



2004
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International Federation of Automatic Control

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IFAC Council- and Related Meetings St. Petersburg, Russia, June 16 – 19, 2004

The annual meetings of the IFAC Council, the Technical Board and the Executive Board were this year held in St. Petersburg, in conjunction with the IFAC Symposium on Automatic Control in Aerospace.

The meetings in the year before the IFAC World Congress are always of great significance, as some important decisions are taken there.

President and Congress Site for 2011 Determined

Two candidate NMOs were still in the “race” for the 2011 IFAC World Congress. Both candidate NMOs gave excellent presentations, showing the facilities of the respective site, the presidential candidate to lead IFAC and the team around him. In the subsequent ballot, the Italian NMO had the majority of votes and will therefore be the host country for the 2011 IFAC World Congress. The presidential candidate is Professor Alberto Isidori and the Congress will be held in Milan.

Major Medal Winners Determined

At its meeting, the IFAC Council took a vote to determine the winners of the following three Major IFAC Awards. The Selection Committees had received several excellent nominations for each of the awards. It was by no means an easy task to determine the respective winners.

Quazza Medal

Tamer Basar (USA)

Nichols Medal

William F. Powers (USA)

Industrial Achievement Award

Serge Boverie (France)

The Program for the IFAC World Congress in Prague is Taking Shape

The International Program Committee for the World Congress in Prague next year was also convened in St. Petersburg. The contribution submission site has been open since June 1, 2004 and can be either reached via the IFAC website or, directly, at <http://www.ifac.cz/>

The Congress will set off with the Opening Ceremony on Sunday, July 3, 2005. The two days preceding the Congress as such, i.e. July 2 and July 3, 2005 will be dedicated to tutorials and workshops. Each Congress day will start with a Plenary and end with a Panel Discussion or Semi-Plenary Session. The Opening and the Closing Ceremony will, among other festivities, also include the presentation of Awards.

IFAC Fellows

In the course of the last year, the concept of introducing an IFAC Fellowship has taken shape and was finally approved by the Council at its meeting in St. Petersburg. The IFAC Fellow award provides a distinction of excellence in the Federation and is conferred by the IFAC Council based on the proposal of a Fellow Selection Committee. The requirements to be fulfilled to confer Fellowship on a person are as follows:

1. Outstanding and extraordinary individual contributions in the fields of interest of IFAC as Engineers/Scientist, Technical Leader or Educator
2. These achievements shall be recorded as technical publications, patents, reports, systems products and applications, services or proved teaching activities.
3. Involvement in IFAC activities in the promotion of the field.
4. Opinions of Fellow references

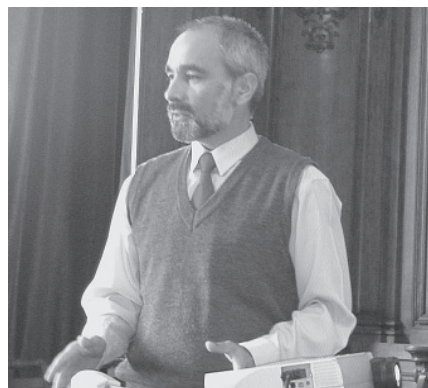
Any control scientist or engineer can be candidate to the IFAC Fellow position. Exceptionally, he/she could have no prior involvement in IFAC activities, if he/she is very outstanding, but he/she should become involved in IFAC after becoming a Fellow. Those who have been actively involved may have some benefits in the evaluation as seen in the above criteria. The first Fellowships will be awarded at the IFAC World Congress in Prague in July 2005. The detailed procedure and the forms to fill in will shortly be available on the IFAC Website.

Affiliate Questionnaire

An internet-based questionnaire was published on the IFAC website, inviting IFAC Affiliates to state their opinion on IFAC events, IFAC publications, the technical areas covered by IFAC and the general satisfaction with IFAC services. Information on this questionnaire was sent to all Affiliates by individual e-mail. From the questionnaires which were returned, one was drawn to win a free registration for the IFAC World Congress in Prague. The winner of this free registration is Carsten Wittenberg. Congratulations!

The answers which were received were analyzed and discussed in the various technical and

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Petr Horacek, IPC Co-Chair
of the IFAC World Congress in Prague

administrative bodies of IFAC and also at the Council meeting.

Of course, quality of papers is the major reason given for participation in IFAC events. It turns out that IFAC is on a good way by carefully screening and reviewing contributions and by actively seeking emerging areas. Another area where IFAC is seeking to strike a careful balance between new technologies and/or scientists' needs is the sector of publications from IFAC events. The most widely preferred format of Proceedings is full papers on CDs. In general, satisfaction with the services rendered by IFAC is very good.

The Questionnaire is still available on the IFAC website and IFAC continues to invite your comments by returning it to the IFAC Secretariat.

50th Anniversary of IFAC

In 2006 IFAC will celebrate its 50th Anniversary. Preparations are well under way to commemorate the foundation of IFAC in various ways. An Anniversary Event with the title "International Conference on Present and Future of Automatic Control" is planned to take place in Heidelberg, Germany, on September 15, 2006. It will be held in conjunction with the 4th IFAC Symposium on Mechatronics (Sep. 12 – 14, 2006). The event includes presentations on the past, but with particular emphasis on the present and the future of automatic control in general, both from the theoretical and the application's side as well as focusing on emerging areas. A panel discussion is planned to complement the lecture series, followed by a banquet (by invitation). A special task force prepares several projects to document IFAC's history and to find funds for young people from developing countries. The activities will be available in the World Wide Web.

Publications

Publications from IFAC events are among the most important outcome from IFAC activities. Papers given at IFAC events are published in full in IFAC Proceedings, and the best papers are considered and selected for publication in IFAC Journals. Through a one-publisher contract with Elsevier, IFAC has always had excellent service given to organizers in the preparation of the Proceedings.

However, the world of publication is changing. New media have come on the market and traditional paper-based formats of publication are losing in importance. Thus, Elsevier has decided to stop the publication of Workshop Proceedings from IFAC Workshops, but continues to publish Proceedings from IFAC Congresses, Symposia and Conferences.

As a consequence of this decision, organizers of IFAC Workshops are now free to use another publisher for their Proceedings, if they wish to publish. What does not change is the copyright, which IFAC holds for all papers given at IFAC events. If Workshop organizers wish to publish Proceedings they can now get their own ISBN number. Quality standards continue to be as with other IFAC publications and corresponding guidelines apply. IFAC will revise the organizer's guide accordingly.

The IFAC Council- and Related Meetings in St. Petersburg took place in a very friendly atmosphere. The organizers of the ACA Symposium and the Russian National Member Organization provided all required facilities in the beautiful setting of a palace situated right next to the Hermitage on the banks of the river Neva.

Automatic Control in Aerospace

16th IFAC Symposium

St. Petersburg, Russia, 14 – 18 June, 2004

The 16th Symposium IFAC on Automatic Control in Aerospace organized by the Saint-Petersburg State University of Aerospace Instrumentation and CSRI "Elektropribor" was held in the House of Scientists (Grand Duke Vladimir Palace) on the Neva river embankment near the Hermitage museum. It was sponsored by the IFAC TC on Aerospace and co-sponsored by the European Space Agency. The Symposium lasted five days, one of which was devoted to the visit to scientific centers, including the Mozhaisky Military Space Academy.

The main scope of the Symposium was dynamics, control and mission control of aeronautical and space related systems. This included launch and reentry vehicles, missiles, satellites, space stations and probes, aircraft, helicopters, autonomous aerospace systems. Control, navigation and guidance systems, their optimization, testing and verification methods, system conceptual definition were the areas of interest. Theory and applications, analysis and design methods, recent research and future trends were presented.

230 submitted papers were carefully reviewed by 73 international prominent researchers and on the basis of their results the International Program Committee made a decision to include 5 plenary lectures, 81 oral presentations and 109 poster presentations into the Symposium program. Accordingly, the total number of accepted papers amounted to 195 from 25 countries.

These papers were distributed among 9 regular (1–9) and 6 special (10–15) sessions as follows:

1. Current Status of National and International Aerospace Programs (only plenary lecture)
2. Spacecraft Attitude and Orbit Control (12 oral, 11 poster presentations)
3. Autonomous Control, Mission Control and Operations (7 oral, 15 poster)
4. Space Robotics and Manipulators (5 oral, 4 poster)
5. Guidance and Control Theory and Analysis (6 oral, 12 poster)
6. Flight Control for Aircraft and Helicopters (7 oral, 10 poster)
7. Missile Guidance, Navigation and Control (5 oral, 13 poster)
8. Robust Control for Aerospace Applications (4 oral, 7 poster)
9. Sensors, On-board Equipment and Signal Processing (4 oral, 16 poster)
10. Fault-tolerant Control Systems for Aerospace Applications (5 oral, 2 poster)
11. Student Aerospace Projects (4 oral, 8 poster)
12. Launcher Control (4 oral, 7 poster)
13. Gas Turbine Engine Health Monitoring (5 oral, 1 poster)
14. Cooperative Control (5 oral)
15. Satellite Navigation Systems GPS/GLONASS Application (6 oral, 4 poster)

The following plenary lectures were delivered to the Symposium participants:

- "Russian Space Programs: Achievements and Prospects of Automatic Control Applications" by Victor Legostaev, the first deputy director of Korolev's rocket-space corporation "Energia", full member of the Russian Academy of Sciences.

- "On-board Control and Navigation System Advances for the New European Earth Observation Missions" by Pierluigi Silvestrin, Head of the ESA Mission and System Studies Section for Earth Observation Future Programmes.
- "Current Status of Japanese Aerospace Programs – Focusing on High Speed Flight Demonstration" by Yoshikazu Miyazawa, Leader of Control Systems Group, Flight Systems Research Center, National Aerospace Laboratory of Japan, Tokyo.
- "Model-based Fault Detection and Diagnosis - Status and Applications" by Rolf Isermann, Director, Institute of Automatic Control, Darmstadt University of Technology, former Vice-president, Advisor and Council member of IFAC.
- "National Achievements in Control Theory: the Aerospace Perspective" by Alexander Kurzhanski, Professor, Lomonosov's Moscow State University, Russian IFAC NMO Chair, full member of the Russian Academy of Sciences.

The total number of authors was 513, 41 of them students. The number of papers submitted from academies was 114, from industry – 81.

All plenary lectures, regular and poster sessions were arranged into a straight line. Poster sessions were well perceived and raised intensive discussions with the authors. Each poster session continued two hours. The secretariat helped authors in the preparation and arrangement of posters. The combination with coffee and refreshments in that room promoted a pleasant and relaxed atmosphere for poster sessions that involved almost every Symposium participant.

The Symposium organized the work in such a way that participants could meet on a panel of significant scientific and technical discussions, renewed professional contacts, thus strengthening their technical expertise.

Most presentations were of high quality and gave rise to interesting and fruitful discussions within and outside the sessions. Sessions were well attended, and there were only a few no shows. The Preprints consist of 1180 pages. Besides a hardcopy, a CD containing the two Preprint volumes was available for all participants. Some other useful things were handed to each participant in the conference case.

The social and cultural events were chosen to give participants the opportunity to exchange ideas in the beautiful historical and cultural sites of Saint-Petersburg.

The main social activity was a banquet at the Marble Palace (Russian Museum Department). The Palace was rented on the admission of City Government exclusively.

In conjunction with the Symposium the IFAC Council- and related meetings 2004 were held at the same venue. Some participants combined their participation in both events.

According to the opinion of most attendees, the Symposium was successful both from the organizational and the technical point of view.

V. Peshekhonov, IPC Chair
A. Nebylov, NOC Chair

**The Submission Deadline for Nominations
for
THE HAROLD CHESTNUT
CONTROL ENGINEERING TEXTBOOK PRIZE
is now extended to
31 December 2004**

Your cooperation in disseminating this information among your colleagues, and your efforts in submitting a nomination, are greatly appreciated. The textbook authors are also encouraged to contact their book publishers and ask for nominations to be submitted.

The Prize is awarded to the author(s) of a control engineering textbook of the highest influence in the education of control engineers. The Prize, consisting of a monetary award and a certificate, will be presented at the Closing Ceremony of the 16th IFAC World Congress that will be held in Prague in 2005.

Nominations for books written in one of the official IFAC languages, preferably in English, and published between 1 September 1996 and 31 July 2002 will be considered.

For the submission details, please visit www.ifac-control.org and/or www.griffith.edu.au/centre/icsl/edcom.

**Manoeuvring and Control of Marine Craft
IFAC Conference (6th)
Girona, Spain, 17 – 19 September, 2003**

The 6th IFAC Conference on Manoeuvring and Control of Marine Craft, was held 17 – 19 September in 2003, in Girona, Spain. A total of 88 draft papers were received out of which 59 were accepted. The papers cover recent progress in applications of new theory on manoeuvring related problems for surface ships and control and sensor problems for underwater vehicles. The conference was organized into 18 technical sessions, from which 12 sessions focused on surface ships and 6 sessions on underwater vehicles.

The following three distinguished speakers were invited to present plenary papers: "Exploring the Mysterious Underwater World with Robots" by Professor Junku Yuh from the Autonomous Systems Laboratory, University of Hawaii, USA; "The Foundations of Steering and Manoeuvring" by Dr. David Clarke from the School of Marine Science and Technology, University of Newcastle, UK; "Steps To Intelligent AUVs" by Professor Tamaki Ura from the Underwater Technology Research Centre, University of Tokyo, Japan. In addition, a one-day tutorial was presented: "Control of Autonomous Marine Vehicles" by Professor António M. Pascoal from the Institute for Systems and Robotics, Portugal.

The impact of nonlinear control theory to manoeuvring and control have become evident

over the last years. Likewise, the contribution of this area to pose relevant real life problems to advance theoretic development is clearly visible. The MCMC documented distinct progress towards practical applications using nonlinear control solutions to solve both underwater and surface ship control problems. Furthermore, the MCMC benefited from significant contributions from new results from the hydrodynamics area, showing a fruitful interaction and cross-fertilization between hydrodynamics, control theory and control technology.

Mogens Blanke
IPC Chair

Joan Batlle
NOC Chair

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**System Identification
SYSID 2003
13th IFAC Symposium
Rotterdam, The Netherlands
27–29 August, 2003**

The 13th IFAC Symposium on System Identification (SYSID 2003) was held in Rotterdam, the Netherlands, August 27–29, 2003.

This symposium covered all major aspects of data-based modeling, signal processing, and system identification from theory to practice. The main purpose of SYSID 2003 was to create a meeting place where researchers and engineers from several different communities could discuss issues relating to system identification. The symposium was held in the congress center "De Doelen," which is located in the main center of Rotterdam and which is among the most modern conference centers in the Netherlands. This venue turned out to be both pleasant and efficient with convenient access to hotels, restaurants, and shopping.

The SYSID symposium, which is held every three years, is among the most successful symposia organized by IFAC. Previous SYSID symposia were held in Prague, CSSR (1967, 1970), The Hague, The Netherlands (1973), Tbilisi, USSR (1976), Darmstadt, FRG (1979), Arlington, VA, USA (1982), York, U.K. (1985), Beijing, China, P.R. (1988), Budapest, Hungary (1991), Copenhagen, Denmark (1994), Kitakyushu, Japan (1997), and Santa Barbara, CA, USA (2000).

The SYSID 2003 Symposium was sponsored by the IFAC-TC on Modeling, Identification and Signal Processing (MISP), and co-sponsored by the TC on Adaptive Control and Tuning (ACT). Additionally it was technically co-sponsored by the Control Systems Society of IEEE, while institutional sponsorship was obtained from Delft and Eindhoven Universities of Technology, Royal Institution of Engineers in the Netherlands, Royal Dutch Academy of Sciences (KNAW) and the Netherlands Organization for Scientific Research (NWO).

A total of 422 papers were submitted to SYSID 2003, of which 333 were accepted after detailed review. The final program was composed of 3 plenary presentations, 6 semi-plenary presentations, 232 papers in oral sessions, 82 posters, and 10 software demonstrations. The large number of high-quality submissions led to a program with 7 parallel sessions. Although the number of parallel sessions made it difficult to decide which sessions to attend, there was ample opportunity for everyone attending the symposium to satisfy his or her own personal interests. A CD-ROM with the symposium preprints was provided to each participant. The official Symposium Proceedings are already available from the IFAC publisher Elsevier Science, Ltd.

The plenary talks were designed to highlight important progress within the field of system identification. In particular, the plenary talks were arranged so that talks with an industrial focus were complemented by talks in closely related disciplines.

Håkan Hjalmarsson of KTH, Sweden, presented the first plenary lecture titled "From Experiments to Closed-Loop Control." He discussed the links between system identification and the design of low complexity controllers. One of the

main points of his talk was that a guiding principle should be to model the plant as well as possible before model or controller simplification is performed. This approach ensures the best statistical accuracy. Particular attention was given to the interplay between experimental design and control performance.

Herman Van der Auweraer, manager of corporate research and technology development activities of LMS International, Belgium, presented the second plenary lecture titled "System Identification for Structural Dynamics and Vibroacoustics Design Engineering." Dr. Auweraer showed how system identification plays a crucial role in structural dynamics and vibroacoustic system optimization. An overview of the main modal testing procedures and parameter identification methods was presented, as well as a number of important industrial applications.

Peter Bartlett, University of California at Berkeley, USA, delivered the final plenary lecture titled "Prediction Algorithms: Complexity, Concentration, and Convexity." He reviewed two families of algorithms for estimating large-scale statistical models for prediction problems, namely, kernel methods and boosting algorithms. The focus of his talk was on the computational and statistical properties of these algorithms.

The three plenary lectures were complemented by six plenary lectures:

- Stefano Soatto, University of California at Los Angeles, USA: "Snippets of Identification Theory in Computer Vision."
- Eric Walter, French National Center for Scientific Research, France: "Interval Analysis for Guaranteed Nonlinear Parameter Estimation."
- John MacGregor, McMaster University, Canada: "Data-Based Methods in Process Control."
- Dietmar Bauer, Technical University of Vienna, Austria: "Subspace Algorithms."
- Johan Schoukens, Free University of Brussels, Belgium: "Identification of Linear Systems with Nonlinear Distortions."
- Benedikt Pötscher, University of Vienna, Austria: "Some Problems in Statistical Inference Following Model Selection."

The conference included a number of special sessions on identification of nonlinear systems, signal processing, identification of communications systems, subspace methods, applications, education and training, and financial econometrics.

The IFAC Technical Board held a working session in conjunction with SYSID to address major emerging trends in control systems and automation. The results of this working session were presented in a panel session on the evening before the symposium. A detailed report on this emerging trends workshop can be found in issue 6/03 of the Newsletter.

SYSID 2003 also hosted the IFAC Council, which had its yearly Council and Related Meetings during SYSID2003.

There were two major social events, namely, a reception at the City Hall and the conference banquet. The Mayor of Rotterdam kindly invited all participants to a reception at the City Hall on the first evening. A delightful conference banquet

was held in the "Sint Laurenskerk," a monumental church completed in 1525, destroyed during World War II, and rebuilt in 1947 and 1968. The symposium ended with a well-attended farewell reception.

The Symposium attracted 350 participants from 40 different countries. More than 100 of the participants were PhD students, showing that system identification is a vital and growing field of research.

The conference chairs would like to take this opportunity to thank everybody involved in this mission. We would also like to thank the international program committee, all authors, plenary speakers, and session organizers for a very successful scientific program. We are looking forward to the next SYSID meeting, SYSID 2006, to be held in Newcastle, Australia.



Bo Wahlberg, IPC Co-Chair
Paul Van den Hof, General Chair
Siep Weiland, NOC Co-Chair

Cost Oriented Automation (COA 2004) 7th IFAC Symposium Ottawa/Gatineau, Canada June 7–9, 2004

The symposium was held in Gatineau/Ottawa, Canada at the campus of the University of Quebec and was well organized by the members of the NOC. It brought together researchers and industrialists of 19 countries, the majority of France and Canada, in four plenary sessions, nine regular sessions, and two industrial workshops.

The plenary lectures on:

- Cost-effective Product Realization: Service-oriented Architecture for Integrated Product Life-cycle Management
 - Performance Oriented System Engineering: Rationales, Experiments and Open Issues
 - High Technology in Low Cost Manufacturing – with special emphasis to SMEs
 - Ubiquitous Computing and New Frontiers for Automation
- were given by well known experts in these fields. Nine regular sessions of five to six contributions each covered the topics:
- Cost Reducing Engineering Strategies and Cost Impacts of International Standards on Automation
 - Smart Devices
 - Sensor- and Data-fusion
 - Architectures for Enterprise Integration and Networking
 - Human Cooperation with Automation Systems

- Plant and Building Automation
- Cost Reduction with E-maintenance Systems in Manufacturing
- SME-Oriented Decision Support Systems
- Network Reliability

The third day of the symposium was an Industry Day with two workshops

- Cost-reducing Engineering Strategies in the Automotive Industry
- Automation in Mining

Statements of the panelists of industry and research triggered a discussion with the audience. Thereafter the participants visited a plant of Scott Paper in Gatineau with automated packaging of special papers.

The symposium was honoured through the participation of the President of IFAC and the Immediate Past President. It was co-sponsored by nine IFAC Technical Committees, and four of them were represented through their chairs (TC's 4.3, 5.1, 5.3, 9.3). Also IFIP TC 5 – Computer Application in Technology was a sponsor of the symposium.

The presented regular papers and the plenary lectures fitted very well into the scope of the symposium; the discussion resulted in a strong suggestion to consider cost-reducing strategies with automatic control more seriously. COA is not a special community in IFAC, but is a cross section of technology and application with theory; this should be well understood in the IFAC community; cost aspects of automatic control, i.e. how can automatic control under systems aspects contribute to cost reduction in production, maintenance, energy generating and distribution, global networking of enterprises, etc. are demanded from industry.

The two industrial workshops with written contributions as well as the power point presentations of the panelists considered automatic control as a means to save cost when considered as an integral part of a system, and not only for an individual component or instrument.

The session "Cost Reduction with e-Maintenance in Manufacturing" together with the respective plenary lecture on "Performance oriented System Engineering" presented new theoretical findings and applications.

The plenary lecture on "Cost effective Product Realization" together with the industrial workshop on engineering strategies "Cost reducing Engineering Strategies" discussed the advantage of an Integrated Product-and Process-Development.

An emergent area is Human-Machine/Robot collaboration, i.e. e-work understood as e-design, e-manufacturing, and e-maintenance; new control strategies are necessary to support a cost effective human collaboration with automation systems. Also the development of "Smart Devices" is still of great interest considering the cost aspect of sensors and actuators. Cost aspects should not be reduced to hardware cost, instead the whole automation system has to be considered.

Ubiquitous Computing with respect to automatic control and the vision of future developments presented new ideas, such as to consider information and physics universally; then switching from virtuality to reality, and vice versa, easy to realize, generating new insights into control aspects. Mixed reality, bond graph and hyperbond are the new keywords of this development.

The 8th Symposium is planned for 2007 in La Habana, Cuba.

Heinz-H. Erbe, IPC Chair
Gus Olling, IPC Vice Chair



FORTHCOMING EVENTS

2004
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Title	2004	Place	Further Information
INSTICC/IFAC Intl. Conference Informatics in Control, Automation and Robotics – ICINCO 2004	August 25 – 28	Setubal Portugal	http://www.icinco.org e-mail: secretariat@icinco.org
IFAC Workshops on – Adaptation and Learning in Control and Signal Processing – ALCOSP – Periodic Control Systems – PSYCO	August 30 – September 1	Yokohama Japan	http://www.contr.sd.keio.ac.jp/ifacws04/main.htm e-mail: sano@sd.keio.ac.jp e-mail: katayama@amp.i.kyoto-u.ac.jp
IFAC Symposium 6 th Nonlinear Control Systems – NOLCOS'04	September 1 – 3	Stuttgart Germany	http://www.nolcos2004.uni-stuttgart.de e-mail: nolcos2004@ist.uni-stuttgart.de
IFAC Multitrack Conference Advanced Control Strategies for Social and Economic Systems	September 2 – 4	Vienna Austria	http://www.ihr.tuwien.ac.at/acs04/ e-mail: kopacek@ihr.tuwien.ac.at
IFAC Workshop Internet Based Control Education IBCE'04	September 6 – 7	Grenoble France	http://ibce.lag.ensieg.inpg.fr e-mail: ibce@inpg.fr
IFAC Symposium Mechatronic Systems	September 6 – 8	Sydney Australia	http://rumi.newcastle.edu.au/mech2004/ e-mail: kdisney@mail.newcastle.edu.au
IFAC Workshop Real Time Programming – W RTP 2004	September 6 – 8	Istanbul Turkey	http://www.enre.umd.edu/iwss2004/ e-mail: Jose.Hurtado@umd.edu
IFAC/(IFIP/IFORS/IEA) Symposium 9 th Analysis, Design, and Evaluation of Human-Machine Systems – HMS 04	September 7 – 9	Atlanta GA, USA	http://www.isye.gatech.edu/IFAC-HMS2004 e-mail: sheila.devezin@isye.gatech.edu
IFAC Workshop 5 th Time Delay Systems	September 8 – 10	Leuven Belgium	http://www.cs.kuleuven.ac.be/conference/tds04/ e-mail: tds04@cs.kuleuven.ac.be
IFAC Symposium 11 th Automation in Mining, Mineral and Metal Processing – MMM 2004	September 8 – 10	Nancy France	http://www.cran.uhp-nancy.fr/ifac-mmm2004/ e-mail: mmm2004@cran.uhp-nancy.fr
IFAC Workshop 2 nd Advanced Fuzzy/Neural Control	September 16 – 17	Oulu Finland	http://www.ntsatsat.oulu.fi/ e-mail: office@atu.fi
IFAC Workshop Discrete Event Systems	September 22 – 24	Reims France	http://www.univ-reims.fr/wodes04 e-mail: wodes04@univ-reims.fr
IFAC Workshop Generalized Solutions in Control Problems GSCP-2004	September 24 – 26	Pereslavl-Zalessky Russia	http://www.botik.ru/PSI/CPRC/GSCP2004 e-mail: gscp@cprc.botik.ru
IFAC Workshop Modelling and Control for Participatory Planning and Managing Water Systems	Sep. 29 – Oct. 1	Venice Italy	http://www.elet.polimi.it/IFAC_TC_Environment/Venice2004 e-mail: venice2004@elet.polimi.it
IFAC Workshop Automatic Systems for Building the Infrastructure in Developing Countries: Regional and Global Aspects (DECOM–TT)	October 3 – 5	Bansko Bulgaria	http://hsi.iccs.bas.bg/decom04/ e-mail: decom04@hsi.iccs.bas.bg
IFAC Conference Manufacturing Modelling, Management and Control	October 21 – 22	Athens Greece	e-mail: not yet available http:// not yet available
SCS/IFAC Conference Advances in Vehicle Control and Safety – AVCS	October 28 – 31	Genova Italy	http://www.liophant.org/i_m_scs/i3m2004/avcs/ e-mail: rachid@u-picardie.fr
IFAC Conference Management and Control of Production and Logistics – MCPL-2004	November 2 – 5	Santiago Chile	http://www.uamericas.net/MCPL2004 e-mail: mcpl@uamericas.cl
IFAC Workshop Programmable Devices and Systems	November 18 – 19	Cracow Poland	http://pds2004.iel.pol.pl.gliwice.p e-mail: pds2004@iel.pol.pl.gliwice.pl

FORTHCOMING EVENTS (ctd.)

Title	2004	Place	Further Information
IFAC Workshop Intelligent Assembly and Disassembly – IAD'2004	November 18 – 20	Vienna Austria	http://www.ihrt.tuwien.ac.at/iad04/ e-mail : han@ihrt.tuwien.ac.at
IFAC Symposium System Structure and Control	December 8 – 10	Oaxaca Mexico	http://sssc04.cinvestav.mx e-mail: jtorres@cinvestav.mx
Title	2005	Place	Further Information
IFAC Workshop Advanced Control Circuits and Systems – ACCS	March 6 – 10	Cairo Egypt	http:// not yet available e-mail: not yet available
13th Intl. Conference on Solid-State Sensor and Actuators – Transducers05	June 5 – 9	Seoul Korea	e-mail: info@transducers05.org http://www.transducers05.org
American Control Conference – in co-operation with IFAC –	June 8 – 10	Portland OR, USA	http://www.ee.washington.edu/conf/acc2005/ e-mail: SJayasuriya@mengr.tamu.edu
16TH IFAC WORLD CONGRESS	JULY 4 – 8	PRAGUE Czech Rep.	http://www.ifac.cz
Title	2006	Place	Further Information
IFAC Symposium System Identification – SYSID 2006	January	Newcastle Australia	http:// not yet available e-mail: not yet available
IFAC Symposium 7th Advances in Control Education – ACE 06	June 14 – 16	Madrid Spain	http:// not yet available e-mail: not yet available
IFAC Symposium 5 th Robust Control – ROCOND	July 05 – 07	Toulouse France	http:// not yet available e-mail: arzelier@laas.fr
IFAC Symposium Fault Detection, Supervision and Safety of Technical Processes – SAFEPROCESS	August 30 – September 1	Beijing China	http://www.au.tsinghua.edu.cn/safe/safeprocess2006/ e-mail: safeprocess2006@mail.tsinghua.edu.cn
IFAC Symposium 8 th Robot Control – SYROCO	September 6 – 8	Bologna Italy	http://www-lar.deis.unibo.it/syroco2006/ e-mail: not yet available
IFAC Symposium Mechatronics Systems	September 12 – 14	Wiesloch Germany	http:// not yet available e-mail: not yet available
IFAC 50th Anniversary Celebration Present and Future of Automatic Control	September 15	Heidelberg Germany	
IFAC Symposium 6th Modelling and Control of Biomedical Systems	September 20 – 22	Reims France	http:// not yet available e-mail not yet available
Title	2007	Place	Further Information
IFAC Symposium Nonlinear Control Systems	August 22 – 24	Pretoria South Africa	http:// not yet available e-mail: not yet available

IFAC Journals

The Tables of Contents of the IFAC Journals can be found respectively at

Automatica

<http://www.elsevier.com/wps/find/journaldescription.librarians/270/description>

Control Engineering Practice

<http://www.elsevier.com/wps/find/journaldescription.librarians/123/description>

Engineering Applications of Artificial Intelligence

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Journal of Process Control

<http://www.elsevier.com/wps/find/journaldescription.librarians/30445/description>

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