New Form of Personal Participation in IFAC

For a long time the need has been felt in IFAC to make a more direct involvement of individuals in IFAC affairs possible. The newly devised IFAC Affiliate Scheme will make it easier for control engineers and other interested persons all over the world to participate actively in all IFAC activities and will give them more direct information on what is going on in IFAC. Below, an exact description of the new scheme is given (a leaflet is also available directly from the IFAC Secretariat at Laxenburg or at any IFAC-sponsored meeting). The IFAC Affiliate Registration Card is printed on pages 38-4 of this issue but is also available from the Secretariat directly or at any IFAC-sponsored technical meeting.

IFAC AFFILIATE INFORMATION

IFAC is the International Federation of Automatic Control. Forty-seven countries are involved in promoting and developing the area of control by organizing technical meetings and by publishing control literature - including the leading journal AUTOMATICA.

IFAC activities are directed towards everyone interested in control engineering research, development and education.

Individual can become IFAC Affiliates and receive the following benefits:

- Free subscription to the IFAC Newsletter, with bimonthly information about IFAC activities and forthcoming conferences.
- Direct access to Calls for Papers and conference information in selected areas of interest.
- Subscription to AUTOMATICA at a personal rate.
- Contacts with IFAC Technical Committees and Working Groups.

To become an IFAC Affiliate fill out the IFAC Affiliate Registration Card (pages 38-4) and send it to the Secretariat at the following address

IFAC Secretariat
Schlossplatz 12
2361 Laxenburg
AUSTRIA
Tel: 02236/71447
Fax: 02236/23589

IFAC TECHNICAL MEETINGS

IFAC organizes some 40 technical events each year with a total of 4000 participants. The meetings are of three types:

- Symposia, which are a series of events devoted to a subarea of control. These are typically held every third year
- Conferences, which are larger meetings on a specific control topic.
- Workshops, which are smaller meetings on a specific control topic.
In addition there is, of course, the IFAC Congress organized every third year, covering the whole area of Automatic Control. The next Congresses are planned for Sydney (1993), San Francisco (1996) and Beijing (1999).

The current series of Symposia include:

1. Adaptive Control (Glasgow '89, Grenoble '92)
2. System Identification (Budapest '91, Copenhagen '94)
3. Control Design (Zurich '91)
4. Distributed Parameter Systems (Perpignan '89)
5. Non-Linear Control Systems (Capri '89)
6. Large Scale Systems (Berlin '89, Beijing '92)
7. Fault Detection, Supervision and Safety for Technical Processes (Baden-Baden '91)
8. Distributed Intelligence Systems (Washington DC '91, Wuppertal '94)
9. Information and Control in Manufacturing (Madrid '89)
10. Transportation Systems (Paris '89)
11. Modelling and Control of National Economies (Edinburgh '89, Beijing '92)
12. Power Systems and Power Plants (Seoul '89)
13. Mining, Mineral and Metal Processing (Buenos Aires '89, Beijing '92)
14. Advanced Control of Chemical Processes (Toulouse '91)
15. Automatic Control in Aerospace (Tsukuba '89, Southampton '91)
16. Robot Control (Vienna '91)
17. Computer Aided Design (Swansea '91)
18. Real Time AI (Shenyang WS '89, Netherlands '92)
19. Man-Machine Systems (Xian '89)
20. Low Cost Automation (Milan '89, Vienna '92)
21. Modelling and Control of Biomedical Systems (Anaheim '91)

IFAC TECHNICAL COMMITTEES AND WORKING GROUPS

IFAC has 14 Technical Committees which are responsible for planning conferences and promoting the respective subareas of control. Several Technical Committees have Working Groups that focus on specific topics in the control field. A list of the current Technical Committees and Working Groups as well as their chairpersons will be published after the World Congress in Tallinn.

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Evaluation of Adaptive Control Strategies in Industrial Applications
IFAC Workshop
Tbilisi, USSR, 16-20 October, 1989

Adaptive Control is one of the main growth points in the control theory and attracts the attention of the scientific and industrial community. The Workshop held in Tbilisi was a further proof of this. It was attended by almost 100 scientists and engineers from 13 countries. 105 papers were selected from 195 originally submitted abstracts.

4 plenary sessions, 34 special sessions and 40 poster contributions were held dealing with contributions on the comparison of adaptive control and identification algorithms, synthesis and estimation of adaptive algorithms and process identification and control. The versatility and abundance of adaptive algorithms developed so far made their comparison in real situations and identification of the domains of their most reasonable application really urgent. The workshop opened up new possibilities for a wide exchange of ideas in this field and provided better insights into practical aspects of adaptive control.

The various practical applications discussed in the papers and presented at the workshop reflect the state of the art in adaptive control: metallurgy, chemistry, machine-building, biotechnology, robotics, nuclear and hydro-power utilities, image processing, etc.

Summarizing the workshop results we may state that it has been a success. The IPC, nominated by the main sponsor APCOM and the co-sponsor SECOM secured a high scientific standard of the presentations. The organizers, the Georgian Polytechnical Institute, the Institute of Control Systems in Tbilisi and the Institute of Control Sciences in Moscow did everything necessary to make the stay of the participants both fruitful and enjoyable.

It was a unanimous view of the participants that the significant problems discussed make it highly desirable to hold such workshops regularly.

Y.Z. Teypkin
IPC Chairman
V.A. Lototsky
Workshop Editor

This Newsletter may be reproduced in whole or in part. We encourage reprinting in national and local automatic control periodicals. Acknowledgement to IFAC would be appreciated.

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## Newly Approved Events

<table>
<thead>
<tr>
<th>Title</th>
<th>Date</th>
<th>Place</th>
<th>Deadlines</th>
<th>Further Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFAC/IFIP Workshop Real Time Programming</td>
<td>15-17</td>
<td>Atlanta, GA</td>
<td>15 Jan. 1991</td>
<td>Prof. K. Ramamritham</td>
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<tr>
<td></td>
<td>May</td>
<td>USA</td>
<td>1991</td>
<td>Univ. of Mass., Computer &amp; Inf. Science Dept.</td>
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<td></td>
<td>1991</td>
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<td>Lederle Graduate Res. Center</td>
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<td></td>
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<td>Amherst, MA 01003, USA</td>
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<td>DAISY '91</td>
<td>May</td>
<td></td>
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<td>Inst.f, Technische Informatik</td>
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<td></td>
<td>1991</td>
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<td>Treitstrasse 3</td>
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<td></td>
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<td></td>
<td>Vienna, Austria</td>
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<tr>
<td>IFAC Workshop</td>
<td>25-27</td>
<td>Shenyang, China</td>
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<td>Prof. Xu Xinhe</td>
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<tr>
<td>Discrete Event System Theory and Applications in Manufacturing and Social Phenomena</td>
<td>June</td>
<td>P.R.</td>
<td></td>
<td>Dept. of Automatic Control</td>
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<td></td>
<td>1991</td>
<td></td>
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<td>Northeast University of Technology</td>
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<td>Shenyang 110006</td>
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<td>China, P.R.</td>
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<tr>
<td></td>
<td>June</td>
<td>Netherlands</td>
<td>1990</td>
<td>Delft Univ. of Technology</td>
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<td>1992</td>
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<td>Fac. of Mech. Engg. &amp; Marine</td>
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<td>Technology, Mekelweg 2</td>
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<td>NL-2626 CD Delft, Netherlands</td>
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<tr>
<td>IFAC Workshop</td>
<td>16-18</td>
<td>Noordwijk a/d</td>
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<td>Prof. ir. H.B. Verbruggen</td>
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<tr>
<td>Artificial Intelligence in Real Time Control</td>
<td>June</td>
<td>Netherlands</td>
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<td>Delft Univ. of Technology</td>
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<td></td>
<td>1992</td>
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<td>Fac. of Electrotechn., POB 5031</td>
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<td>NL-2600 GA Delft, Netherlands</td>
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* not yet known

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**IFAC AFFILIATE REGISTRATION CARD**

Surname

First Name

Mailing Address

Phone

Fax

e-mail

Please return this card to the IFAC Secretariat and you will receive

- free subscription to the IFAC Newsletter

- detailed information/call for papers from organizers of IFAC-sponsored and co-sponsored technical events in the areas listed overleaf (please mark one or several of the keywords).

- subscription to the IFAC Journal AUTOMATICA at a personal rate DM 92/US $ 47/year).

Please mark if you want to receive the AUTOMATICA order form)

Date

Signature

Please send me the IFAC Information Brochure
IFAC Congratulates

Professor Dr. Ing. Manfred Thoma, head of the Institut für Regelungstechnik, Technische Universität Hannover, Past President of IFAC was elected Foreign Member of the Ukrainian Academy of Sciences.

Prof. M. Thoma

Editor’s Note

By the time most of you will read this Newsletter, the IFAC World Congress in Tallinn is already over. In the next issue and the ones to follow we shall come back to you with all the news of the Congress, of the meetings and the new composition of all IFAC bodies, scopes of TCs, if changed, etc.

Keywords:

1  □ Adaptive Control and Systems
2  □ Aerospace
3  □ Agriculture
4  □ Artificial Intelligence
5  □ Biomedical Engineering and Control
6  □ Biotechnology
7  □ Chemical Process Control
8  □ Comonents and Instruments
9  □ Computer Aided Design
10 □ Computers in Control
11 □ Control Design
12 □ Distributed Parameter Systems
13 □ Distributed Systems
14 □ Economic and Management Systems
15 □ Education
16 □ Electric Power Systems
17 □ Identification & Parameter Estimation
18 □ Large Scale Systems
19 □ Man-Machine Systems
20 □ Manufacturing Technology
21 □ Marine Control
22 □ Metallurgy, Mining and Mineral Processing
23 □ Modelling & Control of Non-Technical Systems
24 □ Nonlinear Systems
25 □ Social Effects of Automation
26 □ Other Fields of Interest