



IFAC

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International Federation of Automatic Control

Secretariat: Schlossplatz 12, A-2361 Laxenburg, Austria

Phone (+43 2236) 71 4 47, Fax (+43 2236) 72 8 59, E-mail: [secre@ifac.co.at](mailto:secre@ifac.co.at) – URL: <http://www.ifac-control.org>

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## Reminder and Correction:

### IFAC Fellow Nominations 2007

are due on

**December 31, 2006**

(and not 2007 as mistyped in the last issue of the IFAC Newsletter)

If you wish to submit a nomination, you can find the relevant information and forms on the IFAC Website at

<http://www.ifac-control.org/about/awards.htm>

## Advances in Control Education (ACE06)

### 7<sup>th</sup> IFAC Symposium

Madrid, Spain, 21-23 June 2006

The seventh IFAC Symposium on Advances in Control Education (ACE06) was held in Madrid, Spain organized by Universidad Nacional de Educación a Distancia (UNED) and Universidad Politécnica de Madrid in cooperation with “Comité Español de Automática (CEA)”.

The Symposium on Advances in Control Education, sponsored by the Technical Committee on Control Education of IFAC (EDCOM) is held every three years. This is in fact the seventh event in this series, the last having been held in Oulu (Finland) in 2003 and chaired by Prof. Leiviskä.

From the beginning the ACE Symposium has been a meeting point where new ideas on control curricula development, new control related software, new laboratory experiments, new paradigms of virtual and remote experimentation as well as continuing education and training are presented. The objectives of the present ACE06 Symposium has been again to provide an international forum for the discussion of recent developments and advances in control education and ensure that the knowledge and experience in new methods and approaches is shared throughout the control community.

The Symposium started the preceding day with a High School Students' & Teachers' workshop on “The Power, Beauty and Excitement of the Cross-Boundaries Nature of Control”. The aim of this workshop was to inspire interest from undergraduates towards studies in Automatic Control and to assist teachers in promoting the discipline of Automatic Control among their students. The workshop was attended by a total of 62 participants who receive first class information from world leading specialists in control education.

ACE06 was supported by a large International Program Committee with about 40 members from 19 countries. 162 submissions were received and only 111 high quality papers were selected for presentation at the Symposium

The core of the Symposium was the one hundred eight papers which were presented by their authors in twenty one oral sessions. These contributions extended over all technical areas of control education, and provide an accurate picture of the state of the field at the present time. These sessions covered the following topics: laboratory experiments, software in control education, remote labs, effective teaching of control theory, implications of control, process control (all with 2 sessions), PID control, robotic systems,

continuing control education, control engineering curricula, web-based control education, virtual labs, Internet as a training aid, university–industry cooperation and an invited session about “AutoTech project”. The number of no-show authors was only three. This represents only two percent of the Symposium program, which shows an improvement over previous Symposia.

The technical program of the Symposium included three plenary lectures given by distinguished professors very well known in our field. The first one, entitled “Challenges in Control Education” presented by Prof. K. J. Åström, from Lund University, outlined interesting challenges for control education in the future. Meeting these challenges requires a substantial effort from the control community. The second lecture “Using LEGO in Control Education” presented by Prof. P. J. Gawthrop, from Glasgow University described experiences at Glasgow University in using LEGO Mindstorms for control education. The third lecture “Project Based Control Education” given by Prof. M. W. Spong, from the University of Illinois provided a project-based approach to control education that aims at motivating the need for rigorous theory through practical applications.

There has also been a fruitful panel discussion on “Rethinking Control Education in the Modern World”. This panel discussion provoked stimulating discussions on numerous challenging questions that will influence the ways in which we will teach control in the future. The panel discussion had more than 90 participants.

To conclude, it can be said that the IFAC ACE'06 Symposium had a very high level of attendance, with very active participation in most technical activities, and the general feeling communicated through attendees' comments has been very positive.

Of course, the success of the ACE'06 technical program is the result of many individuals' efforts. On behalf of the IPC, I would like to thank all the authors, IPC members, reviewers, and participants for their contributions, and also the session chairs and co-chairs for conducting the technical sessions and providing valuable feedback on their development. We are also grateful to the Symposium Secretariat, the National Organizing Committee chaired by Prof. Fernando Morilla, and the many volunteers who have contributed to its organization.

Sebastián Dormido Bencomo

## **Robot Control SYROCO'06**

### **IFAC Symposium (8th)**

**Bologna, Italy, 5 – 8 September, 2006**

The 8th IFAC Symposium on Robot Control, SY.RO.CO. 2006, was held in Bologna, Italy, from 6 to 8 September 2006. Previous editions were held in Barcelona (E), Karlsruhe (D), Vienna (A), Capri (I), Nantes (F), Vienna (A), and Wroclaw (PL).

170 papers and 3 videos were submitted to the Symposium. The final selection resulted in having 138 papers in the Technical Program. This consisted of 33 sessions in 3 parallel tracks for the 3 days of the Symposium, bringing together contributions from 378 leading researchers representing 25 different countries. The papers covered a range of topics relevant to the field of robot control, including Modelling and Identification, Control Design and Implementation, Motion and Force Control, Computational Aspects, Grasp Control, Haptic Systems, Telemanipulation, Autonomous Robots, Nonholonomic Robotic Systems, Space Robotics. The Symposium also featured three invited plenary speakers: Professor Yoshi Nakamura, from the University of Tokyo, Japan,

## **Analysis and Control of Chaotic Systems CHAOS'06**

### **1st IFAC Conference**

**Reims, France, 28 – 30 June, 2006**

The first IFAC conference on Analysis and control of chaotic systems, CHAOS '06, was held in Reims, France from 28-30 June, 2006. The conference served as a forum for the presentation of new developments in the interdisciplinary field of chaos control and synchronization. Since about 1970, chaos has received more and more attention, first mainly in mathematics, but afterwards, researchers in physics, biology, economy, electrical engineering, chemistry, mechanical engineering, etc. have become involved in this research. By now it has become clear that 'chaos is everywhere', meaning that notably systems modeled by nonlinear equations have a large tendency to behave complex or chaotic. At CHAOS '06 not only the analysis aspect of chaotic systems was a focal point, but also the control of chaotic or complex systems was an important theme of the conference.

The conference attracted 98 participants from 24 different countries. There were 4 plenary talks delivered at the conference (Henk Nijmeijer, 'Synchronization of Mechanical Systems', Gennady A. Leonov, 'Strange attractors and classical stability theory', Albert Goldbeter, 'From periodic behaviour to chaos in biological systems', Wei Kang, 'The classification of nonlinear behaviour for control systems with singularities') and 74 contributed papers presented in 8 invited sessions and 13 regular sessions. An important aspect of the conference was the fact that participants from different areas could meet and discuss common trends.

The Conference was sponsored by the TC on Non-Linear Control Systems, and co-sponsored by the TC on Discrete Event and Hybrid Systems, the TC on Control Design and the TC on Modelling and Control of Biomedical Systems. Local sponsorship came from the French Ministry of Research, GDR MACS, CNRS, Regional Council of Champagne Ardenne, City of Reims, General Council of Marne, and the University of Reims Champagne-Ardenne.

Considering the success of the meeting, a second IFAC Conference on Analysis and Control of Chaotic Systems will be held in 2009 in London.

Jean-Pierre Barbot, IPC Co-Chair of CHAOS'06  
Henk Nijmeijer, IPC Co-Chair of CHAOS'06  
Janan Zaytoon, NOC Chair of CHAOS'06

presented the lecture "Humanoid Robots", Professor Vincent Hayward from McGill University, Montreal, Canada, presented the lecture "Haptic Synthesis", and Dr. Torgny Brogardh from ABB Robotics, Sweden, presented the lecture "Present and Future Robot Control Development - an Industrial Perspective". In addition, a Round Table on "Research Networks and Technology Transfer in Robotics and Related Technologies" was organized on September 5, 2006. Moreover, an industry-oriented session was organized, with the involvement of some Italian and European robotic companies. At the end, six papers of the Symposium were selected for possible publication in IFAC Journals, e.g. Mechatronics and Annual Reviews in Control. We would like to thank the many individuals who played a key role in the organization of the Symposium: the IPC, NOC and National Advisory Committee members, the reviewers and the local organizing team.

Bruno Siciliano, IPC Chair

## **Large Scale Industrial Systems - ALSIS'06**

### **IFAC Workshop (1st)**

**Cruise Liner, Finland, Sweden**

**30 – 31 August, 2006**

The 1st IFAC Workshop on Applications of Large Scale Industrial Systems - ALSIS'06 was arranged on a cruise liner between two Nordic capitals, Helsinki and Stockholm during August 30 and 31, 2006. Two plenary papers, 36 regular papers and five posters were presented during two days. Regular papers were run in two parallel sessions.

Complexity is always present in many industrial application areas and there are good possibilities to deal with it using the recent advances on computer and network technologies. Examples of such systems include mill-wide and company-wide systems, communication systems, environmental systems, intelligent manufacturing systems, and so on. Large scale system theory provides methodologies to deal with complexity in modelling, control, and design of such systems. The Workshop was a forum for scientists and especially practitioners aiming to discuss new developments and results in the area of large scale industrial systems. The special emphasis was on industrial applications (chemical and petrochemical industries, metallurgical industries and pulp and paper) and development tools and methods applicable in industrial environment.

The Workshop also aimed at disseminating knowledge and experience in alternative methods and approaches in order to deal with complexity in different application areas. A lot of time was reserved for applications. Several industrial sectors were represented, namely paper industry, metallurgical industry, energy sector, and water management. The problem setting in these application papers went from modelling and simulation to actual control, optimization and fault diagnosis. Two excellent plenary papers were presented - one on modelling large scale complex systems in process industry in comparison with biomedical systems and the other concerning research needs in large scale industrial systems. The whole program was good and the level of the papers high.

Kauko Leiviskä Co-Chair, IPC

## **Automated Systems Based on Human Skill and Knowledge**

### **9th IFAC Symposium**

**Nancy, France – 22 – 24 May, 2006**

The 9th IFAC Symposium on Automated Systems Based on Human Skill And Knowledge was held in Nancy, France, from 22–24 May 2006. The Symposium was sponsored by the IFAC TC 9.2 on Social Impact of Automation and co-sponsored by 9 other IFAC TCs. The organization of this 9th edition was in the hands of the Innovative Process Research Team (ERPI) and the Ecole Nationale Supérieure en Génie des Systèmes Industriels (ENSGSI) of the National Polytechnic Institute of Lorraine (INPL). Previous symposia on this more and more relevant theme took place in Berlin, Germany in 1995, in Kranjska Gora, Slovenia in 1997, in Aachen, Germany in 2000 and in Göteborg, Sweden in 2003.

The aim of the 9th IFAC ASBoHS Symposium was to act as an international meeting point for researchers and practitioners, both in academia and industry, to allow them to present their latest research and ideas dealing with aspects of the relation of automation with society. In particular, the main theme of the symposium was the adequate balance between the pushing Information and Automation technologies and their suitable use by Society. Thus, the topics of the Symposium were related to the 6 following tracks offering a variety of aspects of the main Symposium theme: Pacifying e-Automation and Human Capabilities, Collaborating e-Intelligence and Human Skills, Balancing e-Learning and Face to Face Education and Training, Ubiquitous e-Automation, Safe, Secure and Ethical e-Society and Management of e-Technology.

111 papers representing 20 countries were carefully reviewed by 99 reviewers (3 reviewers per paper) and 82 papers were selected for presentation in the Symposium by the International Program Committee, consisting of distinguished researchers or industrialists concerned about the field of interest of the Symposium. In order to well accommodate the nine plenary papers, the sixty-one regular papers, the nine poster papers and the five Work-In-Progress (WIP) papers, five thematic half-days were organised, each one starting with a plenary session presenting two papers introducing regular sessions. The last half-day was also dedicated to poster and WIP sessions. Such a combination of sessions allowed an intensive exchange of ideas and discussions between speakers and participants.

The program of the Symposium included thirteen regular sessions, one poster session and one WIP session, as well as five plenary sessions in which keynote presentations related to the main tracks of the Symposium were given.

The TC 9.2 meeting was held on the last day of the event gathering about thirty participants. A number of issues were discussed, including the title and the scope of the technical committee, membership development, plans, roadmaps for the future, etc.

About 100 participants coming from 20 countries attended the Symposium. Their attendance, their involvement in the Symposium, the lively discussions during the sessions have greatly contributed to the success of the 9th IFAC ASBoHS Symposium on Automated Systems Based on Human Skill And Knowledge.

F. Mayer, ASBoHS'06 General Chair  
S.Y. Nof, ASBoHS'06 IPC Chair

# Fault Detection, Supervision and Safety of Technical Processes SAFEPROCESS 2006 IFAC Symposium (6th) Beijing, China, P.R. 30 August – 1 September, 2006

The 6th IFAC Symposium on *Fault Detection, Supervision and Safety of Technical Processes, SAFEPROCESS 2006*, was held in Beijing, China, from 30 August to 1 September, 2006. This Symposium was the most successful one so far, with the highest attendance rate – over 200 participants from all continents and 28 countries. The Symposium was sponsored by the IFAC Technical Committee on Fault Detection, Supervision and Safety of Technical Processes, SAFEPROCESS, and co-sponsored by nine other IFAC Technical Committees. The 2006 Symposium was organised by the Tsinghua University together with the Beihang University in Beijing, and supported by a number of research institutes and different industries in China.

The previous symposia on this important issue took place in Baden-Baden, Germany (1991), Espoo, Finland (1994), Kingston-upon-Hull, UK (1997), Budapest, Hungary (2000), and Washington DC, USA (2003).

The aim of the 6th IFAC *SAFEPROCESS* Symposium was to create an international forum for researchers and practitioners, both from academia and industry, to present the latest research results and ideas in the field of fault detection and diagnosis including, but not being limited to, the following areas:

- Fault detection, isolation and identification
- Computational intelligence in fault diagnosis
- Design for reliability and safety
- Fault-tolerant systems design
- Maintenance and repair
- Human factors
- Industrial applications and case studies.

During the last years, fault detection and diagnosis have developed into a major research area, located at the intersection of systems and control engineering, artificial intelligence, applied mathematics and statistics, and such application fields as chemical, electrical, mechanical and aerospace engineering.

The technical programme of the Symposium consisted of three plenary and two semi-plenary sessions, one industrial session with two talks, eight invited sessions including a session on *Demonstration of process monitoring and diagnostics software tools*, and 36 regular paper sessions.

The plenary lectures on:

- *Fault diagnosis of networked control systems* (H.J. Fang, Hao Ye, Maiying Zhang)
- *Fault-tolerance as a key requirement for the control of modern systems* (R. Patton, Ch. Kambhampati, A. Casavola, G. Franzè)
- *Statistical signal processing approaches to fault detection* (F. Gustafsson)

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**Acknowledgement to IFAC would be appreciated.**

and the semi-plenary ones on:

- *The practical problems of fault isolation in large scale industrial systems* (J. M. Koscielny, M. Bartys, M. Syfert)
  - *Fault-tolerant control systems: academic and industrial perspectives* (Jin Jiang)
- were given by the above-listed well-known scientists in these fields from China, the UK, Sweden, Poland and Canada. Moreover, two industrial talks were given by experts from Siemens Ltd., China (Johann Strobl), and Emerson Process Management Asia-Pacific (Robin Lu).

During the opening ceremony, Prof. Ronald J. Patton, the former chair of the TC on *SAFEPROCESS*, gave a talk and presentation prepared together with Prof. Steven Ding commemorating Prof. Paul M. Frank, who passed away in 2005. We lost a friend and internationally recognised research leader.

The National Organising Committee arranged a technical exhibition in parallel with the symposium during the first two days.

The International Programme Committee accepted a total of 258 papers out of 392 submissions. Among those, 42 were by authors from the host country. The percentage of papers presented was very high, with only few authors being unable to attend the meeting and present their papers. A total of 248 papers were recommended for publication in the Symposium Proceedings, to be published by Elsevier.

The TC meeting was held on the second day of the event, and a number of issues was discussed including a preliminary report on *SAFEPROCESS 2006*, the choice of the proposal for *SAFEPROCESS 2009*, the milestone report before the next World Congress in Korea. Three proposals were considered for *SAFEPROCESS 2009*, with the locations in Aalborg (Denmark), Barcelona (Spain) and Saint-Malo (France). After two rounds of voting, the decision was to hold the symposium in Barcelona, with Prof. Joseba Quevedo as the NOC chair.

The social aspect of the symposium was just as satisfactory. Beside the welcome reception, all participants were invited to a banquet at a traditional Chinese restaurant, with a performance in the garden (playing various old instruments). Moreover, during the three days lunches and coffee breaks were provided for everyone both in the hotel and the main building of the Tsinghua University.

Józef Korbicz  
IPC Chair

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# Analysis and Design of Hybrid Systems - ADHS 2nd IFAC Conference Alghero, Italy – 7–9 June, 2006

ADHS is a series of triennial meetings that aims to bring together researchers and practitioners with a background in control and computer science in order to provide a survey of the advances in the field of hybrid systems and of their ability to take up the challenge of analysis, design and verification of efficient and reliable control systems. ADHS'06 is the second Conference of this series after ADHS'03 in Saint Malo. The ADHS series follows the successful conference series on the Automation De Processus Mixed / Automation of Mixed Processes (ADPM'92 in Paris, ADPM'94 in Brussels, ADPM'98 in Reims, ADPM'2000 in Dortmund). The continuity of the ADHS conferences is guaranteed by the IFAC Technical Committee on Discrete Event and Hybrid Systems (TC 1.3) that is the main technical sponsor of the series.

Out of 96 submissions, 65 papers were selected after a careful reviewing process during which each paper received three reviews. The high quality of the program is due to the authors of the submitted papers, the members of the International Program Committee and the referees who provided accurate and extensive reports.

Among the 65 papers accepted, 52 come from Europe, 7.5 from US/Canada, 2.5 from Latin America, 2 from Japan, 0.5 from Egypt, 0.5 from Australia.

Three distinguished speakers were invited to give a one hour plenary talk during the conference. They were: Vadim I. Utkin, whose talk was titled "*Chattering Problem for Sliding Mode Control*"; Alberto Sangiovanni-Vincentelli, whose talk was on "*System Theory Approaches for Embedded Systems*"; Claude Iung, whose talk was titled "*Optimal Control in Hybrid Systems*".

Four invited sessions put interesting new research topics into focus. E. De Santis organized a session on "*Structural Analysis and Approximation of Hybrid Systems*"; S. Engell and O. Stursberg organized a session on "*Controller Design Based on Hybrid Models of Industrial Plants*"; A. Bemporad and F. Lamnabhi-Lagarigue organized a session on "*Applications of Hybrid Control*". C.G. Cassandras and P. Mosterman organized a special invited session on "*Hybrid Simulation Tools: Principles, Challenges and Applications*" that was also complemented by an interactive tool presentation.

In the light of the reviews of IPC members and the recommendation of session chairs, 10 application-oriented papers were selected and their extended versions will be reviewed for possible inclusion in a special issue of *Control Engineering Practice*.

The Conference was sponsored by the Technical Committee on Discrete Event and Hybrid Systems (TC 1.3) and co-sponsored by: Technical Committee on Control Design (TC 2.1); Technical Committee on Manufacturing Plant Control (TC 5.1); Technical Committee on Fault Detection, Supervision & Safety of Technical Processes (TC 6.4)

101 participants from 17 countries attended the event. Sessions were well attended, and there was 1 no show. The conference venue was a very pleasant place and stimulating for the participants. The Banquet was a traditional Sardinian dinner with folk dances. The conference provided the opportunity for junior- and senior researchers in Hybrid Systems to meet and exchange ideas and new results, and the comments received from participants were all positive, indicating that the conference was a success.

Professor Alessandro GIUA, IPC Chair



# **CALL FOR NOMINATIONS**

## **for**

# **THE HAROLD CHESTNUT CONTROL ENGINEERING TEXTBOOK PRIZE**

The Harold Chestnut Control Engineering Textbook Prize Selection Committee of the International Federation for Automatic Control (IFAC) calls for nominations for the Triennial Harold Chestnut Prize.

The Prize is awarded to the author(s) of a control engineering textbook that has contributed most to the education of control engineers. The Prize, consisting of a monetary award and a certificate, will be presented at the Closing Ceremony of the 17th IFAC World Congress that will be held in Seoul in 2008.

To be considered, nominations must relate to books that are:

1. written in one of the official IFAC languages, preferably in English; and
2. published between September 1, 1999 and July 3, 2005.

Nominations should include:

a) A nomination letter that states the full title, name(s) and address of the author(s), name of the textbook, date of publication, and name and address of the publisher;

b) Evidence of the contribution/s of the textbook to the education of control engineers; and

c) Any additional information that may support the Judging Process, as per the selection criteria listed below. It is important to note that only those book reviews that have been published by Automatica, Control Engineering Practice, the Journal of Process Control, the Journal of Mechatronics, the Journal on Engineering Applications of Artificial Intelligence, Annual Reviews in Control, or another IFAC affiliated journal within the above mentioned publishing period will be taken into consideration.

All nominations will be evaluated against the selection criteria as follows:

- a) Innovative approach – originality: 25%
- b) General content – i.e. topics covered; 20%
- c) Clear application to real problems; 15%
- d) Style: 15%
  - Presentation & readability;
  - Clarity, context of material
- e) Meeting educational objectives: 25%
  - clear statement of what student should be able to do (5%)
  - worked examples and exercises (5%)
  - software support (5%)
  - multi-disciplinary examples (cross-boundary applications of control) (5%)
  - use by practicing engineers (5%)

**To be considered, nominations must be received by close of business on**

**June 30, 2007**

Only submissions on a CD (containing word, pdf, html, excel, power point and/or image files) will be accepted. Latex files are not acceptable. Please note that all the supporting evidence should also be presented in electronic format and stored on the submitted CD.

If the Prize-winning textbook is written by more than one author, the monetary component of the Prize will be equally split among the authors with each author receiving a certificate. The winner(s) will be notified well in advance, to allow them to plan their attendance at the Award Ceremony to be held during the 17th IFAC World Congress, Seoul, in 2008.

Please submit nominations to:

Dr Ljubo Vlacic FIEAust FIET SMIEEEE CPEng RPEQ CEng (UK)  
Professor and Director; Intelligent Control Systems Laboratory  
Institute for Integrated and Intelligent Systems  
Griffith University; Nathan Campus N44, Brisbane Qld 4111 Australia

Phone: +61 7 3735 5024; Fax: +61 7 3735 5198  
e-mail: L.Vlacic@griffith.edu.au; <http://www.griffith.edu.au/centre/icsl/vlacic>

**Your cooperation is greatly appreciated.**



## FORTHCOMING EVENTS

2006  
No. 6  
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Title	2007	Place	Further Information
IFAC Symposium Cost Oriented Automation – COA 07	February 12 – 14	Habana Cuba	<a href="http://www.cujae.edu.cu/coa07">http://www.cujae.edu.cu/coa07</a> e-mail: <a href="mailto:coa07@electrica.cujae.edu.cu">coa07@electrica.cujae.edu.cu</a>
Interop/Athena/IFAC Conference Interoperability for Enterprise Software and Applications – I-ESA 2007	March 28 – 30	Funchal Madeira Island Portugal	<a href="http://www.aidima.es/iesa2007/web/index.htm">http://www.aidima.es/iesa2007/web/index.htm</a> e-mail: <a href="mailto:info_i-esa@uninova.pt">info_i-esa@uninova.pt</a>
INSTECC/IFAC Conference Intelligent Control Systems and Optimization	May 09 – 12	Angers France	<a href="http://icincro.org/">http://icincro.org/</a> e-mail: <a href="mailto:secretariat@icincro.org">secretariat@icincro.org</a>
IFAC Workshop Technology Transfer in Developing Countries: Automation in Infrastructure Creation	May 17 – 18	Izmir Turkey	<a href="http://web.deu.edu.tr/decom07">http://web.deu.edu.tr/decom07</a> e-mail: <a href="mailto:decom07@deu.edu.tr">decom07@deu.edu.tr</a>
IFAC Workshop Intelligent Manufacturing Systems - IMS 2007  in conjunction with	May 23 – 25	Alicante Spain	<a href="http://www.aurova.ua.es:8080ims2007/">http://www.aurova.ua.es:8080ims2007/</a> e-mail: <a href="mailto:ims07@dfists.ua.es">ims07@dfists.ua.es</a>
IFAC Workshop Intelligent Assembly and Disassembly IAD 2007	May 23 – 25	Alicante Spain	<a href="http://www.aurova.ua.es:8080/iadims07/">http://www.aurova.ua.es:8080/iadims07/</a> e-mail: <a href="mailto:iad07@dfists.ua.es">iad07@dfists.ua.es</a>
IFAC Symposium Computer Applications in Biotechnology – CAB-10	June 04 – 06	Cancun Mexico	<a href="http://www.cab2007.org/">http://www.cab2007.org/</a> e-mail: <a href="mailto:secretariat@cab2007.org">secretariat@cab2007.org</a>
IFAC Symposium Dynamics and Control of Process Systems – DYCOPS-8	June 06 – 08	Cancun Mexico	<a href="http://www.dycops2007.org/">http://www.dycops2007.org/</a> e-mail: <a href="mailto:secretariat@dycops2007.org">secretariat@dycops2007.org</a>
IEEE/IFAC Intl. Workshop Robot Motion and Control – RoMoCo'07	June 11 – 13	Bukowy Poland	<a href="http://romoco.put.poznan.pl/">http://romoco.put.poznan.pl/</a> e-mail: <a href="mailto:krzysztof.kozlowski@put.poznan.pl">krzysztof.kozlowski@put.poznan.pl</a>
IFAC Workshop Dependable Control of Discrete Systems – IFAC DCDS07	June 13 – 15	Paris France	<a href="http://www.japura.lurpa.ens-cachan.fr/dcds07/">http://www.japura.lurpa.ens-cachan.fr/dcds07/</a> e-mail: <a href="mailto:dcds07@lurpa.ens-cachan.fr">dcds07@lurpa.ens-cachan.fr</a>
IFAC Symposium Automatic Control in Aerospace	June 25 – 29	Toulouse France	<a href="http://aca2007.onera.fr">http://aca2007.onera.fr</a> e-mail: <a href="mailto:aca2007@oneracert.fr">aca2007@oneracert.fr</a>
2007 European Control Conference – in cooperation with IFAC –	July 02 – 05	Kos Greece	<a href="http://www.ecc07.ntua.gr/">http://www.ecc07.ntua.gr/</a> e-mail: <a href="mailto:ecc07@mail.ntua.gr">ecc07@mail.ntua.gr</a>
2007 American Control Conference – in cooperation with IFAC –	July 11 – 13	New York NY, USA	<a href="http://www.a2c2.org/conferences/acc2007/">http://www.a2c2.org/conferences/acc2007/</a> e-mail: <a href="mailto:judd@ohio.edu">judd@ohio.edu</a>
IFAC Symposium 11th Large Scale Systems: Theory and Applications	July 23 – 25	Gdansk Poland	<a href="http://www.ely.pg.gda.pl/lss2007">http://www.ely.pg.gda.pl/lss2007</a> e-mail: <a href="mailto:lss2007@ely.pg.gda.pl">lss2007@ely.pg.gda.pl</a>
IFAC Symposium 5 <sup>th</sup> Advances in Automotive Control	August 20 – 22	Seascape Resort Aptos, CA, USA	<a href="http://aac2007.stanford.edu/">http://aac2007.stanford.edu/</a> e-mail: to be announced
IFAC Symposium 12 <sup>th</sup> Automation in Mining, Mineral and Metal Processing – MMM	August 21 – 24	Quebec City Canada	<a href="http://www.gch.ulaval.ca/ifacmmm07/">http://www.gch.ulaval.ca/ifacmmm07/</a> e-mail: <a href="mailto:ifacmmm07@gel.ulaval.ca">ifacmmm07@gel.ulaval.ca</a>
IFAC Symposium Nonlinear Control Systems - NOLCOS	August 22 – 24	Pretoria South Africa	<a href="http://www.nolcos2007.org.za">http://www.nolcos2007.org.za</a> e-mail: <a href="mailto:noc@nolcos2007.org.za">noc@nolcos2007.org.za</a>
IFAC Workshop Adaptive and Learning in Control and Signal Processing – ALCOSP 07  in conjunction with	August 29 – 31	St. Petersburg Russia	<a href="http://conf.physcon.ru/alcosp07/">http://conf.physcon.ru/alcosp07/</a> e-mail: <a href="mailto:alcosp07@physcon.ru">alcosp07@physcon.ru</a>
IFAC Workshop Periodic Control Systems – PSYCO 07	August 29 – 31	St. Petersburg Russia	<a href="http://conf.physcon.ru/psyco07/">http://conf.physcon.ru/psyco07/</a> e-mail: <a href="mailto:psyco07@physcon.ru">psyco07@physcon.ru</a>
IFAC Symposium 6th Intelligent Autonomous Vehicles – I A V	September 03 – 05	Toulouse France	<a href="http://www2.laas.fr/iav2007">http://www2.laas.fr/iav2007</a> e-mail: <a href="mailto:iav2007@laas.fr">iav2007@laas.fr</a>
IFAC Conference Modeling and Designing Distributed Control Systems in Agriculture – – AGRICONTROL 2007	September 03 – 05	Osijek Croatia	<a href="http://www.agricontrol.org">http://www.agricontrol.org</a> e-mail: <a href="mailto:secretary@agricontrol.org">secretary@agricontrol.org</a>

## FORTHCOMING EVENTS (ctd.)

Title	2007	Place	Further Information
IFAC Symposium Analysis, Design and Evaluation of Human-Machine Systems	September 04 – 06	Seoul Korea	<a href="http://www.ifac-hms-2007.com/">http://www.ifac-hms-2007.com/</a> e-mail: wcyoon@kaist.ac.kr
IFAC Workshop Time Delay Systems	September 17 – 19	Nantes France	<a href="http://">http://</a> to be announced e-mail: Jean-Fracois.Lafay@ircsyn.ec-nantes.fr
EUWICS/IFAC Conference Computer Safety, Reliability and Security – SAFECOMP 2007	September 18 – 21	Nuremberg Germany	<a href="http://www.safecomp.org/">http://www.safecomp.org/</a> e-mail: safecomp2007@informatik.uni-erlangen.de
IFAC Conference Control Applications in Marine Systems – CAMS 2007	September 19 – 21	Bol Croatia	<a href="http://">http://</a> to be announced e-mail: to be announced
IFAC Conference Management and Control of Production and Logistics – MCPL'2007	September 27 – 30	Sibiu Romania	<a href="http://mcpl2007.ulbsibiu.ro">http://mcpl2007.ulbsibiu.ro</a> e-mail: mcpl2007@ulbsibiu.ro
IFAC Copnference Cost Effective Automation in Networked Product Development and Manufacturing	October 02 – 05	Monterrey Mexico	<a href="http://cidyt.mty.itesm.mx/ifac-CEA07">http://cidyt.mty.itesm.mx/ifac-CEA07</a> e-mail: IFACcea07.mty@servicios.itesm.mx
IFAC Symposium Computational Economics & Financial Systems	October 09 – 11	Istanbul Turkey	<a href="http://www.ifac-cefis.org/">http://www.ifac-cefis.org/</a> e-mail: contact@ifac-cefis.org
IFAC Symposium System Structure and Control – SSSC 2007	October 17 – 19	Iguacu Brazil	<a href="http://sssc07.ece.ufrgs.br/">http://sssc07.ece.ufrgs.br/</a> e-mail: sssc07@ece.ufrgs.br
IFAC Workshop Fieldbus and Networks in Industrial and Embedded Systems – FeT 2007	November 07 – 09	Toulouse France	<a href="http://">http:</a> to be announced e-mail: to be announced
Title	2008	Place	Further Information
American Control Conference – in cooperation with IFAC	June 12 – 14	Seattle, WA USA	<a href="http://">http://</a> to be announced e-mail: to be announced
<b>17<sup>th</sup> IFAC WORLD CONGRESS</b>	<b>July 06 – 11</b>	<b>Seoul Korea</b>	<b><a href="http://www.ifac2008.org">http://www.ifac2008.org</a></b> <b>e-mail: Secretariat@ifac2008.org</b>
Title	2009	Place	Further Information
IFAC Symposium Identification and System Parameter Estimation - SYSID'09	July 06 – 08	St. Malo France	<a href="http://">http://</a> to be announced e-mail: to be announced
IFAC Symposium Advanced Control of Chemical Processes ADCHEM	July 12 – 15	Istanbul Turkey	<a href="http://">http://</a> to be announced e-mail: to be announced
Title	2010	Place	Further Information
IFAC Symposium Nonlinear Control Systems – NOLCOS 2010	June 30 – July 2	Bologna Italy	<a href="http://">http://</a> to be announced e-mail: to be announced



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to all readers of the  
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