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Subject: Summary of activities of the Technical Committee (TC) on Industrial Process Control (IPC)

Date: April 23, 2008

The applications areas covered by the TC IPC include microelectronic, materials, pharmaceutical, chemical, and electrochemical processes. Many emerging control applications areas such as molecular manufacturing, microchemical systems, and systems biology are addressed in this TC. Most processes of interest are highly nonlinear and spatially distributed with significant model uncertainties and constraints on actuators, states, and outputs. The main focus is on organization and programming for meetings in concert with other organizations such as AACC and IFAC.

Membership is open to any member of the IEEE Control Systems Society, and *CSS members interested in organizing sessions, symposia, and meetings are strongly encouraged to email your interest to [braatz@uiuc.edu](mailto:braatz@uiuc.edu).*

### **(1) Members of Steering Committee (SC)**

Richard D. Braatz (Chair), Frank Allgöwer, B. Wayne Bequette, Francis J. Doyle III, Ricardo Dunia, Martha A. Gallivan, Martin Guay, Juergen Hahn, Michael A. Henson, Morten Hovd, Mayuresh V. Kothare, Jay H. Lee, Zoltan K. Nagy, Yahya Nazer, Babatunde A. Ogunnaike, Srinivas Palanki, Robert S. Parker, Michel Perrier, Hector D. Puyosa, Masoud Soroush

### **(2) Main Organizational Activities**

Some of the recent past and upcoming meetings organized or co-organized by members of the TC IPC are:

- *Foundations of Systems Biology in Engineering* (FOSBE, Stuttgart, Germany, September 9-12, 2007, [www.ist.uni-stuttgart.de/fosbe/fosbe\\_commitee.htm](http://www.ist.uni-stuttgart.de/fosbe/fosbe_commitee.htm)): Allgöwer & Doyle were on the Organizing Team. Henson & Ogunnaike were on the International Program Committee.
- *American Control Conference* (ACC, [www.a2c2.org/conferences/acc2008/](http://www.a2c2.org/conferences/acc2008/), Seattle, June 11-13, 2008): Kothare is a Society Review Chair and Braatz is on the Program Committee. Braatz and Lee organized a workshop on model predictive control, and many SC members contributed to programming.
- *IFAC World Congress* (IFAC, [www.ifac2008.org/](http://www.ifac2008.org/), Seoul, Korea, July 6-11, 2008): Allgöwer & Doyle are on the International Program Committee with Allgöwer serving as a Technical Editor & Doyle as a Technical Associate Editor. Doyle & Hahn are co-organizers of the Chemical Process Control track. Hahn and Ogunnaike organized a workshop on biological control systems and Allgöwer co-organized a session on systems biology.
- *IFAC Symposium on Advanced Control of Chemical Processes* (ADCHEM, [www.adchem09.ku.edu.tr/](http://www.adchem09.ku.edu.tr/), Istanbul, Turkey, July 12-15, 2009): Many SC members are on the International Program Committee.
- *Foundations of Systems Biology in Engineering* (FOSBE, [www.fosbe.org](http://www.fosbe.org), Denver, Colorado, August 9-12, 2009). Henson is the conference chair. Allgöwer, Doyle, Hahn, Ogunnaike & Parker are on the International Program Committee.
- *American Control Conference* (ACC, Baltimore, June 16-18, 2010): Braatz is Program Chair, Allgöwer is Vice Chair for Invited Sessions, Gallivan is Vice-Chair for Special Sessions, and several SC members will serve on the Program Committee.

Many members of the IPC (Allgöwer, Bequette, Braatz, Doyle, Henson, Hovd, Lee, Parker, Perrier) are members of IFAC TCs including the Mining, Minerals & Metals Processing TC, the Modelling & Control of Biomedical Systems TC, the Non-Linear Control Systems TC which Allgöwer chairs, the Chemical Process Control TC which Doyle chairs, and the Biosystems & Bioprocesses TC which Perrier serves as Vice-Chair. The next TC IPC meeting will be held during the 2008 American Control Conference.

### **(3) TC IPC Web Page**

A major redesign of the TC IPC website ([brahms.scs.uiuc.edu/ipc/](http://brahms.scs.uiuc.edu/ipc/)) was completed which includes information on meetings, educational material, & journals.

### **(4) Summary of Editorial Activities**

- Doyle is Editor-in-Chief of *IEEE Transactions on Control Systems Technology* where Palanki is Associate Editor.
- Braatz is Editor-at-Large of *Optimal Control Applications and Methods* where Lee is the Editor for a Special Issue on Batch Optimal Control that should be completed in 2008.
- Allgöwer is the Editor for Process and Computer Control of *Automatica* where Braatz, Guay, Henson, & Kothare are Associate Editors.
- Doyle is Reviews Editor for the *Journal of Process Control* where Allgöwer, Braatz, Henson, & Perrier are Associate Editors.
- Braatz & Kothare are Associate Editors of *IEEE Transactions on Automatic Control*.
- Hahn is an Associate Editor of *Control Engineering Practice*.