# IFAC
## International Federation of Automatic Control

## 2011 No. 6 Dec.
# Newsletter

Contents:

## IFAC Fellow Nominations for the 2011 - 2014 Triennium

The IFAC Council, after extensive discussion with the Executive Board and the Fellow Selection Committee Chair for the 2008-2011 triennium, has decided to align the IFAC Fellow Selection with that of the Major Medals of IFAC. This means that the Council will discuss the Fellow Nominations at the 2013 Council Meeting. *There will therefore only be one IFAC Fellow nomination deadline for the 2011-2014 triennium which is set for 31 December 2012.* The designation of all fellows selected for this triennium will be „Fellow 2014" in accordance with the Major Medals. The procedure for nominations will be announced in the Newsletter, on the IFAC website and by other suitable means.

*Season's Greetings to all readers of the IFAC Newsletter*
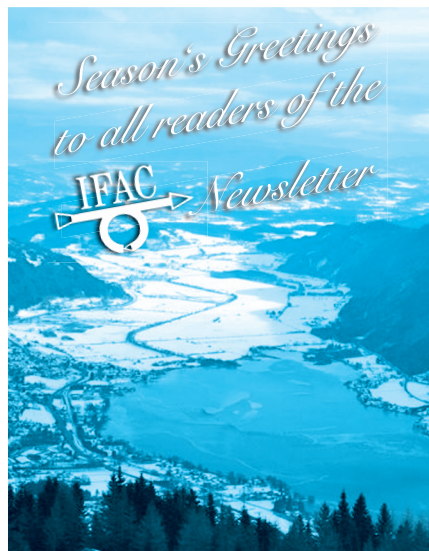
# IFAC General Assembly
## Milan, Italy, 29 August, 2011

### IFAC National Member Organizations vote in new team to manage the Federation in the forthcoming triennium.

The General Assembly of IFAC took place in the framework of the 18th IFAC World Congress in Milan, Italy on Monday, 29 August 2011. The General Assembly is composed of IFAC's National Member Organizations (NMOs). Almost 75 per cent of the NMOs were directly represented at the meeting. Also present were representatives of some countries which do not have an NMO, but were invited to participate in the meeting as observers. They were, among others, from New Zealand, Iran, Cyprus, Thailand and India. The Indian representative could witness the unanimous NMO vote, accepting India as a new NMO of IFAC. Membership will be effective as soon as their first membership fee payment (i.e. for 2012) has been received.

Preceding the meeting proper, there was a one-hour get-together cocktail of NMO representatives, with IFAC Officers and Council members.

For all those who are not so familiar with the structure of IFAC, find a brief description of the purpose of the meeting of the General Assembly. The IFAC Constitution- and By-Laws lists the rights and duties of the General Assembly in Section 3, Articles 8 – 14. Put in a nutshell, the General Assembly, which consists of the NMOs, is the supreme body of the Federation and is responsible for any amendments to the Constitution. It votes on the admission of new NMOs, on any proposed increases of membership fees and of course on the management team of the Federation. At the General Assembly, the NMOs listen to the reports of the President, the Vice-Presidents, the Treasurer and the Secretary covering the three preceding years. All of these reports are of course distributed electronically in due time before the General Assembly meeting. The NMO representatives then have the opportunity to ask questions, make motions and comments on the issues tabled, before voting on approving the reports presented.

Thus an increase in membership fees was proposed. It was the first motion for an increase in fifteen years and it was approved by a majority of the NMOs and will therefore be effective as of 2012.

One other very important task is the vote on the new team that is to manage the Federation between the triennial meetings of the General Assembly. To prepare this vote, an Election Committee invites NMOs in the course of the preceding triennium to propose potential Council members from their respective NMO. It is the task of the Election Committee to put forward a balanced team to manage IFAC business during the triennium.

Thus the IFAC Council 2011 – 2014 will be composed as follows:

| | | |
|---|---|---|
| President | Ian Craig | ZA |
| President-Elect | Janan Zaytoon | FR |
| Vice-President (TB Chair) | | |
| | Iven Mareels | AU |
| Vice-President (EB Chair) | | |
| | Roger Goodall | UK |
| Immediate Past President | | |
| | Alberto Isidori | IT |
| Treasurer | Lino Guzzella | CH |

**Ordinary Members**

| | |
|---|---|
| Frank Allgoewer | DE |
| Yaman Arkun | TR |
| Tamer Basar | US |
| Daizhan Cheng | CN |
| Hyungsuck Cho | KR |
| Torkel Glad | SE |
| Shinji Hara | JP |
| Gennady Leonov | RU |
| Henk Nijmeijer | NL |
| Carlos Pereira | BR |
| Jurek Sasiadek | CA |
| Michael Sebek | CZ |

The General Assembly also approved the slate of candidates which are under the direct competence of the Council.

They are:

IFAC Secretary
<blockquote>Kurt Schlacher    AT</blockquote>
Chair, Adm. & Finance Committee
<blockquote>Janan Zaytoon    FR</blockquote>
Chair, Awards Committee
<blockquote>Tohru Katayama JP</blockquote>
Chair, Policy Committee
<blockquote>Pradeep Misra    US</blockquote>
Chair, Publications Committee
<blockquote>Denis Dochain    BE</blockquote>
Vice-Chairs of Technical Board
<blockquote>Dongil Cho    KR<br>Serge Boverie    FR</blockquote>

**Members of the Technical Board**

IPC Chair, IFAC 2011
<blockquote>Sergio Bittanti    IT</blockquote>
IPC Chair, IFAC 2017
<blockquote>Didier Henrion    FR</blockquote>

*Ordinary Members*

<blockquote>George Irwin    UK<br>Jakob Stoustrup    DK</blockquote>

*Co-ordinating Committee Chairs*

CC1 Systems and Signals
<blockquote>Hakan Hjalmarsson   SE</blockquote>
CC2 Design Methods
<blockquote>Patrizio Colaneri   IT</blockquote>
CC3 Computers, Cognition & Communication
<blockquote>Matjaz Colnaric    SI</blockquote>
CC4 Mechatronics, Robotics & Components
<blockquote>Detlef Zuehlke    DE</blockquote>
CC5 Manufacturing Logistic Systems
<blockquote>Laszlo Monostori HU</blockquote>
CC6 Industrial Systems
<blockquote>Sigurd Skogestad    NO</blockquote>
CC7 Transportation & Vehicle Systems
<blockquote>Hajime Asama    JP</blockquote>
CC8 Bio & Ecological Systems
<blockquote>Francis Doyle    US</blockquote>
CC9 Social Systems
<blockquote>Francoise Lamnabhi-Lagarrigue FR</blockquote>

All the newly elected Boards and Committees hold their first meetings in the days following the General Assembly. At the meeting of the Incoming Council, the newly elected President outlines the tasks and strategies for the forthcoming triennium. Votes are taken on the proposed Selection Committees for the Major Awards (Quazza Medal, Nichols Medal, Industrial Achievement Award, High Impact Paper Award) and the Fellow Selection Committee.

# Congress Awards 2011
## Young Author Prize
## Applications Paper Prize

At every IFAC World Congress, nominations are invited for a Young Author Prize and an Applications Paper Prize.

Once the nominations are in, a selection committee for each of the prizes screens the nominations and cuts them down to a list of five finalist papers each.

As the prize is given for contents and the presentation of the paper at the Congress, The Selection Committee listens to the presentations of all nominated papers, following which they meet and vote for the winning paper.

At the Closing Ceremony, the Chair of the Awards Committee presents the authors of the winning paper with the award. All finalists receive a certificate with an honourable mention.

## Young Author Prize 2011

The prize is for the best paper at an IFAC Congress of an author (in exceptional cases authors) younger than 35 years. If a paper has more than one author all authors must meet the age requirement.

The following papers were selected as finalist papers for the Young Author Prize 2011:

Coherent Nonlinear Quantum Feedback with Applications to On-Chip Quantum Optics, by Jing Zhang and Re-Bing Wu

A Very Relaxed Control Law for Bearing-only Triangular Formation Control, by Adrian Bishop

Multi-agent Systems Reaching Optimal Consensus with Time-varying Communication Graphs, by Guodong Shi

On the Existence of Solutions Characterized by Riccati Equations to Infinite-time Horizon Nonlinear Optimal Control Problems, by Tayfun Cimen

Joint Design of Quality and Production Control in Multi-stage Asynchronous Manufacturing Systems, by Marcello Colledani

The paper winning the Young Author Prize was:

*Coherent Nonlinear Quantum Feedback with Applications to On-Chip Quantum Optics, by Jing Zhang and Re-Bing Wu*

**Citation: For outlining a novel method of engineering strong and controllable nonlinear effects in quantum systems by coherent feedback control and amplification.**

**Dr. Jing Zhang**
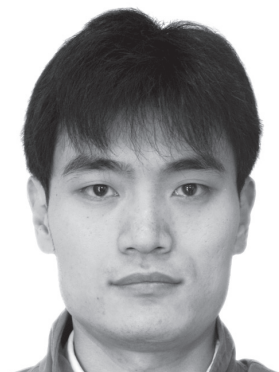
Jing Zhang received his B.S. degree from the Department of Mathematical Science and Ph.D. degree from the Department of Automation, Tsinghua University, Beijing, China, in 2001 and 2006, respectively.

From 2006 to 2008, he was a Postdoctoral Fellow at the Department of Computer Science and Technology, Tsinghua University, Beijing, China, and a Visiting Researcher at the Advanced Science Institute, the Institute of Physical and Chemical Research (RIKEN), Japan from 2008 to 2009. He is now an Associate Professor at the Department of Automation, Tsinghua University, Beijing, China. His research interests include quantum control and nano manipulation.

**Dr. Re-Bing Wu**

Re-Bing Wu received his B.S. degree in Electrical Engineering and Ph.D. degree in Control Science and Engineering from Tsinghua University, Beijing, China, in 1998 and 2004, respectively.

From 2005 to 2008, he was a Research Associate Fellow at the Department of Chemistry, Princeton University, USA. Since 2009, he has been an Associate Professor at the Department of Automation, Tsinghua University, Beijing, China. His research interests include quantum mechanical control theory and nonlinear control theory.

# Applications Paper Prize 2011

The prize is given for outstanding technical contributions at an IFAC Congress in the area of control applications. This includes, but is not limited to, case studies, design and implementation of control systems and optimization of operations in a process, but generally excludes work of a simulation or laboratory scale nature that does not embrace work on an actual full-scale process.

The following papers were selected as finalist papers for the Applications Paper Prize 2011:

Robotic Stretcher for SMA Patient: Preliminary Tests on Controllability and Safety, by T. Sakaki, T. Iribe, R. Kurogi, K. Ushijima, M. Sakuragi, K. Miyanaga

Drilling Seeking Automatic Control Solutions, by J.-M. Godhavn, A.Pavlov, G-Ol. Kaasa, N.L. Rolland

Adaptive Task-Space Control of Strip Flatness in Multi-roll Mill Stands, by G. Pin , V. Francesconi, F. A.Cuzzola, S.Martinis , T. Parisini

Simulator Building for Agile Control Design of Shipboard Crane and its Application to Operational Training, by N.Y. Jian, K. Terashima

Estimating Nitrate Concentration in the Post-denitrification Unit of a Municipal Wastewater Treatment Plant, by M. Mulas, F. Corona, H. Haimi, L. E. Sundell, M. Heinonen, R. Vahala

The paper winning the Applications Paper Prize was:

***Drilling Seeking Automatic Control Solutions, by J.-M. Godhavn, A.Pavlov, G-Ol. Kaasa, N.L. Rolland***

**Citation: For the design, implementation and experimental validation of an observer-based pressure control scheme on a full scale drilling rig**

## John-Morten Godhavn

John-Morten Godhavn graduated with a MSc degree in 1992 from the Department of Engineering Cybernetics at The Norwegian Institute of Technology (NTH), and with a Dr.ing (PhD) degree in 1997 from the Norwegian University of Science and Technology (NTNU).

From 1997 to 2001 he held a position as a senior engineer for Kongsberg Seatex with development of navigation and motion sensors. Since 2001 he has been a principal researcher at Statoil's research centre in Trondheim, Norway, and since 2010 he has held an adjunct professor position at NTNU, Department of Petroleum Engineering and Applied Geophysics, within drilling automation. He has supervised numerous PhD and MSc students within automatic control and drilling. John-Morten has published appr. 40 papers including Journal papers in Automatica and Transactions on Automatic Control.

John-Morten has extensive experience within R&D for the oil and gas industry. He has broad experience within process control, slug control, model predictive control, subsea processing, reservoir optimization, intelligent drilling and in particular managed pressure drilling. Currently he is responsible for dual gradient drilling within the Deep Water Drilling and Well Department.

## Alexey Pavlov

Alexey Pavlov was born in Pskov, Russia in 1976. He received an M.Sc. degree (cum laude) in applied mathematics from St. Petersburg State University, Russia in 1998, and a PhD degree in mechanical engineering from Eindhoven University of Technology, The Netherlands in 2004.

He held researcher positions in several institutions: part-time researcher in the group Control of Complex Systems at the Institute for Problems of Mechanical Engineering, Russian Academy of Sciences (1999); visiting researcher at Ford Research Laboratory, Dearborn, MI, USA (2000); Postdoc at Eindhoven University of Technology (2005); postdoc and assistant professor at the Norwegian University of Science and Technology (2005-2009).

Since 2009 Alexey Pavlov has been a principal researcher in Statoil's research centre in Porsgrunn, Norway. He has been working on R&D projects on automation of drilling and oil and gas production, with the focus on Managed Pressure Drilling Technology. Alexey Pavlov has published more than 60 refereed papers, 2 patents and a book "Uniform output regulation of nonlinear systems: a convergent dynamics approach" co-authored with N.van de Wouw and H. Nijmeijer (Birkhauser 2005). His current research interests are focused on applied nonlinear control.

## Glenn-Ole Kaasa

Glenn-Ole Kaasa received the B.Eng. degree from Telemark University-College, Porsgrunn, Norway, in 1997, and the M.Sc. degree in mechanical engineering from the Norwegian University of Science and Technology (NTNU), Norway, in 1999. He was a Fulbright visiting fellow at the University of California, Santa Barbara in 2002, and received his Ph.D. degree from NTNU in 2006. In 2003 he was employed as a leading specialist at Kongsberg Automotive, involved in the development of control systems for heavy-duty vehicles and sports cars. From 2005 he has held a position as research manager, Norway.

Since 2006 he has been with Statoil's research centre in Porsgrunn where he has been involved in applied research for various applications in the energy industry, with emphasis on multiphase flow rate estimation in oil production and advanced control systems for drilling. He is currently responsible for Statoil's R&D on Managed Pressure Drilling Technology within the Department of Intelligent Well Construction. Since 2011 he has held a part-time position as adjunct associate professor in adaptive control and estimation at NTNU.

## Nils Lennart Rolland

Nils Lennart Rolland graduated from Bergen Tekniske Skole in 1970 with a degree in industrial mechanical engineering. He has worked within the oilfield industry since 1972 with FMC, McEVOY, Kongsberg, Aker, Cameron, DSND, NeoDrill, AGR and Statoil.

Nils Lennart has extensive experience in the oil field within Normal & Deep Water Drilling, Completion, Production, Engineering, Installation, Manufacturing, Operations and Management.

He has been working internationally for periods. He is a contributor to the MPD and DGD guidelines presently being written (IADC). Member of SPE.

nications, and computer science in multi-agent systems, information dynamics in networked feedback systems, analysis of insect flight control systems, and biological circuit design. Professor Murray has recently developed a new course at Caltech that is aimed at teaching the principles and tools of control to a broader audience of scientists and engineers, with particular emphasis on applications in biology and computer science.

**Karl Johan Aström**



Karl Johan Aström was educated at the Royal Institute of Technology (KTH) in Stockholm. After working for IBM Research for five years he was appointed Professor of the Chair of Automatic Control at Lund Institute of Technology (LTH) Lund University where he established a new department. From 2000-2010 he was part time professor at the University of California in Santa Barbara and he is now Senior Professor at Lund University.

Professor Aström has broad interests in control including, stochastic control, modeling, system identification, adaptive control, computer control and computer-aided control engineering. He has supervised 60 PhD students, written seven books and more than 100 papers in archival journals. He is listed in ISA. One paper on self-tuning control, co-authored with B. Wittenmark, was selected for the IEEE Book "Control Theory: Twenty-five seminal papers 1932-81". He has several patents, one of them for automatic tuning of PID controllers, held jointly with T. Hägglund, which has led to substantial industrial production.

Åström is a member of the Royal Swedish Academy of Engineering Sciences (IVA), the Royal Swedish Academy of Sciences (KVA) and a foreign member of the US National Academy of Engineering, the Russian Academy of Sciences, and the Hungarian Academy of Sciences. He is a Fellow of IEEE and IFAC and he has received many honors; among them six honorary doctorates, the 1985 Rufus Oldenburger Medal from ASME, the 1987 Quazza Medal from IFAC, the 1990 IEEE Control Systems Award, the 1993 IEEE Medal of Honor and the 2002 Great Gold Medal of the Royal Swedish Academy of Engineering. In 2003 he was inducted in the Process Control Hall of Fame. In 2011 he received the IFAC Harold Chestnut Control Engineering Textbook Prize.



Awards Chair George Irwin presents the Applications Paper Prize

# Harold Chestnut Control Engineering Textbook Prize



The Harold Chestnut Control Engineering Textbook Prize is being presented to Karl Johan Aström, one of the two authors of the following Textbook:

***Feedback Systems:***
***An Introduction for Scientists and Engineers***

**by K.J. Aström and R.M. Murray** published by Princeton University Press, 2008

**Citation: This textbook presents an innovative and enticing approach to feedback control of dynamic systems, which is accessible to students from diverse backgrounds. It does this by exploring a wide range of examples of dynamic systems and by drawing on conceptual methods and computer tools for analysis and design. The book is well supported by a website and by a forum for the sharing of instructional tools and experience.**

The book has now also been translated into Chinese and is moreover available on the web at
**http://www.cds.caltech.edu/~murray/amwiki/Main_Page**

**Richard M. Murray**

Richard M. Murray received the B.S. degree in Electrical Engineering from the California Institute of Technology in 1985 and the M.S. and Ph.D. degrees in Electrical Engineering and Computer Sciences from the University of California, Berkeley, in 1988 and 1991, respectively. He is currently a Professor of Control and Dynamical Systems at the California Institute of Technology, Pasadena. Professor Murray's research is in the application of feedback and control to mechanical, information, and biological systems. Current projects include integration of control, commu-

| Title | 2012 | Place | Further Information |
|---|---|---|---|
| IFAC Workshop<br>Embedded Guidance, Navigation and<br>Control in Aerospace | February<br>13 – 15 | Bangalore<br>India | http://www.ifac-egnca.org/<br>e-mail: EGNCA2012@aero.iisc.ernet.in |
| 7th Conference on Mathematical Modelling<br>MATHMOD  2012 | February<br>15 – 17 | Vienna<br>Austria | http://www.mathmod.at/ |
| 6th IFIP/IFAC. Conference<br>Interoperability for Enterprise Systems<br>and Applications - I-ESA'12 | March<br>22 – 23 | Valencia<br>Spain | http://www.aidima.es/iesa2012/<br>e-mail: info@i-esa.org |
| IFAC Conference<br>Advances in PID Control | March<br>28 – 30 | Brescia<br>Italy | http://pid12.ing.unibs.it<br>e-mail: pid12@ing.unibs.it |
| IFAC Conference<br>Embedded Systems, Computational<br>Intelligence and Telematics in Control<br>- CESCIT | April<br>03 – 05 | Wuerzburg<br>Germany | http://:www7.informatik.uni-wuerzburg.de/cescit<br>e-mail: not yet available |
| IFAC Workshop<br>Navigation, Guidance and Control of<br>Underwater Vehicles (NGCUV'2012) | April<br>10 – 12 | Porto<br>Portugal | http://paginas.fe.up.pt/~ngcuv2012/<br>e-mail: ngcuv2012@fe.up.pt |
| IFAC Symposium<br>Information Control Problems in<br>Manufacturing - INCOM 2012 | May<br>23 – 25 | Bucharest<br>Romania | http://www.incom12.ro<br>e-mail: incom12@cimr.pub.ro |
| IFAC Conference<br>Programmable Devices and Embedded<br>Systems - PdeS 2012 | May<br>23 – 26 | Brno<br>Czech Rep. | http://www.pdes2012.feec.vutbr.cz/<br>e-mail: pdes2012@feec.vutbr.cz |
| IFAC Workshop<br>Automatic Control in Offshore<br>Oil and Gas Production | May 31 –<br>June 1 | Trondheim<br>Norway | http://www.ifac-oilfield.no/ |
| IFAC Conference<br>Analysis and Design of Hybrid Systems<br>- ADHS 2012 | June<br>06 – 08 | Eindhoven<br>Netherlands | http://adhs12.org/<br>e-mail: info@adhs12.org |
| IFAC Conference<br>International Stability and<br>Systems Engineering: - SWIIS 2012 | June<br>11 – 13 | Waterford<br>Ireland | http:// not yet available<br>e-mail: not yet available |
| IFAC Workshop<br>Dynamics and Control in Agriculture<br>and Food Processing - DYCAF | June<br>13 – 16 | Plovdiv<br>Bulgaria | http://dycaf-2012.tu-plovdiv.bg<br>e-mail: altaneva@tu-plovdiv.bg |
| IFAC Symposium<br>Advances in Control Education - ACE 2012 | June<br>19 – 21 | Nizhny Novgorod<br>Russia | http://ace2012.ru/<br>e-mail: ifac.ace2012@gmail.com |
| IFAC Symposium<br>Robust Control Design - ROCOND | June<br>20 – 22 | Aalborg<br>Denmark | http://www.rocond12.org/ |
| IFAC Conference<br>Control of Chaotic Systems<br>- CHAOS 12 | June<br>20 – 22 | Cancun<br>Mexico | http://www.ipicyt.edu.mx/Chaos12/chaos12.htmlAnalysis and<br>e-mail: not yet available |
| IFAC S Workshop<br>Time Delay Systems (IFAC-TDS-2012) | June<br>22 – 24 | Boston<br>MA, USA | http://www.coe.neu.edu/IFACTDS2012/main.htm<br>e-mail: not yet available |
| American Control Conference<br>- in cooperation with IFAC - | June<br>27 – 29 | Montreal<br>Canada | http://a2c2.org/conferences/acc2012/index.php |
| IFAC Symposium<br>Advanced Control of Chemical Processes<br>- ADCHEM-2012 | July<br>10 – 13 | Singapore<br>Singapore | http://www.adchem2012.org/<br>e-mail: ivan@adchem2012.org |
| IFAC Symposium<br>System Identification - SYSID 2012 | July<br>11 – 13 | Brussels<br>Belgium | http://www.sysid2012.org/<br>e-mail: secretariat@sysid2012.org |

# FORTHCOMING EVENTS (ctd.)

| Title | | Place | Further Information |
|---|---|---|---|
| IFAC Conference<br>Nonlinear Model Predictive Control | August<br>23 – 27 | Noordwijkerhout<br>Netherlands | http:// not yet available<br>e-mai: not yet available |
| 17th Intl. Conference (cosponsored by IFAC)<br>Methods and Models in Automation<br>and Robotics - MMAR 2012 | August<br>27 – 30 | Miedzyzdroje<br>Poland | http:// not yet available<br>e-mail: not yet available |
| IFAC Symposium<br>Fault Detection, Supervision and<br>Safety for Technical Processes<br>- SAFEPROCESS | August<br>29 – 31 | Mexico City<br>Mexico | http://safeprocess2012.unam.mx/<br>e-mail: SafeProcess12@iingen.unam.mx |
| IFAC Workshop<br>Modelling and Control in Biomedical<br>Systems - BMS 2012 | August<br>29 – 31 | Budapest<br>Hungary | http:// not yet available<br>e-mail: not yet available |
| IFAC Symposium<br>Power Plants and Power Systems Control | September<br>02 – 05 | Toulouse<br>France | http://www.pppswc2012.org<br>e-mail: not yet available |
| IFAC Symposium<br>Robot Control - SYROCO 2012 | September<br>05 – 09 | Dubrovnik<br>Croatia | http://www.syroco2012.org/<br>e-mail: syroco2012@syroco2012.org |
| KSAE/IFAC Symposium<br>Advanced Vehicle Control - AVEC 12 | September<br>09 – 12 | Seoul<br>Korea | http://avec12.ksae.org/<br>e-mail: avec12@ksae.org |
| IFAC Workshop<br>Automation in Mining, Mineral and<br>Metal Industries | September<br>10 – 12 | Gifu<br>Japan | http:// not yet available<br>e-mail: not yet available |
| IFAC Symposium<br>Control in Transportation Systems<br>- CTS'12 | September<br>12 – 14 | Sofia<br>Bulgaria | http://hs27.iccs.bas.bg/ |
| IFAC Workshop<br>Control Applications of Optimization<br>- CAO'12 | September<br>13 – 16 | Rimini<br>Italy | http:// not yet operative<br>e-mail: not yet available |
| IFAC Symposium<br>Manoeuvring and Control of Marine Craft<br>- MCMC'2012 | September<br>19 – 21 | Arenzano<br>Italy | www.mcmc2012.issia.cnr.it |
| IFAC Workshop<br>Discrete Event Systems - WODES | October<br>01 – 03 | Guadalajara<br>Mexico | http://www.gdl.cinvestav.mx/wodes-12<br>e-mail: wodes2012@gdl.cinvestav.mx |
| IFAC Workshop<br>Discrete Event System Design - DeSD | October<br>01 – 04 | Campos do Jordao<br>Brazil | http://www.desdes.uz.zgora.pl<br>e-mail: DESDes@iie.uz.zgora.pl |
| IFAC Workshop on Engine and Powertrain<br>Control Simulation and Modelling | October<br>23 – 25 | Paris<br>France | http://www.ecosm12.org |
| Latin American Control<br>Conference - LACC<br>- in cooperation with IFAC | October<br>23 – 26 | Lima<br>Peru | http: not yet available |
| **Title** | **2013** | **Place** | **Further Information** |
| IFAC Symposium<br>System Structure and Control | February<br>04 – 06 | Grenoble<br>France | http:// not yet available<br>e-mail: not yet available |
| IFAC Symposium<br>Mechatronic Systems | April<br>10 – 12 | Hangzhou<br>China | http:// not yet available<br>e-mail: not yet available |
| IFAC/(IFIP/IFROS/IEA) Symposium<br>Analysis, Design, and Evaluation<br>of Human-Machine Systems - HMS 2013 | August<br>11 – 15 | Las Vegas<br>USA | http://not yet available<br>e-mail: not yet available |
| IFAC Symposium<br>Advances in Control Education - ACE 2013 | August<br>28 – 30 | Sheffield<br>UK | http://ace2013.group.shef.ac.uk/<br>e-mail: not yet available |
| IFAC Symposium<br>Automatic Control in Aerospace<br>- ACA 2013 | September<br>02 – 06 | Wuerzburg<br>Germany | http://www7.informatik.uni-wuerzburg.de/aca2013<br>e-mail: aca2013@informatik.uni-wuerzburg.de |
| IFAC Symposium<br>Nonlinear Control Systems - NOLCOS | September<br>04 – 06 | Toulouse<br>France | http:// not yet available<br>e-mail: not yet available |
| IFAC Conference<br>Management and Control of Production<br>and Logistics – MCPL 2013 | September<br>12 – 14 | Fortaleza<br>Brazil | http:// not yet available<br>e-mail: not yet availabe |
| **Title** | **2014** | **Place** | **Further Information** |
| **19th IFAC World Congress** | **August**<br>**25 – 29** | **Cape Town**<br>**South Africa** | **http://www.ifac2014.org/**<br>**email: not yet available** |