Reports From Recent IFAC Technical Events

IFAC holds 40+ technical events (workshops, conferences, and symposia) in years where the flag-ship IFAC World Congress event does not take place. (Few or no additional events take place in a Congress year, and any exceptions are only made with the permission of the IFAC President).

The most recent World Congress was held in July 2017 (Toulouse, FR) and the next IFAC World Congress are scheduled to take place in July 2020 (Berlin, DE) and 2023 (Yokohama, JP). The calendar of events is provided in each issue of this Newsletter, and is available online at: https://www.ifac-control.org/events/

Advances in Control and Optimization of Dynamical Systems (5th ACDOS 2018) 18-22 February 2018 Hyderabad, India

The 5th ACODS 2018 attracted 217 participants (182 from the host country, 14 from industry, 20 women). In total 137 papers were scheduled, and 121 were presented. The top five countries represented were: India, followed by the US, UK, South Korea, Italy and France. Dr. A.K. Sarkar, Scientia G, Defense Research & Development Laboratories (DRDL @ Hyderabad) was the General Chair, and Dr. Padmanabhan K Menon, Optimal Synthesis Inc., US was the Co-Chair. The conference received major funding from the Defense R & D Organization (DRDO), Government of India. Additional funding was provided by private industry, including Mathworks.

The conference was opened on February 18 by Dr. S. Christopher, Chairman, DRDO, New Delhi, followed by IFAC President Prof. Frank Allgöwer (DE), who addressed the inaugural function. F. Allgöwer’s plenary talk was “Model Predictive Control: The Past, Present and Future”. Further, many globally renowned control and guidance experts, including PK Manon, Chairman & CEO, Optimal Synthesis Inc.; Sarah Spurgeon (University College of London, UK); MinJeA Tahk, Korea Advanced Institute of S&T; as well as Reza Moheimani (University of Texas-Dallas, US) presented plenary lectures. Sarah Spurgeon’s talk was about “Sliding Modes for Failure Detection and Estimation”. Reza Moheimani’s talk was concerned with the LDCN’s work on control system design for atomically precise manufacturing (APM). In total there were six plenary talks and three semi-plenary talks. Three of the talks were given by women. Moreover the following workshops were held:

- Dynamics and Control of Air Traffic: Dr. PK Menon (US)
- Learning from Data to Take Smart Decisions in Complex and Multi-Agent Systems: Maria Prandini, Professor at Politecnico di Milano (Italy)
- Numerical Treatment of Flight Dynamics and Control in a Nonlinear Framework: Dr Nandan Kumar Sinha, Professor of Aerospace Engineering IIT Madras (India)
- Modeling, Simulation and Control of a Quadcopter: Naga Chakrapani P., and Chethan C U. MathWorks (India)

On the evening of February 20 there was a grand banquet with a best paper award ceremony and a cultural program showcasing one of the classical dance forms of South India. On day 5, there were sightseeing tours arranged for all the event attendees and their accompanying persons, which were included as a part of the registration.

Forthcoming Events

The IFAC Journals
Automatica
Control Engineering Practice
Engineering Applications of Artificial Intelligence
Journal of Process Control
Annual Reviews in Control
Journal on Mechatronics
Nonlinear Analysis: Hybrid Systems
IFAC Journal of Systems & Control
IFAC-PapersOnLine

IN THIS ISSUE:
Reports from IFAC Technical Events: ACDOS (IN), PID (BE), LHMNC (CL)
IFAC President’s Column
Who’s Who in IFAC
Council and Related Meetings 2018 Reminder
IFAC Journal of Systems and Control: Highlights

June 2018

No.3

Prof. Frank Allgöwer (DE), IFAC President, at the inaugural function of ACDOS 2018

Submitted by:
Dr. Ramakalyan Ayyagari (Indian NMO President)

Advances in Proportional Integral-Derivative Control (3rd PID 2018) 9-11 May 2018 Ghent, Belgium

The 3rd IFAC Conference on Advances in Proportional Integral-Derivative Control (PID’18) was held in Ghent, Belgium, from 9-11 May 2018, organized by Ghent University (BE) in cooperation with BIRA (Belgian Association of Automation), IE-NET (Industrial Engineering Network) and Flandres Make (Indus-
two honored guests were invited and attended PID18: Karl-Johan Åström and Tore Hägglund from Lund University, Sweden. They were involved in both the industry panel and control education panel, respectively; on 9 May, New Perspectives In Industrial PID Control and on 10 May: What is an Ideal Undergraduate Control Curriculum? The industry panel on 9 may was chaired by K. J. Aström, starting with a nice overview provided by Ramon Vilanova (UAB, ES) and the following panelists: Davide Colombo (Gefran, IT), Alf Isaksson (ABB, SE), Jan Verhasselt (YAZZOOM, BE), Sigurd Skogestad (NTNU, NO, Yongduan Song (Chongqing University, CN), and Massimiliano Veronesi (Yokogawa, IT). The conclusion was that despite PID control being a mature technology, there is still a highly significant gap between academia and industry, with respect to low level loop instrumentation, design and tuning. The challenge for data streaming and control was yet again the Industry 4.0 feature on wireless communication systems, where both TC 2.1 (Control Design) and TC 6.1 (Chemical Process Control) play an important role.

The educational panel on 10 May was chaired by Anthony Rossiter (Sheffield Univ, UK), with panelists: Ferdinand Kieckhäfer (Hamburg University, DE), Tore Hägglund (Lund University, SE), Paulo Moura Oliveira (UTAD, PT), Guy Dumont (The University of British Columbia, CA), Tao Liu (Dalian University of Technology, CN). The conclusion was that structured and standardized curriculum content is needed at the Bachelor, Master and Doctoral program levels across universities. Dissemination of a carefully designed enquiry list to probe the state of use in curriculum and current needs/gaps is ongoing task of related members of TC 9.4 (Control Education). Special thanks go to Bozena Pasik-Duncan (Technical Board Education Liaison, US) who flew in last minute especially to attend our event and acknowledged women in control engineering at the dinner party in Brugge. Sessions took place on 11 May dedicated to Benchmark Challenge for PID Control of Refrigeration Systems based on Vapour Compression, which was proposed by proposed by G. Bejarano, J. A. Alfaya, D. Rodriguez, M. G. Ortega (University of Seville, ES) and F. Morilla (UNED, Madrid, ES). The benchmark process received 14 contributions, with the final selected papers with first author: M. Tari (Université de Bordeaux, France), J. Garrido (University of Cordoba, Spain), V. Bordignon (University of Florence). The program further contained four plenary speakers:

- Kevin Starr (ABB, US): Industrial Loop Tuning in the Digital Age
- Tao Liu (Dalian University of Technology, CN): New PID Designs for Sampling Control and Batch Process Optimization
- Julio Normey-Rico (Universidad Federal De Santa Catarina, BR): PID Control of Deadtime Processes: Robustness, Dead-time Compensation and Constraints Handling
- Yang Quan Chen (University of California, Merced, US): Fractional Order PID Control: Better Than the Best Issue and What’s Next

The first day of the conference dedicated to industry, additionally featured two keynote speakers:

- Stijn Derammelaere (Antwerp University, BE): The Fast Lane: Sophisticated Yet Accessible Motion Control Techniques.
- Jan Verhasselt (YAZZOOM, BE): A Practical Approach for Integrating and Maintaining Computational Models in Control.
The timely organization of the conference enabled fruitful discussions. The participants have appreciated the technical program as well as the social one and were very happy with the quality of the presentations throughout all days of the conference. To conclude, it can be said that the IFAC Conference on Advances in PID Control (PID’18) has had a very high level of attendance, with a very active participation in most technical activities and the general feeling we have got from attendees’ comments has been very positive. Of course, the success of the PID’18 technical program is the result of the efforts made by many people. On behalf of both the NOC and IPC, we would like to thank the efforts made by many people. Clara M. Ionescu, NOC Chair, Antonio Visioli, IPC Chair, and the many volunteers who have contributed to the organization, to Pradeep Misra for technical support in Papercept and to Katharina Willixhofer from the IFAC Secretariat for swift replies.

Submitted by:
Clara M. Ionescu, NOC Chair, and Antonio Visioli, IPC Chair

Lagrangian and Hamiltonian Methods for Nonlinear Control (6th LHMNC 2018) 1-4 May 2018 Valparaiso, Chile

The 6th IFAC Workshop on Lagrangian and Hamiltonian Methods for Nonlinear Control has been held in Valparaiso, Chile, at Universidad Técnica Federico Santa María from 1-4 May 2018. It was organized by the Advanced Center for Electrical and Electronic Engineering http://www.ac3e.cl/index.php/en

The workshop has been sponsored by the IFAC TC 2.3 (Nonlinear Control Systems) and co-sponsored by IFAC TC 2.6 (Distributed Pa-rameter Systems) and IEEE TC on Distributed Parameter Systems. The workshop received the financial support of the French and German Agencies of Research ANR-DFG through the INFIDHEM project (ANR-16-CE92-0028), and the Chilean Research Agency (CONICYT) through FOND-ECYT grant 1181090.

Driven by many applications originating from mechatronics, power systems, robotics, aerospace, process control or fluid dynamics, etc., research on modeling and control of non-linear and multi-physical systems has attracted increasing interest and has undergone important developments. A very efficient design method, based on the Lagrangian and Hamiltonian formulations of physical systems’ dynamics, has been increasingly developed and used in the last years. These formulations allow combining the powerful design methods using passivity-based control with the specific properties of the differential-geometric structure of the Lagrangian and Hamiltonian systems. Recent developments have shown that generalizations of the Hamiltonian and Lagrangian frameworks can be used for distributed parameter systems with applications in fluid dynamic systems, fluid-structure interactions, acoustics, quantum mechanics as well as for irreversible thermodynamic systems with applications to chemical engineering, biological processes and smart materials among others.

The motivation of this 6th IFAC Workshop LHMNC 2018 was to highlight new modeling and control problems, as well as to bring together control experts to discuss about recent methodological developments for the modeling, the analysis, and the control of nonlinear open multi-physical systems and their integration into various classical and emerging application areas.

The technical program of LHMNC 2018 included four invited plenary sessions, three invited session and six regular sessions. The technical program is available at the workshop website and also at https://ifac.papercept.net/conferences/conferences/LHM18/program/LHM18_ProgramAtAGlanceWeb.html.

The second day started with the talk of Volker Mehrmann entitled “Port Hamiltonian Model Reduction and Optimization for Coupled Multi-Physics and Multi-Scale Systems” dealing with numerical issues and specificities related to port Hamiltonian representation of complex systems, model hierarchies and multi-physical systems represented by DAEs. The same day the talk “Variational and Hamiltonian Techniques in Aerospace Engineering – A Variational Approach To Robust Control” given by Kenji Fujimoto proposed some recent results on robust optimal control through generating functions methods, singular avoidance and nonlinear Kalman filter with constraints with applications in aeronautics.

Complementing the plenary sessions, the program was completed by three invited sessions on Thermodynamic Systems, Distributed Parameter Systems and Control Design Techniques and different regular technical sessions addressing in detail key issues in modeling and control of Lagrangian and Hamiltonian systems.

The sixth workshop on “Lagrangian and Hamiltonian Methods for Non-Linear Control” gathered 53 participants from 16 countries spread among South and North America, Europe, Asia and Oceania. Participants, coming from different areas and different fields of research, were very actively involved in the different sessions and plenaries. The format of the workshop with a unique plenary track provided many opportunities for lively discussions and fruitful exchanges. The location of the workshop in the UNESCO World Heritage Site of Valparaiso Chile was perfect for connecting researchers from the northern and southern hemispheres and to foster new collaborations and emerging activities between these people.

Associated with the IFAC LHMNC 2018 workshop, a Doctoral School was held at the same venue on 30 April and 1 May. The pre-workshop school was on an Introduction to modeling and control of port-Hamiltonian systems, gathering 37 participants with the following speakers: Yann Le Gorrec, Alessandro Macchelli, Paul Kotyczka, Arjan van der Schaft, Bernhard Maschke, and Héctor Ramirez.

People curious about getting a more precise idea of the workshop may also want to consult some slides on the website at http://www.lhmnic18.org/

Submitted by: Juan I. Zuv, Universidad Técnica Federico Santa María, CHILE and Yann Le Gorrec, FEMTO-ST, FRANCE

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

https://www.ifac-control.org/
Who’s Who in IFAC: Introducing Some IFAC Officials

IFAC Council Member

Alexander M. Tarasyev (RU), who is serving as an ordinary member of the IFAC Council for the 2017-2020 triennium, received the M.Sc. degree in mathematics in 1981 from the Ural State University named after A.M. Gorky (Sverdlovsk, USSR; now known as Yekaterinburg, Russia). His M.Sc. thesis on “Algorithms For Construction Of Stable Bridges In Differential Games” was awarded with the Prize of the Ministry of Higher and Secondary Special Education of the Russian Federation. In 1984, he defended his PhD dissertation in differential equations titled “Analysis and Construction Of Guaranteed Solutions In Problems Of Feedback Control” at the Ural State University.

Starting from 1984 and continuing through the present, A. Tarasyev is with Krasovskii Institute of Mathematics and Mechanics (IMM) of the Ural Branch of the Russian Academy of Sciences in Yekaterinburg. In 1988, he was awarded with the Prize of the Sverdlovsk Komsomol Organization and by the Presidium of the Ural Branch of the Russian Academy of Sciences for his series of works on numerical solution of optimal control problems and differential games via grid schemes based on nonsmooth constructions for Hamilton-Jacobi equations. In 1996, he received the degree of Doctor of Science (Physics and Mathematics) for his thesis “Constructions and methods of nonsmooth analysis in problems of optimal guaranteed control” from the Dissertation Council on Differential Equations at IMM.

In the period of 1994-2014, A. Tarasyev was serving for the International Institute for Applied Systems Analysis (IIASA, Laxenburg, Austria) as Senior Researcher in the Dynamic Systems Program at part-time and full-time (1996-2000) positions. In 1994, he received the Peccei Prize at IIASA for his research in the theory of dynamical bimatrix games on infinite horizon.

In 2001-2015 A. Tarasyev was Head of Sector on Dynamic Optimization, and since 2015 he is Head of the Dynamic Systems Department at IMM specializing in the mathematical theory of optimal control, differential games, dynamic optimization, generalized (minimax, viscosity) solutions of Hamilton-Jacobi equations, mathematical modeling.

In 2010, A. Tarasyev received the Prize of Academician A.I. Subbotin for the best work in mathematics (for the series of papers on application of optimal control and Hamiltonian dynamics to models of economic growth) from the President of the Ural Branch of the Russian Academy of Sciences.

He is also a professor on a part-time position at the Ural Federal University and Liberal Arts University in Yekaterinburg, reading lectures on optimal control, mathematical modeling, economics, financial mathematics, and econometrics.

In IFAC, A. Tarasyev has served as Chair of TC 2.4 (Optimal Control) from 2008-2014 and as Vice-Chair of TC 2.4 from 2014-2017.

Editor’s Note: The full list of IFAC Council members can be found at: https://www.ifac-control.org/structure/council

Technical Board Member (Publications Liaison)

Patrizio Colaneri (IT) received the Laurea degree in Electrical Engineering from the Politecnico di Milano (IT) in 1981 and the Ph.D. degree (Dottorato di Ricerca) in Automatic Control from the Italian Ministry of Education and research in 1988. He is full professor of Automatica at Politecnico di Milano, where he served as head of the Ph.D. school on ICT (2007-2009). He has held visiting positions at the University of Maryland (US), at the Hamilton Institute of the National University of Ireland, and at the Institute for Design and Control of Mechatronical Systems of Johannes Kepler University in Linz (Austria).

P. Colaneri has served IFAC and IEEE CSS in many capacities with both journals and technical events. In particular he was Associate Editor of Automatica for six years, Senior Editor of IEEE TAC for eight years, IPC Chair of the IFAC Symposium ROCOND in Milan, IT (2003), IPC Vice Chair of the CDC in Florence, IT (2013), and IPC Chair of the IEEE Multi Conference on System and Control (CICA) in Buenos Aires, AR (2016). He is currently Senior Editor of the IFAC journal “Non Linear Analysis: Hybrid Systems”, and a member of the IFAC Technical Board (publications liaison). He is a Fellow of both IFAC and IEEE.

P. Colaneri’s main interests are in the area of periodic systems and control, robust filtering and control, and switching control. He has authored/co-authored about 250 papers and seven books.

Technical Board Vice-Chair (Theory, CCS 1-4)

Ji-Feng Zhang (CN), IFAC Technical Board Vice Chair, was born in Shandong, China, on September 22, 1963. He received the B.S. degree in mathematics from Shandong University, China, in 1985, and the M.S. and Ph.D. degrees from the Institute of Systems Science (ISS), Chinese Academy of Sciences (CAS), China, in 1988 and 1991, respectively. Since 1985, he has been with the ISS, CAS, and now is a professor of AMSS and the director of ISS. His current research interests include system modeling, adaptive control, stochastic systems, and multi-agent systems.

J. Zhang is an IEEE Fellow, IFAC Fellow, CAA Fellow, a member of the European Academy of Sciences and Arts, and an Academician of the International Academy for Systems and Cybernetic Sciences. He received the Second Prize of the State Natural Science Award of China in 2010 and 2015, respectively, the Distinguished Young Scholar Fund from National Natural Science Foundation of China in 1997, the First Prize of the Young Scientist Award of CAS in 1995, Excellent Chinese Doctoral Dissertation Supervisor in 2009, Excellent Graduate Student Supervisor of CAS in 2007, 2008 and 2009, respectively.

J. Zhang has served as Convener of Systems Science Discipline, Academic Degree Committee of the State Council, China; Vice President of the Chinese Association of Automation (CAA); Vice President of the Systems Engineering Society of China; standing member of the Chinese Mathematical Society; standing member of the China Society for Industrial and Applied Mathematics; Vice-President of the Shanghai Academy of Systems Science; Vice-President of the Beijing Mathematical Society; Chair of the Technical Committee on Control Theory, CAA, and member of the Board of Governors of the IEEE Control Systems Society. He was the founding Editor-in-Chief of the popularization magazine “All About Systems and Control”, and has served as Editor-in-Chief, Managing Editor, Deputy Editor-in-Chief or Associate Editor for more than 10 journals, including “Science China: Information Sciences”, “IEEE Transactions on Automatic Control” and “SIAM Journal on Control and Optimization”. He was General Co-Chair of the 32nd Chinese Control Conference and the 33rd Chinese Control Conference; General Vice-Chair of the 1st China Systems Science Congress; Program Chair of the 2012 IEEE Conference on Control Systems.
Applications, the 9th World Congress on Intelligent Control and Automation, the 30th Chinese Control Conference and the 2nd China Systems Science Congress; and Organizing Committee Co-Chair of the 21st through to 26th Chinese Control Conferences.

In IFAC, J. Zhang is serving a second term as Vice-Chair of the IFAC Technical Board (2014-2017 and now 2017-2020). He served as one of the IPC Vice-Chairs of the 20th IFAC World Congress (Toulouse, FR, July 2017), and IPC Co-Chair of the 17th IFAC Symposium on System Identification (Beijing, CN, October 2015).

Technical Board Member

Maria Elena Valcher (IT) received the Master Degree (cum laude) in Electronic Engineering (1991) and the Ph.D. Degree in Systems Engineering (1995) both from the University of Padova (Italy). Since January 2005 she is Full Professor of Control Theory at the University of Padova.

M.E. Valcher is author/co-author of approximately 83 papers appeared on international journals, 96 conference papers and 16 book chapters. Her research interests include multidimensional systems theory, polynomial control theory, behavior theory, Boolean control networks, multi-agent systems and consensus problems, switched systems and positive systems.


Since January 2017 she is the Editor in Chief of the IEEE Control Systems Letters.

M.E. Valcher held various positions within the IEEE Control Systems Society: Appointed BoG Member (2003); Elected BoG Member (2004-2006; 2010-2012); Vice President Member Activities (2006-2007); Vice President Conference Activities (2008-2010); President-Elect (2014); President (2015); Junior Past President (2016). She was involved in the organization of several conferences, in particular she was registration Chair of the 2004 IEEE CDC, Publicity Chair of the 2007 MSC, Registration Chair of the 2011 IFAC World Conference and Program Chair of the 2012 IEEE CDC.

She was a member of the 2013, 2014 and 2015 IEEE Control Systems Award committee, a member of the 2016 IEEE Fellow Committee, and of the 2016 IEEE TAB Ad Hoc Committee on Women and Under-Represented Groups. She was a Distinguished Lecturer of the IEEE CSS (2011-2014). She received the 2011 IEEE CSS Distinguished Member Award and she is an IEEE Fellow since 2012. She is currently a member of the IEEE Tab Committee On Diversity and Inclusion (2017-2018).

M.E. Valcher was in the 2014-2017 Awards Committees for two IFAC Journals: Automatica and NAHS. She is a member of the IFAC Technical Board (2017-2020).

A extended version of Valcher’s CV is available at:  [http://www.dei.unipd.it/~meme/MEV/CurriculumVitae.html](http://www.dei.unipd.it/~meme/MEV/CurriculumVitae.html)

The list of Valcher’s publications is available at:  [http://www.dei.unipd.it/~meme/MEV/Publications.html](http://www.dei.unipd.it/~meme/MEV/Publications.html)

Editor’s Note: Further information about the structure and membership of the IFAC Technical Board can be found at:  [https://www.ifac-control.org/structure/technical-board](https://www.ifac-control.org/structure/technical-board)

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

Reminder: Council- and Related Meetings

1-3 September 2018

Florianopolis, Brazil

The next Council- and Related Meetings will take place in Florianopolis, Brazil, from September 1-3 2018, in conjunction with ROCOND (9th IFAC Symposium on Robust Control Design) and LPVS (2nd IFAC Workshop on Linear Parameter Varying Systems).

The Technical Board meeting is scheduled on September, Saturday 1 from 09:00-13:00, and the Executive Board meeting will be held on Sunday, Sept. 2 from 14:30-17:30. The Council meeting is scheduled on Monday, Sept. 3 from 09:00-16:00. In the afternoon there will be the first round of the IFAC 2026 bid presentations.

Please check the travel and visa requirements for your country accordingly.  [http://rocond18.ufsc.br/](http://rocond18.ufsc.br/)

Venue, Travel, and Visa information:  [http://lpvs18.ufsc.br/Travel.html](http://lpvs18.ufsc.br/Travel.html)

IFAC Journal of Systems & Control: Highlights

IFAC Journal of Systems and Control is publishing highly downloaded content! IFAC’s newest publication IFAC Journal of Systems & Control (Editor-in-Chief Bob Bitmead, Deputy Editor-In-Chief Carlos Eduardo Pereira, with editorial board members Geoff Chase, Benoit Iung, Duncan McFarlane, Sebastian Dormido, and João Gomes da Silva) has already published some outstanding papers from leaders in the community. The journal publishes high-quality research papers containing generalizable, extensible and transferable innovations across all aspects of the field of control and automation.

We hope everyone has found the journal to be an interesting and valuable addition to their reading list. The most heavily downloaded papers so far are:

- Optimal Control, MPC and MPC-like Algorithms For Wave Energy Systems: An Overview  
  Nicolás Faedo, Sébastien Olaya, John V. Ringwood  

- Formation Shape Control With Distance and Area Constraints  
  Brian D.O. Anderson, Zhiyong Sun, Toshiharu Sugie, Shun-ichi Azuma, Kazunori Sakurama  

- System Identification Through Online Sparse Gaussian Process Regression With Input Noise  
  Hildo Bijl, Thomas B. Schön, Jan-Willem van Wingerden, Michel Verhaegen  

- Hierarchical Distributed ADMM For Predictive Control With Applications In Power Networks  
  Philipp Braun, Timm Faulwasser, Lars Grüne, Christopher M. Kellett, Steven R. Weller  

We invite you to publish alongside your colleagues. For the full Aims & Scope and to submit your papers online, please visit the journal homepage at  [https://www.journals.elsevier.com/ifac-journal-of-systems-and-control](https://www.journals.elsevier.com/ifac-journal-of-systems-and-control).

Submitted by: Alison Waldron, Elsevier
<table>
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<th>Title</th>
<th>2018</th>
<th>Place</th>
<th>Further information</th>
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<tr>
<td>6th IFAC Conference on Analysis and Design of Hybrid Systems ADHS 2018</td>
<td>July 11 – 13</td>
<td>Oxford United Kingdom</td>
<td><a href="http://www.cs.ox.ac.uk/conferences/ADHS18/">http://www.cs.ox.ac.uk/conferences/ADHS18/</a> <a href="mailto:aabate@cs.ox.ac.uk">aabate@cs.ox.ac.uk</a></td>
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<td>10th IFAC Symposium on Advanced Control of Chemical Processes ADCHEM 2018</td>
<td>July 25 – 27</td>
<td>Shenyang, China</td>
<td><a href="http://www.adchem2018.org/adchem2018@mail.neu.edu.cn">http://www.adchem2018.org/adchem2018@mail.neu.edu.cn</a></td>
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<td>15th International Conference on Informatics in Control, Automation and Robotics (in cooperation with IFAC) ICINCO 2018</td>
<td>July 29 – 31</td>
<td>Porto, Portugal</td>
<td><a href="http://www.icinco.org/icinco.secretariat@insticc.org">http://www.icinco.org/icinco.secretariat@insticc.org</a></td>
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<td>7th CACHE, IFAC Conference on Foundation of Systems Biology in Engineering FOSBE 2018</td>
<td>August 05 – 08</td>
<td>Chicago, IL USA</td>
<td><a href="http://www.fosbe.org/rcraven@fosbe.org">http://www.fosbe.org/rcraven@fosbe.org</a></td>
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<td>5th IFAC Workshop on Mining, Mineral and Metal Processing MMM 2018</td>
<td>August 23 – 25</td>
<td>Shanghai China</td>
<td><a href="http://ifac-mmm.csu.edu.cn/ifacmmm2018@csu.edu.cn">http://ifac-mmm.csu.edu.cn/ifacmmm2018@csu.edu.cn</a></td>
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<td>12th IFAC, IEEE RAS Symposium on Robot Control SYROCO 2018</td>
<td>August 27 – 30</td>
<td>Budapest Hungary</td>
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<td>7th IFAC Workshop on Distributed Estimation and Control in Networked Systems NECSYS 2018</td>
<td>August 27 – 28</td>
<td>Groningen Netherlands</td>
<td><a href="https://fwn06.housing.rug.nl/necsys2018/necsys18@rug.nl">https://fwn06.housing.rug.nl/necsys2018/necsys18@rug.nl</a></td>
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<td>10th IFAC/Polish Academy of Sciences Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS 2018</td>
<td>August 29 – 31</td>
<td>Warsaw Poland</td>
<td><a href="http://safePROCESS18.uz.zgora.pl/safePROCESS18@uz.zgora.pl">http://safePROCESS18.uz.zgora.pl/safePROCESS18@uz.zgora.pl</a></td>
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<td>9th IFAC/IEEE CSS Symposium on Robust Control Design ROCOND 2018</td>
<td>September 03 – 05</td>
<td>Florianópolis Brazil</td>
<td><a href="http://rocond18.ufsc.br/rocond18@gmail.com">http://rocond18.ufsc.br/rocond18@gmail.com</a></td>
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<td>2nd IFAC/IEEE CSS Workshop on Linear Parameter Varying Systems LPVS 2018</td>
<td>September 03 – 05</td>
<td>Florianópolis Brazil</td>
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<td>10th IFAC Symposium on Biological and Medical Systems BMS 2018</td>
<td>September 03 – 05</td>
<td>São Paulo Brazil</td>
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<td>10th IFAC/CEGRE Symposium on Control of Power and Energy Systems CPES 2018</td>
<td>September 04 – 06</td>
<td>Tokyo Japan</td>
<td><a href="https://www.cpes2018.com/cpes2018@hotmail.com">https://www.cpes2018.com/cpes2018@hotmail.com</a></td>
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<td>11th IFAC Conference on Control Applications in Marine Systems, Robotics, and Vehicles CAMS 2018</td>
<td>September 09 – 13</td>
<td>Opatija Croatia</td>
<td><a href="http://ifac-cams2018.com/cams2018@fer.hr">http://ifac-cams2018.com/cams2018@fer.hr</a></td>
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<tr>
<td>18th IFAC Conference on Technology, Culture and International Stability TECIS 2018</td>
<td>September 13 – 15</td>
<td>Baku Azerbaijan</td>
<td><a href="https://tecis18.org/kopacek@ihrt.tuwien.ac.at">https://tecis18.org/kopacek@ihrt.tuwien.ac.at</a></td>
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# Calendar of IFAC Events

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<tr>
<td>10th INSTICC, IFAC et al. International Joint Conference on Computational Intelligence IJCCI 2018</td>
<td>September 18 – 20</td>
<td>Seville, Spain</td>
<td><a href="http://www.ijjcci.org/ijjcci.secretariat@insticc.org">http://www.ijjcci.org/ijjcci.secretariat@insticc.org</a></td>
</tr>
<tr>
<td>5th IFAC Conference on Engine and Powertrain Control, Simulation and Modeling E-COSM 2018</td>
<td>September 20 – 22</td>
<td>Changchun, China</td>
<td><a href="http://www.ascl.jlu.edu.cn/ecosm2018/gaobz@jlu.edu.cn">http://www.ascl.jlu.edu.cn/ecosm2018/gaobz@jlu.edu.cn</a></td>
</tr>
<tr>
<td>17th IFAC Workshop on Control Applications of Optimization CAO 2018</td>
<td>October 15 – 19</td>
<td>Yekaterinburg, Russia</td>
<td><a href="http://cao2018.uran.ru/cao@uran.ru">http://cao2018.uran.ru/cao@uran.ru</a></td>
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<tr>
<td>5th IFAC Conference on Analysis and Control of Chaotic Systems CHAOS 2018</td>
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<tr>
<td>2nd IFAC Conference on Cyber-Physical and Human Systems CPHS 2018</td>
<td>December 13 – 15</td>
<td>Miami, FL, USA</td>
<td><a href="http://www.cphs2018.org/cphs2018org@gmail.com">http://www.cphs2018.org/cphs2018org@gmail.com</a></td>
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<tr>
<th>Title</th>
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<tbody>
<tr>
<td>12th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems DYCOPS 2019</td>
<td>April 23 – 26</td>
<td>Florianópolis, Brazil</td>
<td><a href="http://dydypscab2019_sites.ufsc.br/dycops_cab2019@gmail.com">http://dydypscab2019_sites.ufsc.br/dycops_cab2019@gmail.com</a></td>
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<tr>
<td>3rd IFAC Workshop on Control of Systems Governed by Partial Differential Equations CPDE 2019</td>
<td>May 22 – 24</td>
<td>Oaxaca, Mexico</td>
<td>[<a href="http://not">http://not</a> yet available](<a href="http://not">http://not</a> yet available)</td>
</tr>
<tr>
<td>IFAC Workshop on Control of Smart Grid and Renewables in Energy Systems CSGRES 2019</td>
<td>June 10 – 12</td>
<td>Jeju, Republic of Korea</td>
<td><a href="http://csgres2019.com/yilee@seoultech.ac.kr">http://csgres2019.com/yilee@seoultech.ac.kr</a></td>
</tr>
<tr>
<td>9th IFAC Symposium on Advances in Automotive Control ACC 2019</td>
<td>June 24 – 27</td>
<td>Orléans, France</td>
<td><a href="https://aacc19.sciencesconf.org/aacc2019@univ-orleans.fr">https://aacc19.sciencesconf.org/aacc2019@univ-orleans.fr</a></td>
</tr>
<tr>
<td>Conference on European Control Conference (in cooperation with IFAC) ECC 2019</td>
<td>June 26 – 28</td>
<td>Naples, Italy</td>
<td>[<a href="http://not">http://not</a> yet available](<a href="http://not">http://not</a> yet available)</td>
</tr>
<tr>
<td>10th IFAC Symposium on Intelligent Autonomous Vehicles IAV 2019</td>
<td>July 03 – 05</td>
<td>Gdansk, Poland</td>
<td><a href="http://www.konsulting.gda.pl/ia2019/ia2019@konsulting.gda.pl">http://www.konsulting.gda.pl/ia2019/ia2019@konsulting.gda.pl</a></td>
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## Calendar of IFAC Events

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<tr>
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<tbody>
<tr>
<td>9th IFAC IEEE IFIP IFORS et al. Conference on Manufacturing Modelling, Management and Control MIM 2019</td>
<td>August 28 – 30</td>
<td>Berlin, Germany</td>
<td>[<a href="https://blog.hwr-berlin.de/mim2019/">https://blog.hwr-berlin.de/mim2019/</a>](<a href="https://blog.hwr-berlin.de/mim2019/e-mail">https://blog.hwr-berlin.de/mim2019/e-mail</a>: not yet available)</td>
</tr>
<tr>
<td>18th IFAC Symposium on Control, Optimization and Automation in Mining, Mineral and Metal Processing MMM 2019</td>
<td>August 28 – 30</td>
<td>Stellenbosch, South Africa</td>
<td>[<a href="http://not">http://not</a> yet available](<a href="http://not">http://not</a> yet available)</td>
</tr>
<tr>
<td>11th IFAC Symposium on Nonlinear Control Systems NOLCOS 2019</td>
<td>September 03 – 05</td>
<td>Vienna, Austria</td>
<td><a href="http://www.mechatronicsnolcos2019.org/contact@mechatronicsnolcos2019.org">http://www.mechatronicsnolcos2019.org/contact@mechatronicsnolcos2019.org</a></td>
</tr>
<tr>
<td>8th IFAC Symposium on Mechatronic Systems MECHATRONICS 2019</td>
<td>September 03 – 05</td>
<td>Vienna, Austria</td>
<td><a href="http://www.mechatronicsnolcos2019.org/contact@mechatronicsnolcos2019.org">http://www.mechatronicsnolcos2019.org/contact@mechatronicsnolcos2019.org</a></td>
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<tr>
<td>5th IFAC Symposium on Telematics Application TA 2019</td>
<td>September 25 – 27</td>
<td>Chengdu, China</td>
<td>[<a href="http://not">http://not</a> yet available](<a href="http://not">http://not</a> yet available)</td>
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<tr>
<td>19th IFAC Conference on Technology, Culture and International Stability</td>
<td>September 26 – 28</td>
<td>Sozopol, Bulgaria</td>
<td>[<a href="http://not">http://not</a> yet available](<a href="http://not">http://not</a> yet available)</td>
</tr>
<tr>
<td>15th European Workshop on Advanced Control and Diagnosis ACD 2019</td>
<td>November 21 – 22</td>
<td>Bologna, Italy</td>
<td><a href="https://eventi.unibo.it/acd2019/acd2019@unibo.it">https://eventi.unibo.it/acd2019/acd2019@unibo.it</a></td>
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The IFAC Calendar of Events is constantly updated as additional technical events (Workshops, Symposia, and Conferences) are approved. The online version of the IFAC Calendar of Events is available at: [https://www.ifac-control.org/events/](https://www.ifac-control.org/events/)


Das Sekretariat der IFAC befindet sich seit 1978 aufgrund eines Übereinkommens mit der Österreichischen Bundesregierung mit der Österreichischen Akademie der Wissenschaften in Laxenburg.

Der ‘IFAC Newsletter’ erscheint sechsmal jährlich in englischer Sprache unter der Redaktion des Generalsekretärs der IFAC, Univ.Professor Kurt Schlacher (Österreich). Die Zeitschrift dient der Information über die Aktivitäten der IFAC. Sie wird kostenlos an Abonnenten in 50+ Länder versandt. Die Kosten werden von der IFAC aus Beiträgen der derzeit 49 Mitgliedsländer getragen.

Präsident der IFAC für 20117-2020 ist Prof. Frank Allgöwer (Deutschland), Vizepräsidenten sind Prof. Paul Van den Hof (die Niederlande) und Prof. Dong-II „Dan“ Cho (Korea). Alle Funktionen werden ehrenamtlich ausgeübt.

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