University of Maryland

Sergio Bittanti

Politecnico di Milano

Peter Caines

McGill University, Montreal

Tyrone Duncan

University of Kansas

P.R. Kumar

University of Illinois, Urbana

Lennart Ljung

Linkoping University

Sanjoy Mitter

Massachusetts Inst. of Technology

Victor Solo

University of Michigan

Pravin Varaiya

University of California, Berkeley