

# IFAC NEWSLETTER

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# **Engineering Applications of Artificial Intelligence: Change in Editorship**

Dr. Ajith Abraham, Editor-In-Chief since 1 January 2016 of EAAI, is the Director of Machine Intelligence Research Labs (MIR Labs), a not-for-profit Scientific Network for Innovation and Research Excellence connecting Industry and Academia. The Network, headquartered in Seattle, WA, USA, currently has more than 1,000 scientific members from over 100 countries.

Abraham also works as a Research Professor in VSB-Technical University of Ostrava, Czech Republic. As an Investigator / Co-Investigator, he has won several research grants from Australia, USA, EU, Italy, Czech Republic, France, Malaysia and China. Dr. Abraham works in a multi-disciplinary environment involving machine intelligence, cyber-physical systems, Internet of things, network security, sensor networks, Web intelligence, Web services, data mining and applied to various real world problems. In these areas he has authored/co-authored more than 1,000+ research publications. He has 700+ co-authors originating from 40+ countries. As per Google Scholar, Dr. Abraham has more than 20,000+ citations with an h-index of 70. He has given more than 100 plenary lectures and conference tutorials in more than 20 countries).

Artificial Intelligence (AI) deals with the engineering of intelligent machines for solving some of the real world problems. AI has grown into a multidisciplinary science with wide applications in engineering, medicine, business etc. In the past AI was primarily used for robotics and solving complex problems. Today AI has a prominent role in real life and promises an even better role in the near future. From smart phones, smart cars and smart appliances; AI is embedded in our daily life.



Aiith Abraham

Engineering Applications of Artificial Intelligence (EAAI): The International Journal of Intelligent Real-Time Automation is one of the seven official journals of International Federation of Automatic Control (IFAC). Ajith Abraham became the editorin-chief of this journal in January 2016, replacing

Bernard Grabot. EAAI has grown as a trusted source for high-quality innovative and timely knowledge in novel and interdisciplinary engineering fields. EAAI has succeeded in increasing responsiveness to the needs of control system engineers, scientists, research students and attracting new communities. EAAI provides an international forum for rapid publication of review papers, contributed papers, case studies etc. discussing the experience gained and lessons learnt from using or developing AI systems for real world engineering applications.

The editorial board is dedicated to drive EAAI as one of the most outstanding outlets for cuttingedge Al research in real world engineering applications while broadening its scope and impact. For example, Al capabilities to turn big data into insight have already made large impacts. It is interesting to note that the Al revolution has barely begun and it is progressing very fast. In view of these latest developments, EAAI seeks articles reporting cutting edge research results on big data analytics, social networks, Internet - of -Things and cyber-physical systems, EAAI topics would also include, but are not limited to: innovative applications of real-time intelligent automation: architectures, algorithms and techniques for Al systems; intelligent fault detection and industrial applications.

In addition to contributed papers detailing new research and case studies or software reviews, EAAI will strive to publish articles from top scholars illustrating conceptual reviews of important topics. These articles will be source of ideas for future research in cutting-edge topics, which could themselves be submitted to EAAI.

To improve the interaction between EAAI and the IFAC Technical Committees, EAAI will have new Associate Editors, especially from the Technical Committee on Computational Intelligence. EAAI is also currently working on updating the editorial board and the new team will be on board by March 2016. We plan to induct more members from industry and hope they can attract good quality industrial application papers.

Installing a three member editorial team to monitor special issue development (from proposal submission to monitoring the quality of the papers), a specialized editor each to deal with brief papers, review papers and industrial applications are also in the pipeline. For authors, EAAI supports

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Engineering Applications of Artificial Intelligence
http://www.elsevier.com/locate/

engappai

Journal of Process Control

http://www.elsevier.com/locate/ jprocont

Annual Reviews in Control

Annual Reviews in Control
http://www.elsevier.com/locate/
arcontrol

Journal on Mechatronics http://www.elsevier.com/locate/

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#### SYSID 2015 1-3 July 2015 Beijing, China

The 17th IFAC Symposium on System Identification (SYSID 2015) was held in Beijing, China, October 19-21, 2015. SYSID 2015 attracted a lot of interest: 339 submissions from 40 countries, including 19 invited sessions. After rigorous reviewing, 254 invited and contributed papers were included into the final program, which equals to acceptance rate 74.9%. 279 participants were registered. The top 5 countries leading in the number of accepted papers were China (116), Sweden (32), France (20), the Netherlands (15), and USA (14). SYSID 2015 covered major aspects of system identification, experimental modelling and signal processing, ranging from theoretical and methodological developments to practical applications.

The richness and diversity of the technical program is a sign of demand of the community and growth of interest in the area of system identification. The outstanding list of exceptional plenary speakers: Han-Fu Chen (CN), Alessandro Chiuso (IT), Krister Forsman (SE), Rik Pintelon (BE), Bernhard Schölkopf (DE), Victor Solo (AU), Michel Verhaegen (NL), and Le Yi Wang (USA) made this conference really special. There were also a number of sessions dedicated to applications: Modelling and Identification of Practical Systems, Software Demonstration, and so on.

SYSID 2015 took place in Beijing, the capital and a historical center of China, and one of the most beautiful cities in the world. The symposium was held at the Beijing International Convention Center, located next to the Beijing National Stadium,nicknamed the "Bird's Nest", and the Aquatic Center, nicknamed the "Water Cube". The location allowed the participants to participate in some sightseeing after the sessions.

The organizers express their sincere thanks to the many contributors, the reviewers and in particular to the members of the National Organizing Committee and the International Program Committee for their great help and support. Furthermore we would like to express our sincere thanks to the Key Laboratory of Systems and Control, Academy of Mathematics and Systems Science and the Technical Committee of Control Theory, Chinese Association of Automation for their wonderful help with the local arrangements. The next SYSID symposium will be held in Stockholm, Sweden in July 2018.

Submitted by: Ying Qu/Technical Committee on Control Theory, Chinese Association of Automation, Beijing, China

#### ADHS 2015 14-16 October 2015 Atlanta, GA, USA

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The 5th IFAC Conference on Analysis and Design of Hybrid Systems (ADHS'15) was held on the Georgia Tech University campus in Atlanta, GA, USA from October 14-16, 2015. Prior conferences in the ADHS series were hosted in St. Malo, France (2003), Alghero, Italy (2006), Zaragoza, Spain (2009), and Eindhoven, The Netherlands (2012.) The ADHS '15 conference was the first of this series to be held outside of Europe.

The focus of the conference is on hybrid systems, i.e., systems that are characterized by a combination of time-driven and event-driven dynamics, and the interactions between these two modalities has been a major focus of research for the past three decades. Such systems arise in various application domains, including networked control systems, largescale process industries, robotics, transportation systems, energy distribution networks, communication networks and internet-ofthings, safety-critical systems, smart cities, cyber-physical systems, and more. The ADHS conference focuses on all areas pertaining to the modelling and simulation, analysis, design, control, optimization, verification, implementation, and applications of hybrid dynamical systems.

The conference program featured three expert presentations on topics of major, current relevance and interest: "Cyber-Physical Systems and Smart Grid" by Pramod P. Khargonekar, National Science Foundation and University of Florida (US); "Bipedal Locomotion: A Case Study in Feedback Control of Hybrid Systems" by Jessy Grizzle, University of Michigan (US); and "Distributed State Estimation and Fault Diagnosis in Discrete Event Systems" by Christoforos Hadjicostis, University of Cyprus (CY)

The conference banquet was held at the Carter Center in Atlanta, GA, where the Jimmy Carter Presidential Library and Museum is housed. Jimmy Carter was the 39th President of the US and is also a Georgia native and a Georgia Tech alumnus. The social event included a guided tour of the museum followed by a banquet featuring a modern take on Southern cuising

Following a thorough review by the International Program Committee, sixty papers were accepted for presentations and publication in the proceedings. We were very happy with both the breadth and strength of the program.

Submitted by: Magnus Egerstedt, Georgia Institute of Technology, Atlanta, GA, USA

#### TECIS 2015 24-26 October 2015 Sozopol, Bulgaria

The 16th IFAC Conference on Technology, Culture and International Stability (TECIS 2015) took place in Sozopol, Bulgaria (on the Bulgarian Black Sea coast) from 24 – 27 September 2015. The event aimed to bring together researchers and practitioners from industry and academia to give an overview of the state of the art, to present new research results and to exchange ideas and experiences in the field of international stability.

Plenary speakers included TC 9.5 Chair Larry Stapleton (IE), as well as Peter Kopacek (AT), Ventislav Slavkov (BG), Hiujun Gao (CN) and Peter Groumpos (GR.) A roundtable panel discussion was organized by Dr. Norbert Jesse (DE) concerning a short paper entitled "Aging Societies and the Internet- Can Social Media Contribute to the Quality of Life in Neighborhoods?"

Control and automation technologies can be used to improve the conditions in less developed regions by helping to create jobs and improving inflows of wealth. They can be also used to improve agriculture and to provide medical services in unstable regions. Technology development leads to changes in international stability. It has never been so important to examine system stability. In recent years social, international, and national systems of control have been shown in some situations to be inadequate and prone to be fundamental and most basically instable. The scope of TECIS 2015 was to systematically examine topics associated with these issues.

The conference was particularly concerned with the role of Cost Oriented Automation as a way of improving international stability, through its applications, technologies, processes, and as part of larger systems contexts.

After a sequence of successful symposia on "Low Cost Automation" (1986 - 2004) and on "Cost-Oriented Automation" or "Affordable Automation Systems" (2007 - 2010) the aim of TECIS 2015 was to provide a place for the specialists in the field to discuss new methods for reducing the cost of automation systems considering not only the development and application of low cost components of control systems, but the control aspects of their life cycle regarding design, production, operating, maintenance, reconfiguration and recycling.

Submitted by: Andon V. Topalov, Control Systems Department, Technical University of Sofia, branch in Plovdiv, Bulgaria

Check out IFAC's YouTube channel for new and historical IFAC video materials!

The link to the YouTube channel can be accessed via the IFAC website,

WWW.ifac-control.org

IFAC is now on social media!
Check out IFAC's presence on Facebook and Twitter. In addition check out the IFAC Blog at http://blog.ifac-control.org

#### CHAOS 2015 26-28 August 2015 Tokyo, Japan

The fourth IFAC Conference on Analysis and Control of Chaotic Systems (CHAOS 2015) was held from August 26 to 28, 2015 at Tokyo Metropolitan University, Tokyo, Japan. The conference was sponsored by the IFAC Technical Committee on Non-Linear Control Systems (TC 2.3) and co-sponsored by four other IFAC TCs (TC 1.3 Discrete Event and Hybrid Systems, TC 1.5 Networked Systems, TC 2.1 Control Design, and TC 2.8 Biological and Medical Systems), and Tokyo Metropolitan University.

The CHAOS series started in Reims, France (2006) and since then has been successfully held in London, UK (2009) and Cancun, Mexico (2012). The CHAOS conference, as the name suggests, is the IFAC meeting related to analysis and control of chaotic systems, but the range of the conference topics is not limited to chaos systems but covers a broad interdisciplinary field of chaos control, synchronization, and complex networks.

The research activity in this field is driven by the needs of different application domains such as biology, physics, mechanics, engineering, power electronic systems, chaos encrypted signals, chemical engineering, and so on. Therefore, the aim of this conference was to provide an opportunity to exchange information to international researchers with different backgrounds.

The conference was opened with the opening remarks by Professor Jun-ichi Imura, who served as the general chair, and then Professor Henk Nijmeijer, IFAC Council member, addressed the audience as the IFAC President's representative and gave a short introduction to the activities of IFAC.

Following the opening remarks, the opening lecture was presented by Prof. Leon O. Chua. The CHAOS 2015 conference had five plenary lectures delivered by prominent professors from multiple areas closely related to the conference focus: "Memristor, Brain, and Edge of Chaos" by Prof. Leon O. Chua (UC Berkeley, USA), "Physical Ethology of an Amoeba" by Prof. Toshiyuki Nakagaki (Hokkaido University, Japan), "To What Extent Can Nonlinear Network Dynamics Be Controlled? And What For?" by Prof. Adilson E. Motter (Northwestern University, USA), "Chaotic Systems With Any Number of Equilibria and Their Hidden Attractors" by Prof. Guanrong Chen (City University of Hong Kong, HK), and "Pattern Formation and Synchronization in Biology" by Prof. Murat Arcak (UC Berkeley, USA).

The technical program was composed of the above five plenary lectures and ten oral sessions. After a rigorous review process, a total of 48 papers were presented in ten sessions consisting of six invited sessions and four regular sessions with 73 participants from 12 coun-

tries. The conference banquet took place on a cruise ship in the Tokyo Bay while participants enjoyed the night view of the Tokyo Bay area.

All papers presented at the conference were published as the conference proceedings on IFAC-PapersOnline. Further details about the conference including the final program can be found on the web page

http://ctrl.mech.se.tmu.ac.jp/chaos2015

Submitted by Toshiki Oguchi, Tokyo Metropolitan University

#### Who's Who in IFAC: IFAC Council Member Sarah Spurgeon

Prof. Sarah K. Spurgeon received the BSc degree in Mathematics in 1985 and a DPhil in Electronics in 1988 both from the University of York in the UK. She has held previous academic positions at the University of Loughborough and the University of Leicester in the UK where she was appointed as Leicester's first female Professor of Engineering in 2002 and was head of their Department of Engineering from 2006-2008. She is currently Professor of Control Engineering and Head of the School of Engineering and Digital Arts at the University of Kent.

Her research interests are in the area of systems modelling and analysis, robust control and estimation in which areas she has published over 300 research papers. Her contributions to engineering were recognised by election as a Fellow of the Royal Academy of Engineering in 2008, the highest honour for an engineer in the UK, with citation 'Eminent for fundamental contributions to the development of nonlinear control and estimation methods, from theoretical developments through to trials and subsequent industrial support of technological exploitation. Distinguished for advancing the practice of both UK and international professional bodies and the promotion of new methods of supporting early career stage female engineers'.

She is also a Fellow of the Institute of Measurement and Control (FInstMC), a Fellow of the Institute of Engineering and Technology (FIET) and a Fellow of the Institute of Mathematics and its Applications. Her research contributions were recognised by the award of the Honey-well International Medal in 2010, as well as the award of an IEEE Millenium Medal in 2000.

Sarah Spurgeon currently chairs the IEEE Technical Committee on Variable Structure and Sliding Mode Control and has been an IEEE Distinguished Lecturer for the Control Systems Society. She is a member of the Higher Education Funding Council for England General Engineering sub-panel which assesses the research

output of all UK Universities, is an independent member of the Defence Scientific Advisory Council (DSAC) which provides independent advice to the UK Secretary of State for Defence on matters of concern to the Ministry of Defence in the fields of Science, Engineering, Technology and Analysis (SETA) and currently chairs the Ingenious Panel of the Royal Academy of Engineering which, supported by the UK government, prioritises funding for public engagement projects which put engineering at the heart of society.



Sarah Spurgeon

Spurgeon is currently Editor of the IMA Journal of Mathematical Control and Information, a member of the Editorial Board of the International Journal of Systems Science, a member of the Editorial Board of the IET Control Theory and Applications, a Subject Editor for the International Journal of Robust and Nonlinear Control. At the General Assembly of IFAC at the World Congress in Cape Town, Sarah Spurgeon was elected Council member for the 2014 – 2017 Triennium.

Spurgeon is a past Chair (2008-2011) of the UK NMO, the UK Automatic Control Council (UKACC) and has previously been a member of the IFAC Publications Committee. She is currently a member of TC 2.3 Nonlinear Control Systems, Vice-chair of TC 9.2 Social Impact of Automation and Vice-Chair of IFAC's Policy Committee.

Submitted by Sarah Spurgeon, IFAC Council Member

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contents innovations such as AudioSlides and Interactive MATLAB Figure Viewer that would help readers to understand the concepts very quickly and also access the underlying data.

Submitted by Ajith Abraham, Editor-in-Chief, FAAI



#### Who's Who in IFAC: **IFAC Policy Committee Chair** Dawn Tilbury

Dawn M. Tilbury is currently the Associate Dean for Research in the College of Engineering. University of Michigan. She received the B.S. degree in Electrical Engineering, summa cum laude, from the University of Minnesota in 1989, and the M.S. and Ph.D. degrees in Electrical Engineering and Computer Sciences from the University of California, Berkeley, in 1992 and 1994, respectively. In 1995, she joined the Mechanical Engineering Department at the University of Michigan, Ann Arbor, where she is currently Professor, with a joint appointment as Professor of EECS.

Tilbury's research interests include distributed control of mechanical systems with network communication, logic control of manufacturing systems, reliability of ground robotics, and dynamic systems modeling of physiological systems. She has published more than 150 articles in refereed journals and conference proceedings. She was elected Fellow of the IEEE in 2008 and Fellow of the ASME in 2012, and is a Life Member of SWE.

Tilbury won the EDUCOM Medal (jointly with Professor William Messner) for her work on the web-based Control Tutorials for Matlab. An updated version was recently re-issued at http://ctms.engin.umich.edu. She is co-author (with Joseph Hellerstein, Yixin Diao, and Sujay Parekh) of the textbook Feedback Control of Computing Systems. She received an NSF

CAREER award in 1999, and is the 2001 recipient of the Donald P. Eckman Award of the American Automatic Control Council She is the 2012 recipient of the SWE Distinguished Engineering Educator Award, and the 2014 recipient of the Michael J. Rabins Leadership Award from the ASME Dynamic Systems and Control Division.



**Dawn Tilbury** 

Tilbury was a member of the 2004-2005 class of the Defense Science Study Group (DSSG), and was a member of DARPA's Information Science and Technology Study Group (ISAT) from 2005-2008. She has spent sabbatical leaves at the Institute for Industrial Technologies and Automation (ITIA-CNR) in Milan, Italy and the Department of Automatic Control in Lund, Sweden. At the University of Michigan, she has taught courses in dynamic systems modeling, automatic control, robot kinematics and dynamics, and linear systems theory, and has advised 17 PhD students.

Additionally Tilbury was a member of the IEEE Control Systems Society Board of Governors from 2005-2008 and again from 2014-2016, and was a member of the ASME Dynamic Systems and Control Division Executive Committee from 2008-2013 (and was Chair of the Division from 2011-2012). She was Associate Editor of the IEEE Transactions on Automation Science and Engineering from 2008-2011, and has been a Senior Editor since 2012. She was Program Chair for the 2012 American Control Conference and General Chair for the 2014 ACC, and is currently the Chair of the Policy Committee for IFAC.

The Policy Committee advises the Council, at the Council's request or on its own initiative, on the general policy and long-range planning of the Federation, on matters concerning the relations between IFAC and other international organizations and between IFAC and its NMOs as well as on procedural matters and guidelines related to the conduct of business within the Federation and to the organization of technical meetings. It makes a report to the Executive Board each year.

Biographical material submitted by: Dawn Tilbury, IFAC Policy Committee Chair. Information concerning Policy Committee provided by IFAC Secretariat.

### Calendar of IFAC Events

Title	2016	Place	Further information
14th IFAC Symposium on Control in Transportation Systems CTS 2016	May 18 – 20	Istanbul Turkey	http://www.cts2016.itu.edu.tr/ e-mail: cts2016@itu.edu.tr
14th IFAC Symposium on Large Scale Complex Systems: Theory and Applica- tions LSS 2016	May 26 - 28	Riverside USA	http://www.ee.ucr.edu/~ren/lss16 e-mail: not yet available
4th IFAC Conference on Intelligent Control and Automation Sciences ICONS 2016	June 01 – 03	Reims France	http://icons2016.univ-reims.fr/ e-mail: icons2016@univ-reims.fr
11th IFAC Symposium on Advances in Control Education ACE 2016	June 01 – 03	Bratislava Slovakia	http://www.ace2016.sk/ e-mail: info@ace2016.sk
11th IFAC Symposium on Dynamics and control of process systems, including biosystems DYCOPS 2016	June 06 – 08	Trondheim Norway	http://dycops2016.org/ e-mail: dycops2016@itk.ntnu.no
2nd IFAC/IEEE CSS Workshop on Control of Systems Governed by Partial Differential Equations CPDE 2016	June 13 – 15	Bertinoro Italy	http://www.cpde2016.org/ e-mail: cpde2016@gmail.com
8th IFAC Symposium on Advances in Automotive Control AAC 2016	June 20 – 23	Kolmården Wildlife R. Sweden	http://aac2016.isy.liu.se/ e-mail: aac2016@isy.liu.se
13th IFAC Workshop on Time Delay Systems TDS 2016	June 22 – 24	Istanbul Turkey	http://www.tds2016.itu.edu.tr/ e-mail: tds2016@itu.edu.tr



## **Calendar of IFAC Events**

Title	2016	Place	Further information
6th IFAC Symposium on System Structure and Control SSSC 2016	June 22 – 24	Istanbul Turkey	http://www.sssc2016.itu.edu.tr/ e-mail: sssc2016@itu.edu.tr
8th IFAC/IEEE/IFORS/INFORMS Conference on Manufacturing Modelling, Management and Control MIM 2016	June 28 – 30	Troyes France	http://mim2016.utt.fr/ e-mail: mim2016@utt.fr
12th IFAC Workshop on Adaptation and Learning in Control and Signal Pro- cessing ALCOPS 2016	June – July 29 – 01	Eindhoven Netherlands	http://alcosp2016.wtb.tue.nl/ e-mail: alcosp2016@tue.nl
6th IFAC Workshop on Periodic Control Systems PSYCO 2016	June – July 29 – 01	Eindhoven Netherlands	http://psyco2016.wtb.tue.nl/ e-mail: alcosp2016@tue.nl
15th EUCA, IEEE CSS IFAC Conference on European Control Conference (in cooperation with IFAC) ECC 2016	June – July 29 – 01	Aalborg Denmark	http://www.ecc16.eu/index.shtml e-mail: ecc2016@es.aau.dk
9th IFAC/IEEE RAS Symposium on Intelligent Autonomous Vehicles IAV 2016	June – July 29 – 01	Messe Leipzig Germany	http://iav2016.inf.h-brs.de/ e-mail: paul.ploeger@h-brs.de
Conference on American Control Conference (in cooperation with IFAC) ACC 2016	July 06 – 08	Boston USA	http://acc2016.a2c2.org/ e-mail: daniel_abramovitch@agilent.com
IEEE (CSS) and IEEE (SSIT) IFAC Conference on Norbert Wiener in the 21st Century	July 13 – 15	Melbourne Australia	http://21stcenturywiener.org/ e-mail: NorbertWiener-2016@unimelb.edu. au
Univ. of Novi Sad, IFAC, IUTAM, IEEE B. of Serbia& M. Conference on Fractional Differentiation and its Applications ICFDA 2016	July 18 – 20	Novi Sad Republic of Serbia	http://www.icfda16.com/public/ e-mail: icfda16@uns.ac.rs
13th Intern. INSTICC Conference on Informatics in Control, Automation and Robotics (in cooperation with IFAC) ICINCO 2016	July 29 – 31	Lisbon Portugal	http://www.icinco.org/ e-mail: icinco.secretariat@insticc.org
5th IFAC Conference on Sensing, Control and Automation Technologies for Agriculture AGRICONTROL 2016	August 14 – 17	Seattle, WA USA	http://ifac.cahnrs.wsu.edu/ e-mail: manoj.karkee@wsu.edu
20th IFAC Symposium on Automatic Control in Aerospace ACA 2016	August 21 – 25	Sherbrooke, Québec Canada	http://aca2016.ngcaerospace.com/ e-mail: aca2016@ngcaerospace.com
10th IFAC Symposium on Non-Linear Control Systems NOLCOS 2016	August 23 – 25	Monterey, CA USA	https://www.math.ucdavis.edu/static/con- ferences/nolcos_2016/ e-mail: NOLCOS2016@math.ucdavis.edu
13th IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems HMS 2016	Aug. – Sept. 30 – 02	Kyoto Japan	http://www.syn.me.kyoto-u.ac.jp/ IFACHMS2016/ e-mail: sec-ifachms2016@me.kyoto-u.ac.jp
17th IFAC and others Symposium on Mining, Mineral and Metal Processing MMM 2016	Aug. – Sept. 31 – 02	Vienna Austria	http://www.ifacmmm2016.org/ e-mail: contact@ifacmmm2016.org
7th IFAC and others Symposium on Mechatronic Systems MECHATRONICS 2016	September 05 – 08	Loughborough Uni- versity United Kingdom	http://www.mechatronics2016.lboro.ac.uk/ e-mail: mechatronics2016.lboro.ac.uk
6th IFAC Tokyo Institute of Techn. Workshop on Distributed Estimation and Control in Networked Sys- tems NecSys 2016	September 08 – 09	Tokyo Japan	http://www.necsys2016.ctrl.titech.ac.jp/ e-mail: not yet available
9th EUROSIM IFAC Congress on Modelling and Simulation EUROSIM 2016	September 12 – 15	Oulo Finland	http://eurosim2016.automaatioseura.fi/ e-mail: office@automaatioseura.fi
10th IFAC Conference on Control Applications in Marine Systems CAMS 2016	September 13 – 16	Trondheim Norway	http://www.ifac-cams2016.com/ e-mail: cams@ifac-cams2016.com



## **Calendar of IFAC Events**

Title	2016	Place	Further information
12th APCA IFAC Portugese Conference on Automatic Control CONTROLO 2016	September 14 – 16	Guimarães Portugal	http://controlo2016.com e-mail: controlo2016@dei.uminho.pt
2nd IFAC Workshop on Thermodynamic Foundations for a Mathematical Sys- tems Theory TFMST 2016	September 28 – 30	Vigo Spain	http://tfmst2016.com e-mail: tfmstii@viajeseci.es
14th IFAC Conference on Programmable Devices and Embedded Systems PDES 2016	October 05 – 07	Brno Czech Republic	http://pdes-conference.eu/ e-mail: pdes2016@feec.vutbr.cz
6th IFAC, CACHE, IEEE CSS TC on Systems Biology Conference on Foundation of Systems Biology in Engineering FOSBE 2016	October 09 – 12	Magdeburg Germany	http://www.fosbe2016.ovgu.de/ e-mail: fosbe2016-l@ovgu.de
IFAC CZ&Slov. Nat. Com. CIGRE/CZ Nat. Com. CIRED Workshop on Control of Transmission and Distribution Smart Grids CTDSG 2016	October 11 – 13	Prague Czech Republic	http://www.ifac.ctdsg2016.cz/ e-mail: secretary@ifac.ctdsg2016.cz
Conference on Latin American Conference of Automatic Control (in cooperation with IFAC) XVII CLCA 2016	October 13 – 15	Medellin Colombia	http://www.eafit.edu.co/minisitios/clca- eafit/Paginas/default.aspx e-mail: oquinte1@eafit.edu.co
1st IFAC/IFIP Workshop on Control and Computers WOCO 2016	October 18 – 20	Valencia Spain	http://woco2016.upv.es/ e-mail: not yet available
3rd IFAC/IFIP WG 5.7/ESRA Workshop on Advanced Maintenance Engineering, Service and Tech- nology AMEST 2016	October 19 – 21	Biarritz France	http://ifac-amest16.com/ e-mail: not yet available
17th IFAC EUROSIM Conference on Technology, Culture and International Stability TECIS 2016	October 26 – 28	Durres Albania	http://tecis2016.ubt-uni.net/ e-mail: tecis2016@ubt-uni.net
4th IFAC Symposium on Telematics Applications TA 2016	November 06 – 09	Porto Alegre - RS Brazil	http://ifactelematics2016.ece.ufrgs.br/ e-mail: ifactelematics2016@ece.ufrgs.br
12th IFAC Workshop on Intelligent Manufacturing Systems IMS 2016	December 05 – 07	Austin USA	http://not yet available e-mail: not yet available
1st IFAC IEEE, EECI, NSF Conference on Cyber-Physical & Human-Systems CPHS 2016	December 07 – 09	Florianopolis Brazil	http://www.cphs2016.org/ e-mail: not yet available
20th IFAC World Congress 2017	July 09 – 14	Toulouse France	http://www.ifac2017.org/ e-mail: contact@ifac2017.org
IEEE - CSS, IFAC, SICE, ICROS Conference on Conference on Asian Control Conference (in cooperation with IFAC) ASCC 2017	December 17 – 20	Gold Cast Australia	https://www.ascc2017.com/ e-mail: l.vlacic@griffith.edu.au
18th IFAC/IEEE CSS Symposium on System Identification SYSID 2018	July 09 – 11	Stockholm Sweden	http://not yet available e-mail: not yet available

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Das Sekretariat der IFAC befindet sich seit 1978 aufgrund eines Übereinkommens mit der Österreichischen Bundesregierung und mit der Österreichischen Akademie der Wissenschaften Laxenburg und mit der Sterreichischen Akademie der Wissenschaften Laxenburg und wird derzeit aus Mitteln des Bundesministeriums für Verkehr, Innovation und Technologie "BMVIT" gefördert.

