News from the IFAC Secretariat: Austrian Support

Contents:

Control Engineering Practice Paper Prize

Call for Nominations

The Control Engineering Practice Paper Prize Call for Nominations can be found on the IFAC website under

http://www.ifac-control.org/ news/2014-control-engineering- practice-paper-prize-call-for- nominations

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

Automatica
http://www.elsevier.com/locate/automatica

Control Engineering Practice
http://elsevier.com/locate/conengprac

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

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

Schlossplatz 12, Laxenburg, Austria. Permenent home of the IFAC Secretariat since 1978.

IFAC is a non-profit federation based in Switzerland with its headquarters in Zurich, as well as a permanent Secretariat in Austria. The IFAC Secretariat has been located at Schlossplatz 12 in Laxenburg, Austria (just south of Vienna) since 1978, following an invitation and agreement for financial support which were extended by the Austrian Federal Government. For many years that support was provided by the Austrian Federal Ministry for Science and Research (BMWF.) A major component of the support from the Austrian federal government has been to assist in partially financing the expenses incurred by the Secretariat in Austria, with other funds coming directly from the membership fees paid by the IFAC National Member Organizations (NMOs.)

In 2011 the agreement was ended by the BMWF and negotiations for further support began between IFAC and the Austrian Federal Ministry for Transport, Innovation and Technology (BMVIT.) These negotiations resulted in IFAC receiving funding, which is insignificantly less than the former support, from the BMVIT through an association support program. IFAC received support from the BMVIT for the year 2012. In exchange IFAC's secretariat is ready to assist the BMVIT with matters regarding control engineering activities in Austria. For example, the BMVIT called upon IFAC in the summer of 2012 to recommend experts to speak at the European Forum Alpbach, a conference bringing together internationally renowned experts in various fields in Alpbach, Tirol, Austria every summer since 1945.

The majority of the 2012 funding has been received by IFAC, with the last part to be received in April 2013 when IFAC submits a report to the BMVIT detailing IFAC activities in Austria. Preparations for further support in 2013, which would be the same as the 2012 support, are already in progress as of this writing.

Even with the change of funding, the IFAC Secretariat is still supported logistically by the Austrian Academy of Sciences. IFAC Secretariat staff members are employed under Austrian employment contracts (IFAC office holders are unpaid volunteers who serve IFAC on three-year terms– only the Secretariat staff members are permanent, salary-drawing employees) under Austrian employment law through the Academy. The Academy also assists IFAC with various technological aspects such as server and DNS hosting and public e-mail services, as well as support for all these services through the academy's computer center.

IFAC is grateful to the federal republic of Austria for the support they have provided over the years and looks forward to a continued relationship with and presence in Austria in the years to come.

Beginning with the February 2013 issue of this Newsletter the BMVIT logo has been and will continue to be published in each issue for the duration of BMVIT financial support. It is also an invitation to all organizations who are interested in automatic control to become active and involved in IFAC. Further information can be obtained from the IFAC Secretariat.

Kurt Schlacher, IFAC Secretary

Engine and Powertrain Control, Simulation and Modeling
E-COSM 2012
IFAC Workshop
Rueil-Malmaison, France, 23 – 25 October 2012

E-COSM'12, the 2012 IFAC Workshop on Engine and Powertrain Control, Simulation and Modeling, was held at IFP Energies nouvelles in Rueil-Malmaison (near Paris), France, from 23 to 25 October 2012.

The third of a conference series begun in 2006, E-COSM'12 has been organized in the joint framework of "Les Rencontres Scientifiques d'IFP Energies nouvelles" and IFAC, and sponsored by the IFAC Technical Committee 7.1 on Automotive Control and co-sponsored by four other IFAC Technical Committees.

E-COSM'12 examined the most recent developments in the fields of engine and powertrain control and modeling, emphasizing the interplay between control design and validation on the one hand, and physical modeling and simulation on the other. As in the previous editions, the aim was to offer academic and industrial researchers and practitioners working in the automotive control sector an opportunity to meet one another and exchange views and ideas at a relatively small-scale event.

166 attendees from 18 countries participated in the conference, with about one-fourth of them coming from industry. Young author and student participation was very strong, with more than fifty PhD students registered.

The papers and plenary talks that were presented covered a wide area of automotive topics and applications, from engine emission generation and abatement to energy management in hybrid vehicles. The conference covered not only traditional engine and powertrain control, simulation and modeling topics which have been the focus of the previous editions of E-COSM, but also new ones such as diagnostics, thermal management or vehicle dynamics control. Roughly one-third of the papers were related to hybrid vehicles and electrification. A total of 63 regular papers (out of 73 submitted) were presented in 13 regular sessions, as well as a poster session.

One of the highlights of the conference was the PHEV Control Benchmark, a competition among research teams in industry and academia to find the best energy management strategy for a plug-in electric vehicle. Nine teams from eight institutions submitted a solution. The 2000€ award, made possible by the IFP School – Fondation Tuck Chair on Hybrid Vehicle and Energy Management, was won by the University of Linköping team, led by Martin Sivertsson, under the supervision of Prof. Lars Eriksson (more details are available on the conference website at http://www.ecosm12.org)

Both university and industry contributed to the following sequence of five plenary lectures that summarized results and open problems: „A Challenging Future for the IC Engine: Can Control Help?" , Carlos Guardiola, Universitat Politècnica de València, Spain, „The Art of Control Engineering: Science Meets Industrial Reality"- Urs Christen, Ford Motor Research, Germany, „Optimal Energy Management of Hybrid Electric Vehicles: 15 years of Development at The Ohio State University" - Giorgio Rizzoni, Ohio State University, USA, „Overview of the Status of the Automotive Catalyst State Diagnosis Using Microwave-Based Techniques" - Ralf Moos, University of Bayreuth, Germany and „Diesel Engine Transients: Novel Diagnostic Technique and Real-Time Emissions Models For Control," Zoran Filipi, Clemson University, USA.

Papers presented at E-COSM'12 are hosted and available on-line on the IFAC-PapersOnLine.net website and are thus citable via an ISSN and a DOI. The best papers have been forwarded for consideration for publication in IFAC affiliated journals, and a special E-COSM'12 edition of the IFAC Journal *Control Engineering Practice* is under preparation. A further selection has been proposed to OGST (http://ogst.ifpenergiesnouvelles.fr), a bi-monthly journal indexed in the major international bibliographical databases.

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Bundesministerium
für Verkehr,
Innovation und Technologie

Submitted by Paolino Tona / IFPEN

Analysis and Control of Chaotic Systems
CHAOS 2012
IFAC Conference
Cancun, Mexico, 20 – 22 June 2012

The third IFAC meeting related to Analysis and Control of Chaotic Systems (CHAOS '12) was held in Cancun, Mexico, and sponsored by IFAC TC 2.1 (Adaptive and Learning Systems), Asociacion de Mexico de Control Automatico (AMCA), and Division de Matematicas Aplicadas at IPICyT (DMAp-IPICYT), from June 20-22, 2012. Previous meetings were held in Reims, France in 2006 and London, England in 2009.

The CHAOS12 meeting provided a forum for the presentation of new developments in the important interdisciplinary fields of chaos control and synchronization. The research activity in this field was driven by the needs of different application domains such as: biology (brain dynamics, heart dynamics), physics (optics, magnetics, fluid dynamics), mechanics, engineering (non-linear dynamics of electronic and power electronic systems, chaos encrypted signals), economics, chemical engineering etc. The aim of the conference was to provide the communities of control engineering, physics, economics, biology, fluid dynamics, power electronics, electronic circuits, etc. with an opportunity to exchange information and new ideas and to discuss new developments in the fields of chaos control and synchronization.

About 70 contribution papers were submitted, out of which 51 were accepted for presentation at the meeting with zero no-shows. The technical program included two plenary lectures entitled "On the Sympathy of Pendulum Clocks and Other Oscillators," given by Prof. Henk Nijmeijer (Netherlands) and "Network of Networks and Recurrence Networks: Novel Paradigms for Nonlinear Time Series Analysis," given by Prof. Juergen Kurths (Germany), in which both theory and applications were discussed.

In addition to the technical events participants were able to enjoy the climate and atmosphere of Cancun and the Mexican Riviera Maya along the Gulf of Mexico, as well as the conference banquet with local food and entertainment.

Submittted by Ricardo Femat, IPC chair.

Title	2013	Place	Further Information
IFAC Workshop Convergence of Information Technologies and Control Methods with Power Systems	May 22 – 24	Cluj-Napoca Romania	http://icps13.conference.utcluj.ro/ e-mail: icps13@conference.utcluj.ro
IFAC Workshop Workshop on Intelligent Manufacturing Systems (IMS 2013)	May 22 – 24	São Paulo Brazil	http://www.ims2013.poli.usp.br/ e-mail: not yet available
IFAC Workshop International Stability, Technology and Culture (SWIIS 2013)	June 06 – 08	Prishtina Kosovo	http://www.ubt-uni.net/swiis2013 e-mail: kopacek@ihrt.tuwien.ac.at
American Control Conference in cooperation with IFAC	June 17 – 19	Washington, DC USA	http://a2c2.org/conferences/acc2013/
IFAC Conference Manufacturing Modelling, Management and Control (MIM 2013)	June 19 – 21	St. Petersburg Russian Fed.	http://mim2013.org/ e-mail: noc@mim2013.org
Asian Control Conference (ASCC 13) in cooperation with IFAC	June 23 – 26	Istanbul Turkey	http://www.ascc.boun.edu.tr/ e-mail: ascc@boun.edu.tr
IFAC Symposium Intelligent Autonomous Vehicles IFAC-IAV 2013	June 26 – 28	Gold Coast City Australia	http://www.iav2013.org/ e-mail: l.vlacic@griffith.edu.au
IFAC Workshop Periodic Control Systems (PSYCO‘2013)	July 03 – 05	Caen France	http://psyco-2013.sciencesconf.org/ e-mail: psyco-2013@sciencesconf.org
IEEE IFAC Workshop Robot Motion and Control (RoMoCo 2013)	July 03 – 05	Warsaw Poland	http:// romoco.put.poznan.pl e-mail: waldemar.wroblewski@put.poznan.pl
IFAC Workshop Adaptation and Learning in Control and Signal Processing (ALCOSP 2013)	July 06 – 08	Caen France	http://www.ubt-uni.net/swiis2013 e-mail: alcosp-2013@sciencesconf.org
IFAC/IFORS/IMACS/IFIP Symposium Large Scale Complex Systems: Theory and Applications - 13th	July 07 – 10	Shanghai China	http://lss2013.sjtu.edu.cn e-mail: lss2013@sjtu.edu.cn
KEPCO, KSGA IFAC, KPX Conference International Smart Grid Conference & Exhibition 2013	July 08 – 11	Jeju Republic of Korea	http:// not yet available e-mail: not yet available
IFAC Workshop Thermodynamic Foundations of Mathematical Systems Theory	July 14 – 16	Lyon France	http://www.lagep.univ-lyon1.fr/TFMST2013/ e-mail: TFMST2013@lagep.univ-lyon1.fr
European Control Conference (ECC 13) in cooperation with IFAC	July 17 – 19	Zurich Switzerland	http://www.ecc13.ch/ e-mail: secretariat@ecc13.ch
INSTICC/ IFAC Conference Informatics in Control, Automation and Robotics (ICINCO10th)	July 29 – 31	Reykjavík Iceland	http://www.icinco.org/ e-mail: icinco.secretariat@insticc.org
IFAC/IFIP/IFORS/IEA) Symposium Analysis, Design, and Evaluation of Human-Machine Systems – HMS 2013	August 11 – 15	Las Vegas, Nevada USA	http://www.cs.wright.edu/ifac/ e-mail: not yet available
IFAC Symposium Mining, Mineral and Metal Processing (MMM 2013)	August 25 – 27	San Diego, California USA	http://www.flogen.org/MMM2013/ e-mail: symposiums@flogen.org
IFAC Symposium Advances in Control Education ACE 2013	August 28 – 30	Sheffield UK	http://ace2013.group.shef.ac.uk/ e-mail: ace2013@shef.ac.uk

FORTHCOMING EVENTS (ctd)

Title		Place	Further Information
IFAC Conference Modelling and Control in Agriculture, - Horticulture and Post Harvest Industry (AGRICONTROL 2013)	August 28 – 30	Espoo Finland	http://agricontrol2013.automaatioseura.com/ e-mail: office@atu.fi
IFAC Symposium Automatic Control in Aerospace ACA 2013	September 02 – 06	Wuerzburg Germany	http://www7.informatik.uni-wuerzburg.de/aca2013 e-mail: aca2013@informatik.uni-wuerzburg.de
IFAC Conference Intelligent Control and Automation Science ICONS 2013	September 02 – 04	Chengdu China	http://risit.org/icons2013 e-mail: sec.icons@gmail.com
IFAC Symposium Nonlinear Control Systems - NOLCOS	September 04 – 06	Toulouse France	http://www.laas.fr/NOLCOS2013 e-mail: nolcos2013@laas.fr
IFAC Workshop Dependable Control of Discrete Systems (DCDS 4th)	September 04 – 06	York United Kingdom	http://dcds13.net.dcs.hull.ac.uk/ e-mail: not yet available
IFAC Symposium Advances in Automotive Control AAC 2013	September 04 – 07	Tokyo Japan	http://www.sice.or.jp/IFAC-AAC2013 e-mail: ifac-aac2013@c-linkage.co.jp
IFAC (ACM) Conference Management and Control of Production and Logistics – MCPL 2013	September 12 – 14	Fortaleza Brazil	http://www.cti.gov.br/mcpl2013/ e-mail: mcpl2013@cti.gov.br
IFAC Workshop Advances in Control and Automation Theory for Transportation Applications (ACATTA)	September 16 – 17	Istanbul Turkey	http://www.acatta13.itu.edu.tr/ e-mail: not yet available
IFAC Conference Control Applications in Marine Systems CAMS 9th 2013	September 18 – 20	Osaka Japan	http://cams2013.naoe.eng.osaka-u.ac.jp/ e-mail: not yet available
IFAC Workshop Distributed Estimation and Control in Networked Systems (NecSys 4th)	September 25 – 26	Koblenz Germany	http://www.necsys2013.rub.de e-mail: necsys2013@atp.rub.de
IFAC Conference Programmable Devices and Embedded Systems PDeS 2013	September 25 – 27	Velké Karlovice Czech Republic	http://pdes-conference.eu e-mail: noc@pdes-conference.eu
IFAC/IEEE CSS Workshop Control of Systems Modeled by Partial Differential Equations (CPDE)	September 25 – 27	Paris France	http://www.cpde2013.fr/ e-mail: contact@cpde2013.fr
IFAC Symposium Telematics Application TA 3rd 2013	November 11 – 13	Seoul Republic of Korea	http://ta2013.yonsei.ac.kr/ e-mail: not yet available
ESF, SIAM IFAC Workshop Mathematical Control	December 03 – 06	Trieste Italy	http://mct.lsis.org e-mail: mct@lsis.org
IFAC Symposium Computer Applications in Biotechnology (CAB 2013)	December 16 – 18	Mumbai India	http://www.cab2013.org/ e-mail: cab2013@che.iitb.ac.in
IFAC Symposium Dynamics and Control of Process Systems (DYCOPS 2013)	December 18 – 20	Mumbai India	http://www.dycops2013.org/ e-mail: not yet available
Title	**2014**	**Place**	**Further Information**
IFAC Workshop Discrete Event Systems (WODES 2014)	May 14 – 16	Paris France	http://wodes2014.lurpa.ens-cachan.fr/ e-mail: jean-marc.faure@lurpa.ens-cachan.fr
19th IFAC World Congress	August 25 – 29	Cape Town South Africa	http://www.ifac2014.org/ email: not yet available
Title	**2015**	**Place**	**Further Information**
IFAC Symposium System Identification – SYSID 2015	October 19 – 21	Beijing China	http://not yet available e-mail: not yet available