

Control Engineering Practice: Introducing Biao Huang, Editor-in-Chief

Control Engineering Practice has had new editorship since 1 January 2018. The new Editor-in-Chief is Biao Huang (CA), who previously served as Deputy Editor-in-Chief under Andreas Kugi (AT). In this issue Newsletter readers can learn more about *Control Engineering Practice* from its new Editor-in-Chief, as well as some of the journal's upcoming changes and plans.

As of January 2018, I have assumed the role of Editor-in-Chief of IFAC's journal *Control Engineering Practice*. Control Engineering is a discipline that applies control theory to design systems with desired behaviors amidst external disturbances. It also ascertains the functioning of systems while simultaneously adhering to the expectations. Thus it covers a wide range of subjects such as modeling, control, optimization and monitoring. Control Systems have widespread applications in a number of different fields including but not limited to homes, cars, factories, communications, medical services, transportation, robotics, military, and aerospace, etc.

Control Engineering consists of both theoretical developments and practical applications. The journal *Control Engineering Practice* strives to meet the needs of industrial practitioners, academics and researchers with inclination towards industries. It publishes papers which illustrate the direct application of profound control theory and its supporting tools in all possible areas of automation. As a result, the journal portrays a unique proposition towards publishing significant contributions made towards application of advanced control strategies.

Under the leadership of Andreas Kugi, *Control Engineering Practice* has embarked on a remarkable journey publishing high-quality content with a global outreach with contributions from researchers and practitioners alike. I take this opportunity to thank Andreas Kugi as well as earlier EiCs and their editorial teams for establishing a strong foundation to this journal. My vision is to further the core values of the journal and establish its rightful place as a premier venue for control engineering researchers and practitioners to access practicing control engineering publications of the highest caliber and contribute back with their results. I endeavor to position the journal as a preferential choice for the highest quality submissions covering a broad spectrum from traditional areas of control engineering practice to emerging fields of

interest to our control community. In addition, I intend to further enhance the review process with timely and high-quality objective feedback made available to the authors. I will ensure a more diverse and efficient editorial board, and streamline mechanisms of both the editorial board member appointment and functioning. In the forthcoming editorial notes, both the board and readers may expect further details in the aspects discussed and upcoming changes.

Biao Huang, Editor-in-Chief of the IFAC Journal *Control Engineering Practice*, received his PhD degree in Process Control from the University of Alberta, Canada, in 1997. He holds a MSc degree (1986) and a BSc degree (1983) in Automatic Control from the Beijing University of Aeronautics and Astronautics (CN). He joined the University of Alberta in 1997 as an Assistant Professor in the Department of Chemical and Materials Engineering, and is currently a Full Professor, NSERC Senior Industrial Research Chair in Control of Oil Sands Processes, and Alberta Innovates Industry Chair in Process Control.



Huang is an IEEE Fellow, Fellow of the Canadian Academy of Engineering, and Fellow of the Chemical Institute of Canada. He is a recipient of a number of awards including Alexander von Humboldt Research Fellowship from Germany, Best Paper award from IFAC *Journal of Process Control*, APEGA Summit Award in Research Excellence, and the Bantrel Award in Design and Industrial Practice. He has published five books and over 320 peer-reviewed journal papers. His research interests include: process control, data analytics, Bayesian inference, system identification, control performance assessment, fault detection and isolation, and soft sensors. He has applied his expertise extensively in industrial practice.

In addition to currently serving as the Editor-in-Chief for IFAC Journal *Control Engineering Practice*, Biao Huang is Subject Editor for *Journal of*

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The IFAC Journals

Automatica

<http://www.journals.elsevier.com/automatica>

Control Engineering Practice

<http://www.journals.elsevier.com/control-engineering-practice>

Engineering Applications of Artificial Intelligence

<http://www.journals.elsevier.com/engineering-applications-of-artificial-intelligence>

Journal of Process Control

<http://www.journals.elsevier.com/journal-of-process-control>

Annual Reviews in Control

<http://www.journals.elsevier.com/annual-reviews-in-control>

Journal on Mechatronics

<http://www.journals.elsevier.com/mechatronics>

Nonlinear Analysis: Hybrid Systems

<http://www.journals.elsevier.com/nonlinear-analysis-hybrid-systems>

IFAC Journal of Systems & Control

<http://www.journals.elsevier.com/ifac-journal-of-systems-and-control>

IFAC-PapersOnLine

<http://www.journals.elsevier.com/ifac-papersonline>

the Franklin Institute, and Associate Editor for *Journal of Process Control*. He has also recently served as Associate Editor for the *Canadian Journal of Chemical Engineering*, NOC Chair for 2015 IFAC ADCHEM and IPC Chair for 2017 AdCONIP.

Article and Bio submitted by Biao Huang,
CEP Editor-in-Chief

2018 IFAC Council and Related Meetings 1-3 September 2018 Florianópolis, BR

The 2018 IFAC Council and Related Meetings will take place in Florianópolis, Brazil in conjunction with ROCOND 2018 and LPVS 2018 from 1-3 September 2018.

Please check the event websites for details concerning the various dates, hotel information, etc.:

<http://rocond18.ufsc.br/#>

<http://lpvs18.ufsc.br/#>

Additionally please check the visa requirements for Brazil (visas are required for the citizens of many countries, including but not limited to: USA, Canada, Australia, as well as most countries in Asia, Africa and Oceania. Visa information can be found at

<http://www.portalconsular.itamaraty.gov.br/vistos>

IFAC meeting participants are kindly requested to submit their reply forms to the IFAC Secretariat as soon as possible, as well as inform their committee chairs regarding their planned attendance. The link to the form can be found at:

<https://www.ifac-control.org/AdminMeeting-Form>

Introducing the IFAC 2017-2020 Officers

IFAC President

Frank Allgöwer (DE) is Professor in the Mechanical Engineering Department of the University of Stuttgart in Germany, director of the Institute for Systems Theory and Automatic Control (IST) and director of the Stuttgart Research Centre for Systems Biology (SRCSB). He studied Engineering Cybernetics and Applied Mathematics in Stuttgart and at the University of California at Los Angeles (UCLA) respectively and received his Ph.D. degree from the University of Stuttgart. Prior to his present appointment he held an assistant professorship in the electrical engineering department at ETH Zurich and visiting positions at Caltech, the NASA Ames Research Center, the DuPont Company, the University of California at Santa Barbara and the University of Newcastle in Australia. Since 2012 Frank serves in addition as Vice-President of Germany's most important research funding agency, the German Research Foundation (DFG) in Bonn, Germany.

Frank Allgöwer's main interests in research and teaching are in the area of systems and control with emphasis on the development of new methods for the analysis and control of nonlinear systems, networks of systems, optimization based control and data based control. His application interests span a wide range from chemical engineering via mechatronic systems to systems biology. He has published over 500 scientific articles on his research and received several recognitions including several best paper awards, an IFAC Fellowship, the IFAC Outstanding Service Award, the IEEE CSS Distinguished Member Award, the State Teaching Award of the German state of Baden-Württemberg, and the Leibniz Prize, which is the most prestigious award in science and engineering awarded by the Deutsche Forschungsgemeinschaft.

Frank Allgöwer has served IFAC in many positions over the last two decades. Among others he was Editor for IFAC's flagship journal *Automatica* for 13 years, chairman of the IFAC Technical Committee on Nonlinear Systems, Member of IFAC's Policy Committee, Member of the IFAC Council and Chair of the Administration and Finance Committee. Since 2017 he is President of IFAC until the Berlin World Congress in 2020.



In addition to his activities within IFAC, Frank is also involved in other scientific and societal organizations. He served, for example, the IEEE Control Systems Society as Vice-president for Technical Activities in 2013/14, was repeatedly a member of IEEE CSS Board of Governors, and has been the chairman of the CSS International Affairs Committee for 2007-2013. In addition he has been a member of the council of the European Union Control Association (EUCA) and a member of the Board of Governors of the VDI/VDE Society for Measurement and Automatic Control. Frank has been organizer or co-organizer of more than a dozen international conferences.

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Readers of this Newsletter are kindly requested to keep their contact details updated with the IFAC Secretariat.
<https://www.ifac-control.org/about/ifac-affiliate-registration>

From the IFAC President

Dear Friends and Colleagues,

More than six months have already passed since the IFAC World Congress in Toulouse and the numerous volunteers in all the IFAC offices are already busy working on new ideas and their realization for the current triennium. While there are over 2000 volunteers working in IFAC, there are a few persons and offices that I want to present in this month's short presidential column and that are introduced in a bit more detail through individual profiles in this month's IFAC Newsletter.

The IFAC President, nominated by the Council and elected by the General Assembly, legally represents the Federation. It is an honor and a privilege to follow in the footsteps of 21 brilliant IFAC Presidents preceding me, to foster the strengths of IFAC, to keep the daily business running, and at the same time modernize and refine where beneficial. This task is of course not possible without, amongst others, the elected officers of IFAC and the IFAC Secretary. Besides the President, the elected officers include the Immediate Past President, the President-Elect, the Vice-Presidents and the IFAC Treasurer.

As many processes and changes last more than three years and to guarantee continuity within the officers, the Immediate Past President, Janan Zaytoon from the University of Reims Champagne-Ardenne, and the President-Elect, Hajime Asama from the University of Tokyo, are essential positions within the officers and are both involved in all issues of central relevance. The day-to-day operating business is divided into the competence of the Executive Board (EB), that is responsible for the executive activities of IFAC through various Executive Committees, and the Technical Board (TB), which is responsible for all technical meetings and publications. The chairs of the EB and the TB, respectively, are the Vice-Presidents within the officers. For the triennium that just started, the Vice-President (EB) is Paul Van den Hof from the Eindhoven University of Technology and the Vice-President (TB) is Dong-Il "Dan" Cho from the Seoul National University, together with Carlos Pereira from the Federal University of Rio Grande do Sul. Two more essential positions are the Treasurer, John Lygeros from the ETH Zürich, who handles all financial matters of IFAC, and the Secretary Kurt Schlacher from the Johannes Kepler University Linz, who organizes and monitors the work of the Secretariat, both doing an incredible and most reliable job in serving the community. For further details on these individuals please see the profiles in this newsletter.

With these officers and all the other IFAC volunteers and IFAC affiliates at my side, I am very much looking forward to serving IFAC during this triennium. I also want to take the chance to thank the officers, and of course all other IFAC volunteers, for investing time and effort to serve IFAC and hence the control community in general without any compensation.

Frank Allgöwer

Immediate Past-President

Janan Zaytoon (FR), born in 1962, (BSc Eng./1983, MSc Eng./1986, DEA/1988, PhD/1993, Habilitation/1997) is a professor at the University of Reims Champagne-Ardenne (FR). He is the Immediate-Past President/ currently in charge of membership of the International Federation of Automatic Control (IFAC), the Past Director of the French national research network/group "GDR MACS of CNRS" (with 2000 researchers and engineers involved), and the Founder and Past Director of the CReSTIC Research Center at the University of Reims Champagne-Ardenne (150 researchers and PhD students involved). He is currently the Vice-Chair of the IFAC Foundation and a Member of the IFAC Council (2017-2020).

J. Zaytoon's work is related to the areas of discrete-event systems, hybrid systems, and intelligent control systems. He published and edited 52 books, conference proceedings and special journals issues. He also published 60 journal papers, 126 conference papers, and 6 patents. He was the advisor of 18 PhD students and 5 "Habitations".

J. Zaytoon is the co-founder of the *Nonlinear Analysis: Hybrid Systems* Journal. He moved this journal to the IFAC Publication portfolio after serving as its Editor-in-Chief. He is an Associate Editor of *Control Engineering Practice* and *Discrete Event Dynamic Systems*.



During Zaytoon's term as IFAC President (2014-2017), the 2017 IFAC World Congress was organized in Toulouse (FR) and attracted a record of 3463 participants from 68 countries. Janan Zaytoon initiated the series of IFAC ADHS Conferences on Analysis & Design of Hybrid Systems, and the series of IFAC CHAOS (Conferences on Analysis and Control of Chaotic Systems). He has chaired 15 international conferences and 12 national conferences. He chaired the IFAC Technical Committee on Discrete-Event and Hybrid Systems, and received the IFAC Outstanding Service Award and the 2014 Paper Prize of the Journal of *Engineering Applications of Artificial Intelligence*.

Janan Zaytoon has been an invited plenary speaker for eight international conferences, and invited visitor at ten universities. He has also chaired the scientific excellence award committee of the French Ministry of Higher Education and Research. He has been an expert for many institutions, and national and international bodies.

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

<https://www.ifac-control.org/>

Vice-President/Executive Board Chair

Paul M.J. Van den Hof (NL) received the M.Sc. and Ph.D. degrees in electrical engineering from Eindhoven University of Technology, Eindhoven, The Netherlands, in 1982 and 1989, respectively.

In 1986 P. Van den Hof moved to Delft University of Technology (NL), where he was appointed as Full Professor in 1999. From 2003 to 2011, he was founding co-director of the Delft Center for Systems and Control (DCSC), with appointments in the faculty of Mechanical, Maritime, and Materials Engineering, and the faculty of Applied Sciences. From 2005-2015 he was scientific director of the Dutch Institute of Systems and Control (DISC), and representing the Dutch NMO in IFAC. As of 2011, he is a Full Professor in the Electrical Engineering Department, Eindhoven University of Technology, where he is heading the Control Systems Group.



P. Van den Hof's research interests include system identification, identification for control, and model-based control and optimization, with applications in industrial process control systems, including petroleum reservoir engineering systems, and high-tech systems. He has been coordinator of an EU project on Advanced Autonomous Model-Based Operation of Industrial Process Systems (Autoprofit), aiming at autonomous on-line model and controller tuning in MPC-type applications, and he has had long-term collaboration projects, mainly with TU Delft and Shell, in model-based optimization in petroleum reservoir engineering systems. He is an author of two edited books, one of which is on Modelling and Identification with Rational Orthogonal Basis Functions (jointly with Peter Heuberger and Bo Wahlberg).

Over the last years P. Van den Hof has initiated a new research line in data-driven modeling in structured dynamic networks, where the modelling aspects are considered that e.g. underlie distributed and multi-agent control systems. Since 2016 he holds an ERC Advanced Research Grant for a research program on identification in dynamic networks.

Paul Van den Hof is an IFAC Fellow and IEEE Fellow, and an Honorary Member of the Hungarian Academy of Sciences. He has been a member of the IFAC Council (1999-2005, 2017-2020), the Board of Governors of IEEE Control Systems Society (2003-2005), Associate Editor and Editor of *Automatica* (1992-2005), and General Chair of the 13th IFAC Symposium on System Identification that was held in Rotterdam, The Netherlands in 2003. Further he has served IFAC in earlier roles as Member and Chair of the IFAC Awards Committee (2008-2017).

Vice-President/Technical Board Chair

Dong-II "Dan" Cho (KR) was born in Seoul, Korea, and received the B.S.M.E. from Carnegie-Mellon University (US) and the S.M. and Ph.D. degrees from Massachusetts Institute of Technology (US). From 1987 to 1993, he was an assistant professor at Princeton University (US) in the Department of Mechanical and Aerospace Engineering. Since 1993, he has been a Professor at Seoul National University (KR) in the Department of Electrical and Information Engineering. He has served as the Director of Automation and Systems Research Institute, Director of Microsystems Technology Center, and currently serves as the Director of Biomimetic Robot Research Center.



D. Cho's research interests are applications of control and microfabrication technologies to sensors, robotics, motion control, biomimetic systems, and quantum devices. He has authored and coauthored more 120 international journal articles and more than 40 US and 80 Korean patents in those areas. Many of these technologies have been licensed to industry, and in particular several control techniques are currently used in production systems. He was also a founder and co-founder of two start-up companies related to those fields.

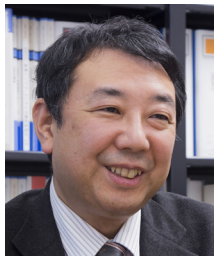
D. Cho received the Korean Minister of Communications Award (2006), the IFAC Outstanding Service Award (2011), and the ICROS Academic Award (2015). He has served on the editorial board of many international journals, including those published by IFAC (Elsevier), IEEE, ASME, and IOP. Currently, he is Senior Editor of the *IEEE Journal of MEMS* (since 2012) and *Mechatronics* (since 2017). He actively has participated (and has committed to participate) in organizing many conferences, including the 1997 Asian Control Conference (General Secretary), 2005 IFAC World Congress (IPC Vice-Chair), 2006 Transducers (Local Chair), 2008 IFAC World Congress (IPC Chair), 2011 IFAC World Congress (IPC Vice-Chair), 2017 ICCAS (General Chair), 2019 IEEE CCTA (Advisory Board), and 2020 IEEE CDC (Advisor).

D. Cho serves (or has served) for numerous professional organizations, including as the President of ICROS (2017), Vice President of IFAC (2017-2020), Chair of the Technical Board of IFAC (2017-2020), Council Member of IFAC (2014-2017), Vice-Chair of the Technical Board of IFAC (2011-2014), Member of the Technical Board of IFAC (2002-2011), BOG Member of IEEE Control System Society (2017), AdCom Member of IEEE Electron Device Society (2006-2012), BOG Member at Large of IEEE Electron Device Society (2012-2018), and Steering Committee of International Conferences on

Solid-State Sensors, Actuators and Microsystems (2013-2021). He is an elected member of National Academy of Engineering of Korea, as an Ordinary Member (2009-2012) and as a Senior Member (2012-2017, 2018-2023).

President-Elect

Hajime Asama (JP) received his B. S., M. S., and Dr. Eng in Engineering from the University of Tokyo (JP), in 1982, 1984 and 1989, respectively. He worked at RIKEN (Institute of Physical and Chemical Research) in Japan from 1986 to 2002 as a research scientist, etc. He became a professor of RACE (Research into Artifacts, Center for Engineering) of the University of Tokyo in 2002, and a professor of School of Engineering at the University of Tokyo since 2009. He received the RSJ (Robotics Society of Japan) Distinguished Service Award in 2013, and the JSME (The Japan Society of Mechanical Engineers) Robotics and Mechatronics Award in 2009.



H. Asama was the chair of CC7 (Transportation and Vehicles Systems) of IFAC from 2011 to 2017. He served as the Chair of IFAC committee in the Science Council of Japan, the Japanese IFAC NMO (National Member Organization). In addition, he served as the chair of TC 7.5 (Intelligent Autonomous Vehicles) from 2002 to 2005, the vice-president of RSJ in 2011-2012, and as an AdCom (Administrative Committee) member of IEEE (The Institute of Electrical and Electronics Engineers) Robotics and Automation Society in 2007-2009. Currently, he is the president-elect of IFAC since July 2017, and the president of International Society for Intelligent Autonomous Systems since 2014, and an associate editor of Control Engineering Practice, Journal of Robotics and Autonomous Systems, and Journal of Field Robotics. He served as the director of the Mobiligence (Emergence of adaptive motor function through the body, brain and environment) program in the MEXT (Japanese Ministry of Education, Culture, Sports, Science and Technology) Grant-in-Aid for Scientific Research on Priority Areas from 2005 to 2009. He has served as a member of Science Council of Japan from 2014 to 2017, and a member of IFAC Council since 2017. He is a Fellow of IEEE, JSME and RSJ.

H. Asama is a member of the Expert Committee on Fuel Removal of NDF (Nuclear Damage Compensation and Decommissioning Facilitation Corporation), a member of the technical committee of IRID (International Research Institute for Nuclear Decommissioning), a member of the technical committee on mockup testing facility of JAEA (Japan Atomic Energy Agency), as well as the project leader on Dis-

aster Response Robots of COCN (The Council on Competitiveness-Japan), etc.

H. Asama's research interests are service robotics, distributed autonomous robotic systems (self-organizing robots, cooperation of multiple autonomous mobile robots), rescue robotics, Mobiligence, embodied-brain systems science, bio-inspired robotics, ambient intelligence, ubiquitous systems, sensor networks, service engineering, human-robot interaction, human interface, disaster response robots, rehabilitation robots, maintenance engineering, and bioprocess engineering.

Technical Board Vice-Chair

Carlos E. Pereira (BR) received his B.S. and M.S. degrees in Engineering and Computer Science from the Federal University of Rio Grande do Sul (UFRGS) Brazil, in 1987 and 1990 respectively, and the Dr.-Ing. degree in Electrical Engineering from the University of Stuttgart (DE) in 1995. He worked as Group Leader of the Embedded Information Devices Group at United Technologies Research Center (UTRC) from 2000 to 2001 and acted as Director of CETA – Center of Excellence in Advanced Technologies in Brazil from 2002 to 2007. Currently he is a professor of Industrial Automation at UFRGS and also acts as a director of Operations at EMBRAPIL, where he coordinates a network of 42 applied research centers. EMBRAPIL is a Brazilian organization, inspired by models such as Fraunhofer from Germany and Catapult from UK, whose goal is to foster the development of industry-academia collaboration projects.



From 2008 to 2010 C. Pereira was President of the Brazilian Automation Society, the Brazilian IFAC National Member Organization and later became Member and then President of the SBA Council. He has held several IFAC leadership positions, such as TC Chair for the IFAC TC on Manufacturing Plant Control, Vice-Chair of the TC on Telematics Control, and IFAC Council Member (from 2011 to 2017). Currently he is serving as the Vice Co-Chair of the IFAC Technical Board and as a member of the IFAC Industry Committee (a new initiative of IFAC as of the 2017-2020 triennium).

C. Pereira served as general co-chair for several IFAC events held in Brazil (WRTP 1997, IMS 1998, IAD 2001, INCOM 2004, and TA 2016). He is an Associate Editor of the IFAC Journals *Control Engineering Practice* and *Annual Reviews of Control* and is Deputy Editor-in-Chief of the recently created *IFAC Journal of Systems and Control*. He has authored more than 400 technical publications for conferences and journals.

C. Pereira's research focuses on methodologies and tool support for the development of distributed real-time embedded systems, with special emphasis on industrial automation applications and the use of distributed objects over industrial communication protocols. He has worked on several research projects in collaboration with industry, mostly dealing with the development of real-time computer-based systems and has contributed to the creation of several spin-off companies. He has been awarded the 2012 Friedrich Wilhelm Bessel Research Award from the Alexander von Humboldt Foundation, the IFAC Outstanding Service Award in 2014 and was the supervisor of the team that won the IEEE President's Change the World Competition in 2011.

IFAC Treasurer

John Lygeros (CH) completed a B.Eng. degree in electrical engineering in 1990 and an M.Sc. degree in Systems Control in 1991, both at Imperial College of Science, Technology, and Medicine, London (UK). In 1996 he obtained a Ph.D. degree from the Electrical Engineering and Computer Sciences Department, University of California, Berkeley (US). After a series of postdoctoral researcher appointments, in 2000 he joined the Department of Engineering, University of Cambridge (UK), as a University Lecturer and Churchill College, Cambridge (UK) as a Fellow. Between 2003 and 2006 he was an Assistant Professor at the Department of Electrical and Computer Engineering, University of Patras (GR).



In July 2006 J. Lygeros joined the Automatic Control Laboratory at ETH Zürich (CH). He is currently serving at ETH Zürich as a professor, Head of the Automatic Control Laboratory and Head of the Department of Information Technology and Electrical Engineering.

J. Lygeros' research interests include modeling, analysis, and control of hierarchical, hybrid, and stochastic systems, with applications to biochemical networks, automated highway systems, air traffic management, power grids and camera networks. He teaches classes in the area of systems and control at both the undergraduate and graduate levels at ETH Zurich, notably the 4th semester class *Signals and Systems II*, which he delivers in a flipped classroom format. John Lygeros is a Fellow of the IEEE, and a member of the IET and of the Technical Chamber of Greece. He has been serving as the Treasurer of IFAC and a member of the IFAC Council since 2013.

The IFAC Story E-book is available!

<https://www.ifac-control.org/about/the-ifac-story>

IFAC Secretary

Kurt Schlacher (AT), born in 1955 in Graz, Austria, studied electrical engineering from 1973 – 1979 at the Technical University Graz. After completing his compulsory military service he finished his doctoral studies in 1984 at the Technical University Graz, where he received the Venia Docendi (habilitation) in 1990. Since 1992 he is professor for automatic control in the mechatronics group at the Johannes Kepler University (Linz, Austria), where he is currently Head of the Institute of Automatic Control and Control Systems Technology.



K. Schlacher's main theoretic interests are differential geometric methods for advanced modeling and control system design of lumped and distributed parameter systems, Hamiltonian and Lagrangian field theories and flatness. Together with his group he published more than 100 peer-reviewed papers about these topics. But he is also interested in the application of the methods to industrial relevant processes. From 1999 to 2006 he was head of the Christian Doppler Laboratory for Automatic Control of Mechatronic Systems in Steel Industries. Christian Doppler Laboratories belong to an Austrian excellence initiative for application-oriented basic research. Since 2008 he has taken part in several excellence programs. Application of nonlinear control advanced feed forward in injection molding for plastic industries was the main research contribution to the Austrian Center of Competence in Mechatronics (2008-2012). Advanced control for hot rolling mills based on image processing was one of the research topics for the Linz Center of Mechatronics (2013 - 2018). Support for autonomous driving of tractors was a contribution to center Future Farm Technology (2011-2014). Currently he is involved in dosage and gravimetric control for continuous processes in plastic industries for the center Pro2Future (since 2017). The outcome of the industrial research is documented by patents.

In addition Kurt Schlacher has been involved with IFAC over many years. He serves as IFAC Secretary since 2005 after having been the Austrian representative on the IFAC Council since 2002. During the presidency (2005-2008) of Wook Hyun Kwon (KR) the IFAC Secretariat replaced the old pure HTML web-site by a Content Management System and helped to set up IFAC-Papers OnLine. The latter was presented in 2008 in Seoul (KR) at the IFAC World Congress to our community. The following period 2008-2011 with president Alberto Isidori (IT) was a time of changes. Because of a new policy of the Austrian administration the long term contract between Austria and IFAC was canceled. With the assistance of the

Secretariat IFAC succeeded in preserving the association financial support subsidy, which continues today. He received the Outstanding Service Award in 2011 at the IFAC World Congress in Milan (IT). Leading up to and during the presidency (2011-2014) of Ian Craig (ZA) there were several changes of the staff in the IFAC Secretariat in Laxenburg. Barbara Aumann and Ernestine Rudas retired, and Elske Haberl and Katharina Willixhofer joined IFAC. In addition the IFAC website and newsletter got a new look, and the social media presence of IFAC started. POL is now IFAC-PapersOnLine on Science Direct, with the change taking place during the presidency (2014-2017) of Janan Zaytoon (FR). The almost complete collection of papers of the IFAC events since 1960 hosted in Laxenburg were digitized and have been made available to our community since 2017

IFAC Email Aliases are available! Sign up with the address with which you are registered with IFAC at:

<https://hera.ifac-control.org/ifacmail/>

If you need any assistance to complete the process please contact the Secretariat.

IFAC is on social media!
 Direct links to IFAC's presence on Facebook, LinkedIn, and Twitter can be found on the IFAC website.

In addition check out the IFAC Blog at
<https://blog.ifac-control.org/>

ICINCO 2017 26-28 July 2017 Madrid, ES

ICINCO 2017 was held in Madrid, Spain from 26-28 July 2017. The event emphasized the connection of Informatics, Control, Automation and Robotics, and therefore ICINCO authors in general highlighted the benefits of Information Technology (IT) in these areas. Some papers presented innovative ideas on how to solve problems using IT, both in R&D and industrial applications. Other papers described advanced prototypes, systems, tools and techniques. The main topic areas addressed at ICINCO 2017 included intelligent control systems and optimization, robotics and automation, signal processing, sensors, systems modelling and control, and industrial informatics. The conference received 214 paper submissions from 45 countries. To evaluate each submission, a double blind paper review was performed by the Program Committee. After a stringent selection process, 55 papers were published and presented as full papers, i.e. completed work (10 pages/30' oral presentation) and 50 additional short papers were presented orally. Some poster presentations were also accommodated. The total oral and paper presentation acceptance ratio was close to 69%.

During the three days in Madrid, the 148 delegates were actively engaged in various activities, including oral presentations, poster pres-

entations, keynote sessions, and also some social events to promote networking. The networking/social activities included a welcome cocktail, the conference dinner and a farewell cocktail.



Entertainment at the social program component of ICINCO 2017

ICINCO's program included four invited talks delivered by internationally distinguished speakers, namely: Andre Rosendo (Shanghai Tech University, CN), Vitor Santos (Universidade de Aveiro, PT), Wolfram Burgard (University of Freiburg, DE) and Carme Torras (Institut de Robòtica i Informàtica Industrial (CSIC-UPC, ES).

ICINCO 2017 began with an opening session chaired by Prof. Oleg Gusikhin (Ford Motor Company, US) including a panel on "The Path to Autonomy: Teaching Robots to Deal with Humans" which was carried out with the participation of all keynote speakers.

At the closing session, the conference acknowledged a few papers that were excellent in their class, presenting a "Best Paper Award" and a "Best Student Paper Award". These awards were conferred to the authors indicated below:

Best Paper Award

Area: Robotics and Automation

Using Geometry to Detect Grasping Points on 3D Unknown Point Cloud

Winners: Brayan S. Zapata-Impata, Carlos M. Mateo, Pablo Gil and Jorge Pomares

Best Student Paper Award

Area: Intelligent Control Systems and Optimization

Evolutionary Type-2 Fuzzy Blood Gas Models for Artificially Ventilated Patients in ICU

Winners: S. H. Indera-Putera and M. Mahfouz

Preparations are underway for ICINCO 2018, to be held in Porto, Portugal from 29-31 July 2018, and we invite all researchers that may have an interest in informatics in control, automation and robotics to check the conference website and submit a paper at <http://www.icinco.org/>

Submitted by: Ana Guerreiro,
 ICINCO Secretariat

Calendar of IFAC Events

Title	2018	Place	Further information
2nd ASET/IFAC/IEEE International Conference on Advanced Systems and Electrical Technologies IC_ASET 2018	March 22 – 25	Hammamet Tunisia	http://aset.ieee.tn/ abdessattar.benamor@yahoo.fr
6th IFAC/IEEE (TC on DPS) Workshop on Lagrangian and Hamiltonian Methods for Nonlinear Control LHMNC 2018	May 01 – 04	Valparaiso / Viña del Mar Chile	http://www.lhmncl8.org/ juan.yuz@usm.cl
3rd IFAC Conference on Advances in Proportional-Integral-Derivative Control PID 2018	May 09 – 11	Ghent Belgium	http://www.pid18.ugent.be/ pid18@ugent.be
1st IFAC Workshop on Integrated Assessment Modelling for Environmental Systems IAMES 2018	May 10 – 11	Brescia Italy	https://iames2018.unibs.it/ iames2018@unibs.it
15th IFAC Conference on Programmable Devices and Embedded Systems PDES 2018	May 23 – 25	Ostrava Czech Republic	http://pdes-conference.eu/ zdenek.slanina@vsb.cz
14th IFAC/IEEE Workshop on Discrete Event Systems WODES 2018	May - June 30 – 01	Sorrento Coast - Castellammare di Stabia (NA) Italy	http://wodes2018.unisa.it/ wodes2018@unisa.it
3rd IFAC Workshop on Automatic Control in Offshore Oil and Gas Production OOGP 2018	May - June 30 – 01	Esbjerg Denmark	http://ifac-oogp2018.org/ secretariat@ifac-oogp2018.org
15th IFAC Symposium on Control in Transportation Systems CTS 2018	June 06 – 08	Savona Italy	http://www.cts2018.unige.it/ cts2018@unige.it
3rd IFAC Conference on Embedded Systems, Computational Intelligence and Telematics in Control CESCIT 2018	June 06 – 08	Faro Portugal	http://www.cescit2018.org/ geral@untappedevents.pt
16th IFAC et al. Symposium on Information Control Problems in Manufacturing INCOM 2018	June 11 – 13	Bergamo Italy	http://www.incom2018.org/ secc@incom2018.org
Conference on European Control Conference (in cooperation with IFAC) ECC 2018	June 12 – 15	Limassol Cyprus	http://ecc18.eu/ ecc18@ucy.ac.cy
IFAC Workshop on Networked & Autonomous Air & Space Systems NAASS 2018	June 13 – 15	Santa Fe, NM USA	https://sites.google.com/site/naass2018/ richardscotterwin@gmail.com
2nd IFAC Conference on Modelling Identification and Control of Nonlinear Systems MICNON 2018	June 20 – 22	Guadalajara Jalisco, Mexico	https://www.micnon2018.org/ contact@micnon2018.org
IEEE, IFAC et al. Conference on Blockchain and Knowledge Automation ICBKA 2018	June 25 – 26	Changshu, Jiangsu, China	http://www.2018iv.org/WS08.html feiyue.wang@ia.ac.cn
Conference on American Control Conference (in cooperation with IFAC) ACC 2018	June 27 – 29	Milwaukee, WI USA	http://acc2018.a2c2.org/ e-mail: not yet available
14th IFAC Workshop on Time Delay Systems TDS 2018	June 28 – 30	Budapest Hungary	http://www.congressline.hu/tds2018/ office@congressline.hu
18th IFAC/IEEE CSS Symposium on System Identification SYSID 2018	July 09 – 11	Stockholm Sweden	https://www.kth.se/en/eecs/om-oss/konferenser-och-event/sysid2018 sysid2018@ee.kth.se
6th IFAC Conference on Analysis and Design of Hybrid Systems ADHS 2018	July 11 – 13	Oxford United Kingdom	http://www.cs.ox.ac.uk/conferences/ADHS18/ aabate@cs.ox.ac.uk
6th IFAC Conference on Bio-Robotics BIOROBOTICS 2018	July 13 – 15	Beijing China	http://123.57.55.167:8080/caumeeting/caumeetingweb2018/index.html e-mail: not yet available

Calendar of IFAC Events

Title	2018	Place	Further information
10th IFAC Symposium on Advanced Control of Chemical Processes ADCHEM 2018	July 25 – 27	Shenyang China	http://www.adchem2018.org/ adchem2018@mail.neu.edu.cn
15th International Conference on Informatics in Control, Automation and Robotics (in cooperation with IFAC) ICINCO	July 29 – 31	Porto Portugal	http://www.icinco.org/ icinco.secretariat@insticc.org
7th CACHE, IFAC Conference on Foundation of Systems Biology in Engineering FOSBE 2018	August 05 – 08	Chicago, IL USA	http://www.fosbe.org/ rcraven@fosbe.org
6th IFAC Conference on Nonlinear Model Predictive Control NMPC 2018	August 19 – 22	Madison, WI USA	http://www.nmpc2018.org/ e-mail: not yet available
5th IFAC Workshop on Mining, Mineral and Metal Processing MMM 2018	August 23 – 25	Shanghai China	http://ifac-mmm.csu.edu.cn/ ifacmmm2018@csu.edu.cn
12th IFAC, IEEE RAS Symposium on Robot Control SYROCO 2018	August 27 – 30	Budapest Hungary	http://syroco2018.org/ secretariat@syroco2018.org
7th IFAC Workshop on Distributed Estimation and Control in Networked Systems NECSYS 2018	August 27 – 28	Groningen Netherlands	https://fwn06.housing.rug.nl/necsys2018/ e-mail: not yet available
10th IFAC/Polish Academy of Sciences Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS 2018	August 29 – 31	Warsaw Poland	http://safeprocess18.uz.zgora.pl/ safeprocess18@uz.zgora.pl
9th IFAC/IEEE CSS Symposium on Robust Control Design ROCOND 2018	September 03 – 05	Florianópolis Brazil	http://rocond18.ufsc.br/ rocond18@gmail.com
2nd IFAC/IEEE CSS Workshop on Linear Parameter Varying Systems LPVS 2018	September 03 – 05	Florianópolis Brazil	http://lpvs18.ufsc.br/ ifac.lpvs18@gmail.com
10th IFAC Symposium on Biological and Medical Systems BMS 2018	September 03 – 05	São Paulo Brazil	http://www.ifacbms2018.org/ secretariat@ifacbms2018.org
10th IFAC/ CEGRE Symposium on Control of Power and Energy Systems CPES 2018	September 04 – 06	Tokyo Japan	https://www.cpes2018.com/ cpes2018@hotmail.com
11th IFAC Conference on Control Applications in Marine Systems, Robotics, and Vehicles CAMS 2018	September 09 – 13	Opatija Croatia	http://ifac-cams2018.com/ cams2018@fer.hr
18th IFAC Conference on Technology, Culture and International Stability TECIS 2018	September 13 – 15	Baku Azerbaijan	https://tecis18.org/ kopacek@ihrt.tuwien.ac.at
5th IFAC Conference on Engine and Powertrain Control, Simulation and Modeling E-COSM 2018	September 20 – 22	Changchun China	http://www.ascl.jlu.edu.cn/ecosm2018/ gaobz@jlu.edu.cn
17th IFAC Workshop on Control Applications of Optimization CAO 2018	October 15 – 19	Yekaterinburg Russia	http://cao2018.uran.ru/ e-mail: not yet available

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Bundesministerium
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Innovation und Technologie

Calendar of IFAC Events

Title	2018	Place	Further information
13th OTM / IFAC / IFIP International Workshop on Enterprise Integration, Interoperability and Networking EI2N 2018	October 24 – 25	Valletta Malta	http://www.otmconferences.org/index.php/workshops/ei2n-2018 e-mail: not yet available
Conference on Latin American Conference on Automatic Control (in cooperation with IFAC) XVIII CLCA 2018	October 24 – 26	Quito, Ecuador	http://clca2018.epn.edu.ec/index.php/en/clca2018@epn.edu.ec
5th IFAC Conference on Analysis and Control of Chaotic Systems CHAOS 2018	Oct./Nov. 30 – 01	Eindhoven Netherlands	http://chaos2018.wtb.tue.nl/chaos2018@tue.nl
2nd IFAC Conference on Cyber-Physical and Human Systems CPHS 2018	December 13 – 15	Miami, FL USA	http://www.cphs2018.org/ e-mail: not yet available
Title	2019	Place	Further information
12th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems DYCOPS 2019	April 23 – 26	Florianópolis Brazil	http://dycopscab2019.sites.ufsc.br/dycops.cab2019@gmail.com
IFAC Workshop on Control of Smart Grid and Renewable Energy Systems CSGRES 2019	June 10 – 12	Jeju Republic of Korea	http://not yet available e-mail: not yet available
9th IFAC Symposium on Advances in Automotive Control AAC 2019	June 24 – 27	Orléans France	http://not yet available e-mail: not yet available
10th IFAC Symposium on Intelligent Autonomous Vehicles IAV 2019	July 03 – 05	Gdansk Poland	http://www.konsulting.gda.pl/iav2019/iav2019@konsulting.gda.pl
3rd IFAC Workshop on Thermodynamic Foundations for a Mathematical Systems Theory TFMST 2019	July 08 – 10	Louvain-la-Neuve Belgium	http://not yet available e-mail: not yet available
Conference on American Control Conference (in cooperation with IFAC) ACC 2019	July 10 – 12	Philadelphia, PA USA	http://not yet available e-mail: not yet available
9th IFAC IEEE IFIP IFORS et al. Conference on Manufacturing Modelling, Management and Control MIM 2019	August 28 – 30	Berlin Germany	https://blog.hwr-berlin.de/mim2019/ e-mail: not yet available
18th IFAC Symposium on Control, Optimization and Automation in Mining, Mineral and Metal Processing MMM 2019	August 28 – 30	Stellenbosch South Africa	http://not yet available e-mail: not yet available
11th IFAC Symposium on Nonlinear Control Systems NOLCOS 2019	September 03 – 05	Vienna Austria	http://www.mechatronicsnolcos2019.org/contact@mechatronicsnolcos2019.org
8th IFAC Symposium on Mechatronic Systems MECHATRONICS 2019	September 03 – 05	Vienna Austria	http://www.mechatronicsnolcos2019.org/contact@mechatronicsnolcos2019.org
Title	2020	Place	Further information
21st IFAC World Congress 2020	July 12-17	Berlin Germany	http://www.ifac2020.org/ e-mail: not yet available

The IFAC Calendar of Events is constantly updated as additional technical events (Workshops, Symposia, and Conferences) are approved.

Check back often to find information about upcoming technical events in your field/s of interest! Additionally you can find links to IFAC events going back to 2014.

<https://www.ifac-control.org/events/>