

Introducing the IFAC Major Award Winners: First in a Series

Over the course of this and upcoming issues of this Newsletter readers will have the opportunity to learn more about the winners of the IFAC Major Awards. This month readers will learn about inaugural Manfred Thoma Medal winner Ming Cao, and Nichols Medal winner Lennart Ljung. The Major Awards will be presented at the IFAC World Congress in Toulouse, FR in July 2017.

The names of all IFAC Major Award winners, as well as the current citations for the 2014-2017 triennium, can be accessed on the IFAC website.

Thoma Medal: Ming Cao (NL)

Ming Cao, winner of IFAC's inaugural Manfred Thoma Medal, is currently professor of networks and robotics with the Engineering and Technology Institute (ENTEG) at the University of Groningen, the Netherlands, where he started as a tenure-track assistant professor in 2008. He received the Bachelor degree in 1999 and the Master degree in 2002 from Tsinghua University, Beijing, China, and the Ph.D. degree in 2007 from Yale University, New Haven, CT, USA, all in electrical engineering. From September 2007 to August 2008, he was a postdoctoral research associate with the Department of Mechanical and Aerospace Engineering at Princeton University, Princeton, NJ, USA. He worked as a research intern during the summer of 2006 with the Mathematical Sciences Department at the IBM T. J. Watson Research Center in New York, USA. His main research interest is in autonomous agents and multi-agent systems, mobile sensor networks and complex networks.



In addition to being the inaugural winner of IFAC's Manfred Thoma Medal Cao is the 2016 recipient of the European Control Award sponsored by the European Control Association (EUCA) for his fundamental contributions to distributed and cooperative control of multi-agent and network systems. He is an associate editor for IEEE Transactions on Automatic Control, IEEE Transactions on Circuits and Systems and Systems and Control

Letters, and for the Conference Editorial Board of the IEEE Control Systems Society. He is a senior member of IEEE and also a member of the IFAC Technical Committee on Networked Systems.

Nichols Medal: Lennart Ljung (SE)

Lennart Ljung received his PhD in Automatic Control from Lund Institute of Technology in 1974. After a period as a post doc at Stanford, he was appointed to the chair of Automatic Control in Linköping, Sweden in 1976. He has spent periods as a visiting professor at Stanford, MIT, and University of California- Berkeley (US) and Newcastle University (Australia).

Ljung's main research area has been on all aspects of system identification; theory, algorithms, software and applications. He has published several books and many papers on the subject and related areas. The text book *System Identification - Theory for the User* (Prentice Hall 1986, 2nd edition 1999) has become a wide-spread reference in the area. The software package *System Identification Toolbox* (the MathWorks, Inc, 1987, annually-updated editions after that) is a tool that is widely used internationally, both in academia and industry.



Ljung's research group at Linköping University covers a broad area in systems, control and signal processing, with significant industrial collaboration. More than 80 Ph.D.s have graduated from this group. Beginning in the mid 1990's, Ljung initiated, built up and managed a series of broad research constellations in Linköping and Sweden, with the aim to extend the research in control and automation to broader questions of autonomy. Several of these centres are still in operation and engage many researchers in control, autonomy and computer science.

Lennart Ljung is an IEEE Fellow, an IFAC Fellow and an IFAC Advisor. He is a member of the

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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 PapersOnLine

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

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Royal Swedish Academy of Sciences (KVA), a member of the Royal Swedish Academy of Engineering Sciences (IVA), an Honorary Member of the Hungarian Academy of Engineering, an Honorary Professor of the Chinese Academy of Mathematics and Systems Science, and a Foreign Member of the US National Academy of Engineering (NAE). He has received honorary doctorates from the Baltic State Technical University in St. Petersburg (Russia), from Uppsala University, Sweden, from the Technical University of Troyes, France, from the Catholic University of Leuven, Belgium and from Helsinki University of Technology, Finland.

Ljung has received several best paper awards, including three Automatica Prize paper awards. In 2002 he received the Quazza Medal from IFAC, and in 2003 the Hendrik W. Bode Lecture Prize from the IEEE Control Systems Society. He was the 2007 recipient of the IEEE Control Systems Award.

Introducing the IFAC Fellows

The IFAC Fellow Award is given to persons who have made outstanding and extraordinary contributions in the field of interest of IFAC, in the role as an Engineer/Scientist, Technical Leader, or Educator.

The 2014-2017 IFAC Fellows were voted on by the IFAC Council in June 2016. 34 Fellows were chosen by the Fellow Selection Committee chaired by Robert Bitmead (US). Over the course of this and upcoming Newsletter issues readers will get the opportunity to learn more about each of the IFAC Fellows (bios provided by the individual Fellows.)

The citations of each of the 2014-2017 IFAC Fellows, as well as the listing of all Fellows since 2005, can be found on the IFAC website at: <http://www.ifac-control.org/awards/ifac-fellows>

Anuradha Annaswamy

Dr. Anuradha Annaswamy is a Senior Research Scientist, Department of Mechanical Engineering at MIT (Massachusetts Institute of Technology), Cambridge, MA, USA. She received her BS (Math) from Madras University and BE (Electrical Engineering) from Indian Institute of Science in 1979, both in India. She received her MS and Ph.D. in Electrical Engineering from Yale University (New Haven, CT, USA) in 1980 and 1985, respectively. Annaswamy's current research interests are in the areas of adaptive control theory and applications to aerospace problems, applications of identification, control, and optimization to smart grids and smart cities, and theoretical foundations of resilience in cyber-physical systems. She is the author of

a graduate textbook on adaptive control (2004), co-editor of two reports, *IEEE Vision for Smart Grid Control: 2030 and Beyond* in 2013 and *Impact of Control Technology* in 2014 (2nd edition), and co-author of over a hundred journal publications and numerous conference publications.



Annaswamy has received several awards including the George Axelby and Control Systems Magazine Best Paper awards from the IEEE Control Systems Society (CSS), the Presidential Young Investigator award from National Science Foundation, the Hans Fisher Senior Fellowship from the Institute for Advanced Study at the Technische Universität München (Germany) in 2008, and the Donald Groen Julius Prize for 2008 from the Institute of Mechanical Engineers. In addition to being an IFAC Fellow Annaswamy became a Fellow of the IEEE in 2002.

She served as the Vice President for Conference Activities (2014-15), and will serve as the VP for Technical Activities (2017-18) in the Executive Committee of the IEEE CSS. She has been both a nominated member (1993) and elected member of the CSS Board of Governors (2010-2012).

Currently she is serving as a member of the IFAC Publications Committee (2014-2017.) In addition she is the Deputy Editor-in-Chief of the IFAC Journal *Annual Reviews in Control*.

Ji-Feng Zhang

Ji-Feng Zhang was born in Shandong, China in 1963. He received the B.S. degree in mathematics from Shandong University in 1985, and the M.S. and Ph.D. degrees in control theory from Institute of Systems Science (ISS), Chinese Academy of Sciences (CAS), China, in 1988 and 1991, respectively.

He has been with the ISS since 1985, and now is the Director of ISS and Guan Zhaozhi Chair Professor of the Academy of Mathematics and Systems Sciences, CAS. His current research interests include system modeling, adaptive control, stochastic systems, and multi-agent systems. In addition to being an IFAC Fellow, Zhang is a Fellow of the IEEE. He has twice 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, and Excellent Graduate Student Supervisor of CAS in 2007, 2008 and 2009, respectively.



Zhang is a Vice-Chair of the IFAC Technical Board (2014-2017), Vice-President of the Systems Engineering Society of China (2010-2018), Vice-President of the Chinese Association of Automation (CAA, 2014-2018), Chair of the Technical Committee on Control Theory (2010-2017), CAA, and was a member of the Board of Governors of the IEEE Control Systems Society (2013).

Zhang has served as the Editor-in-Chief of *Journal of Systems Science and Mathematical Sciences* (2014-2017) and *All About Systems and Control* (2014-2017), and has been Deputy Editor-in-Chief or associate editor of more than ten other journals, including *Science China: Information Sciences* (2014-2017), "IEEE Transactions on Automatic Control" (2007-2009) and "SIAM Journal on Control and Optimization" (2008-2013).

Zhang is serving as an IPC Vice-Chair of the 20th IFAC World Congress in Toulouse, FR. In the past he has served as General Co-Chair of the 32nd and 33rd CCCs (Chinese Control Conference), Program Chair/Co-Chair of the 2012 IEEE CCA, the 9th WCICA (World Congress on Intelligent Control and Automation), the 30th CCC, the 17th IFAC Symposium on System Identification, and Finance Co-Chair of the 48th CDC.

IFAC Newsletter readers are kindly requested to inform the IFAC Secretariat concerning changes to contact information, affiliation, technical area/s of interest, etc.

<http://www.ifac-control.org/about/ifac-affiliate-registration>

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

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

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Advances in Automotive Control (AAC 2016)

Kolmården Wildlife Resort, SE
19-23 June 2016

The 8th IFAC International Symposium on Advances in Automotive Control (AAC 2016) is a triennial symposium that took place in Kolmården Wildlife Resort (Vildmarkshotellet) near Norrköping city, in Sweden, June 19-23, 2016.

The goal was to contribute to the future research and development by active exchange of knowledge and visions between engineers from industry and academia. During the symposium, the state-of-the-art, latest developments as well as future perspectives in automotive control have been presented. Many experts both from industry and university have discussed, in a relaxed atmosphere, leading-edge results in automotive control. At the AAC2016 Symposium, there were 117 technical papers (87% acceptance rate), 7 plenary speakers, and 247 registered participants from 23 different countries and with 104 from industry, all in all showing a wide international and industrial interest in the symposium topics. The 7 most well represented countries were: Sweden – 95, Germany – 35, France – 15, Japan – 15, Italy – 11, USA – 11, and China – 11, as has been common for the last events the hosting country attracts most participants. Industry was invited to sponsor the event and the three large Swedish OEMs, Scania CV, Volvo Cars, and Volvo Trucks all supported the event as title sponsors.

Prior to the symposium there were three tutorials arranged at the Linköping University (LiU) Campus, providing a combination of theory and hands on exercises in emerging topics. These had the aim to lift the general level of the community in developing subject areas and also give engineers and young engineers both an introduction to the subject matters and a meeting ground for those who are studying the same field. The tutorials attracted in total 80 participants and the topics were:

- *Modeling and Control of Turbocharged Engines*, by Lars Eriksson, Xavier Llamas Commellas, and Andreas Thomasson, Linköping University, Sweden.
- *Modeling and Control of Diesel Aftertreatment Systems*, by Xander Seykens and Frank Willems, NO Automotive and TU Eindhoven, The Netherlands.
- *Modeling, Estimation and Control of Lithium Ion Batteries*, by Giorgio Rizzoni and Marcello Cannova, The Ohio State University, USA.

As a side remark the availability to the pre-symposium tutorials were an important attractor for industry. This contributed to the high degree of participation of the Swedish OEMs at the symposium.

Transport was arranged from the tutorials at LiU Campus as well as the train stations and airports of Norrköping and Linköping to the main venue at Kolmården on Sunday afternoon and evening. The main venue was selected so that all participants would be gathered in one

place and the program was planned with plenty of time for lunches and coffee breaks all aiming at providing excellent opportunities for discussions and networking. The location and great weather during the summer solstice with long days contributed to a friendly and pleasant atmosphere.

The technical program was spread over 3.5 days, and had 7 plenary speakers: 4 in the mornings and 3 at lunch. The plenary speakers were:

- Prof. Rolf Isermann, TU Darmstadt, Germany – *Perspectives on Automotive Control – Past, Present, and Future*
- Prof. Robert Shorten, University College Dublin, Ireland – *Cars and Smarter Cities: New Services, New Applications for Control*
- Prof. Anna Stefanopoulou, University of Michigan, Ann Arbor, MI, USA – *Engine Control at the Rugged Edge of High Efficiency*
- Prof. Lars Nielsen, Linköping University, Sweden – *Some Results Related to Vehicle Dynamics, Real Driving, and Autonomy*
- Prof. Maarten Steinbuch, Eindhoven University of Technology, The Netherlands – *The Future of Cars, Robots and Humans*
- Prof. Richard Stobart, Loughborough University, UK – *The Role of the Three Term Controller in Engine Management*
- Prof. Giorgio Rizzoni, Ohio State University, Columbus, OH, USA – *Connected and Automated Vehicles and Advances in Powertrain Control to Achieve Improved Fuel Economy*



Lars Nielsen,
Plenary Speaker at AAC 2016

Each day after the plenaries the program was split in three parallel technical sessions. In the planning we tried to keep themes separate so that there would be separate tracks to avoid conflicts of interest between subject, the basic structure for the three parallel sessions was one on engines and powertrains, one on hybrid vehicles and electrification, and one on vehicle dynamics and autonomous vehicles.

In addition to the regular program a benchmark problem was arranged. It was on fuel optimal control of long haulage trucks on open roads when GPS information is available. The benchmark problem was developed in a joint effort between Linköping University and Scania truck

company, providing a complete model for a heavy duty truck that can be run on different road profiles. The solutions could utilize both off-line planning of the truck speed profile enabled by cloud computing and complemented by on-line control of the engine, transmission and vehicle brake to fulfil a transport mission on a given profile. The benchmark problem was requested and downloaded by 45 persons or groups and there were 6 that managed to provide a solution at the deadline for the conference. The problem and the results were shown and discussed in a special benchmark session that also contained a panel discussion, including contributors from industry. Even though the problem was the same, all six provided solutions were unique and showed a great variety in their various approaches. Even though very different in approach and concept, four of the solutions were very similar in fuel economy performance, while the other two were according to the contributors not fully developed and submitted prematurely due to the constraint with a deadline of submission. The winner was given a toy model of a Scania truck that was handed over by the Scania representative at the symposium banquet.

The social program was comprised of several elements. The symposium started with a welcome reception on Sunday evening at the Resort restaurant. On Monday there was a symposium Dinner, also at the resort restaurant. The symposium banquet was held in the industrial landscape in Norrköping City. The participants could after a short walk through the industrial landscape arrive at the "heating church." On Wednesday all participants were invited to the Kolmården Zoo, where there was a private dolphin show and the dinner was arranged as a Swedish midsummer party at the Restaurant Safari. The dinner had the traditional Swedish dishes and also provided a surprise with the famous Swedish Surströmming (fermented herring). The symposium was closed on Thursday lunch by a farewell luncheon in the restaurant at the resort.



Lars Eriksson, AAC 2016 NOC Chair, at the
Midsummer evening social event

All in all it was a successful symposium with high-quality content and an event that provided many new contacts. The feedback from the participants during and after the symposium has been overwhelmingly positive.

Submitted by: NOC Chair Lars Eriksson,
Vehicular Systems, Linköping University, SE

Introducing IFAC's New NMO: Malaysia

Malaysian Society for Automatic Control Engineers (MACE) is very pleased to be accepted as the IFAC National Member Organization (NMO) for Malaysia. After the initial membership application check by the Executive Board, approval from IFAC Council, and then vote of the IFAC General Assembly the membership took effect upon the receipt of the first membership fee payment in September 2016, per IFAC policy.

MACE is a society formed as a result of a meeting attended by 42 Malaysian automatic control researchers from 10 universities throughout the country on 10 August 2015. The meeting agreed on the need to form a society that will represent Malaysia in IFAC's General Assembly. At the end of the meeting, a provisional committee chaired by Professor Mohd Rizal Arshad (Universiti Sains Malaysia) was formed. The provisional committee members were given the responsibility to draft the constitution of the new society and initiating the submission process to be an IFAC NMO.

On 17 December 2015, MACE received its registration approval from the Malaysian Registrar of Society (MROS). Its main aim is very much aligned with that of IFAC, which is to promote the science and technology of automatic control engineering in various types of systems. It is also concerned with the impact of control technology, particularly on the Malaysian society and in the ASEAN region. Although the society is new, many of its members are experienced control engineers, researchers and academicians who are members of established control engineering faculties, research centers/institutes/industries throughout Malaysia. MACE's Secretariat is based at the Centre for Artificial Intelligence & Robotics (CAIRO), Universiti Teknologi Malaysia, Jalan Sultan Yahya Petra, 54100 Kuala Lumpur, Malaysia.

On 17 February 2016, MACE held its first Annual General Meeting (AGM) at Universiti Teknologi Malaysia in Kuala Lumpur. 101 control researchers and practitioners from both the industries and universities from many parts of Malaysia attended the AGM. During the AGM, the following MACE committee members were elected:

President Prof. Dr. Mohd Rizal Arshad, Universiti Sains Malaysia (USM), Vice President Prof. Dr. Rini Akmeliawati, International Islamic University of Malaysia (IIUM) General Secretary Assoc. Prof. Ir. Dr. Hazlina Selamat, Universiti Teknologi Malaysia (UTM) Treasurer, Assoc. Prof. Dr. Mohd Khair Hassan, Universiti Putra Malaysia (UPM)

Ex-Comm. Members are Assoc. Prof. Dr. Hamzah Ahmad, Universiti Malaysia Pahang (UMP), Ir. Dr. Muralindran Mariappan, Universiti Malaysia Sabah (UMS), Assoc. Prof. Dr. Chong Shin Horng, Universiti Teknikal Malaysia (UTeM), and Assoc. Prof. Dr. Mohd Hezri Rahiman, Universiti Teknologi MARA (UiTM), and Mdm. Norashikin M. Thamrin, Universiti

Teknologi MARA (UiTM). In addition there are two auditors: Assoc. Prof. Dr. Shahnorbanun Sahran, Univ. Kebangsaan Malaysia (UKM) and Assoc. Prof. Dr. Samsul Bahari b. Mohd. Noor, Univ. Putra Malaysia (UPM)

MACE has also appointed 2 Society Advisors who have vast experience and made significant contributions in the field of automatic control. The Advisors may be consulted by the active committee members on any matters related to the society or given special assignments as appropriate. The Society Advisors are Professor Dr. Mohd Nasir Taib, Dean at the Faculty of Electrical Engineering at Universiti Teknologi MARA (UiTM) and Professor Datin Dr. Rubiyah Yusof, Dean at the Malaysia-Japan International Institute of Technology (MJIIIT), Universiti Teknologi Malaysia

The members of MACE consist of control researchers and practitioners from institutions/organizations/industries throughout Malaysia and therefore are representing the automatic control engineering community for the whole country. The total number of members of MACE as of this writing is 163.

Since its formation, the society has organized activities for its members such as symposiums, monthly technical seminars, membership drives, workshops and short courses. MACE has also co-organized and technically co-sponsored conferences such as the 3rd International Multi-Conference on Artificial Intelligence Technology (MCAIT2016), 2016 International Conference on Automatic Control and Intelligent Systems (ICACIS 2016) and 2016 International Conference on Advanced Technology and Applied Sciences (ICATAS 2016).

We also have a strong professional network and links at the national and international levels. The societies/professional bodies that we are proud to be connected with includes the likes of Asian Control Association (ACA), IEEE, The Institution of Engineers Malaysia (IEM), The Institution of Engineering and Technology (IET) and Institute of Marine Engineering Science & Technology (IMAREST).

We hope that with the inclusion of MACE as IFAC NMO for Malaysia, we will be able to further strengthen the activities related to automatic control and its applications in solving related societal and industrial problems, and to contribute to nation building and its associated educational programmes. It is hoped that MACE's activities will grow each year, and we can be a strategic partner for IFAC in Malaysia and the ASEAN region.

Submitted by: Dr Hazlina Selamat,
MACE General Secretary, Malaysian IFAC NMO

IFAC Foundation Award: Call for Nominations

One of the aims of the IFAC Foundation is to promote the awareness and dissemination of the social relevance of automatic control. Beginning with the Congress year 2017, the IFAC Foundation will recognize, with an award, contributions from individuals or group of individuals who, with their work, have shown how Automatic Control science and technology can contribute to significant advances in the broad area of "sustainable development". This includes work in the areas of renewable and clean energy; management of energy, water and resources in general; control in agriculture, pollution control, climate control or similar.

The award will be given to high-quality papers submitted and accepted for presentation at the triennial IFAC World Congress. The award is fully funded by the IFAC Foundation. The winner (or winning team) will receive a medal, a certificate and a monetary prize at the time of the IFAC World Congress.

Nomination Procedure

Nominations of high-quality papers are solicited for the IFAC Foundation awards. Nominations should be prepared according to the format described below and in the nomination form. Nominators should produce a convincing documentation that explicitly describes the benefits and impacts of the proposed contribution. Nominations may also include reference letters. If authors choose to self-nominate, they are limited to one such self-nomination.

Nominations should be sent to the Chair of the Board of Trustees of the IFAC Foundation. All full-length papers, nominated for the IFAC Foundation award, that have been accepted through the normal Congress review process are considered as candidates for the award.

Selection Criteria

The criteria are the highest technical quality and evidence of significant potential future impact on one or more of the fields outlined above. Such criteria include not only the impact and benefits to society of the work done, as presented at the Congress, but also the paper's technical soundness and research content quality based on the IPC evaluation

Selection Procedure

The IFAC Foundation Board of Trustees will appoint a Selection Committee. This committee will examine all qualifying nominated papers and select a winner. The Selection Committee will report to the IFAC Foundation Board of Trustees, proposing a winner and an alternate. Based on the report of the Selection Committee, the IFAC Foundation Board of Trustees may choose a winner or may choose not to give the award.

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The winner will be notified jointly by the Chair of the IFAC Foundation Board of Trustees and by the IFAC President.

Format of the Nomination

Nomination forms can be downloaded from the IFAC Foundation website at <http://foundation.ifac-control.org>. A nomination, consisting of the completed nomination form with its supporting documents, should be sent, by e-mail, to the IFAC Foundation at foundationaward@ifac-control.org as one single file (in pdf format), by the deadline of 15 January 2017.

Questions concerning the award should be directed to the IFAC Board of Trustees at: foundation@ifac-control.org

Further information about the IFAC Foundation can be found at:

<http://foundation.ifac-control.org>



Alberto Isidori
Chair, IFAC Foundation

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

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

www.ifac-control.org

Offenlegung: Das Medienwerk 'IFAC Newsletter' wird als Organ der 'International Federation of Automatic Control' (IFAC) verlegt und ist Eigentum dieser Internationalen Föderation, deren Tätigkeit der Förderung von Wissenschaft und Technik automatischer Regelung und Steuerung dient. Die Föderation hat ihren Sitz in Zürich und ist nach Schweizer Recht als gemeinnütziger Verein angemeldet. Sie verfolgt weder wirtschaftliche noch praktische Ziele.

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. 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 2014-2017 ist Prof. Janan Zaytoon (Frankreich), Vizepräsidenten sind Prof. Sergio Bittanti (Italien) und Prof. Francis C. Doyle III (USA). Alle Funktionen werden ehrenamtlich ausgeübt.

(To our readers: To comply with the Austrian 'Media Act', every publication must contain a declaration once a year concerning ownership and purpose, as above.)

Mechatronics Journal Handover Ceremony

Mechatronics Journal, under the outstanding leadership of Prof. Maarten Steinbuch (NL), has evolved alongside the field providing timely publication of outstanding research reflecting the most exciting work being done in mechatronics. Both IFAC President Janan Zaytoon and Elsevier Publisher Alison Waldron paid tribute to the successful tenure of Professor Steinbuch as Editor-in-Chief of Mechatronics 2008-2015 by hosting a ceremony at the recent IFAC Mechatronics conference at Loughborough University, UK on September 2016.

Mechatronics is an international journal that publishes papers relating to the multidisciplinary area of design and use of advanced automated systems, where the synergistic integration of mechanics, electronics, and control plays a fundamental role. It is published ten times a year and all papers are rigorously reviewed prior to publication. Special issues are published on new and emerging topics of interest.



Reza Moheimani & Maarten Steinbuch
current and former Editors-In-Chief
at the Mechatronics Journal handover ceremony

Professor Steinbuch's leadership provided a diverse collection of special issues covering emerging areas as well as well-established topics ensuring comprehensive coverage of the exciting work going on across the spectrum of subfields. This also contributed to the phenomenal growth in Impact Factor, bringing it to its highest level ever at 1.871 in the ©Thomson Reuters Journal Citation Reports 2016.

Incoming Mechatronics Editor-in-Chief Professor Reza Moheimani (US) also took a moment to thank Professor Steinbuch for his efforts as well as share his vision for the next phase of Mechatronics. Moheimani will now lead the Journal to the next phase of providing high quality content with guidance from the newly expanded Editorial Board comprised of leaders of both the academic and industrial communities.

The link to the Mechatronics Journal editorial board can be found at

<http://www.journals.elsevier.com/mechatronics/editorial-board/>

Submitted by Alison Waldron, Elsevier, IFAC Publisher

IFAC 2017: Plenary Speakers Announced

Plenary speakers for IFAC 2017 in Toulouse, France from 9-14 July have been announced. They are:

Christos Cassandras (US)

Autonomous Mobility in Smart Cities

Jean-Michel Coron (FR)

History Survey on Control of Nonlinear Partial Differential Equations

Jong-Hwan Kim (KR)

Towards Smart Service Robots with Task Intelligence

Iven Mareels (AU)

Systems Engineering in Water Engineering

Shimon Nof (US) and Gérard Morel (FR)

Historical Survey & Emerging Challenges in Manufacturing System Control – A Global Perspective

Kristin Pettersen (NO)

Snake Robots: From Biology, Through University, Towards Industry

Roberto Tempo (IT)

Dynamic Social Network Analysis

Dawn Tilbury (US)

Hybrid Processes for Controlling Cyber-Physical Manufacturing Systems

Qing-Chang Zhong (UK)

Synchronized & Democratized Smart Grids

The detailed World Congress program will be available by the end of February 2017 and will feature the accepted presentations. The submission deadline has been extended to 8 November 2016 for Regular Papers, and 30 November for Extended Abstracts and Tutorial/Workshop proposals). Workshops and Tutorials will take place on Saturday 8 July and Sunday 9 July 2017. Regular and Extended Abstract contributions will be presented at oral, interactive and demonstrator sessions from Monday 10 July to Friday 14 July 2017.

Sessions will be organized by gathering together papers on close topics, accordingly to the IFAC technical areas and their keywords, and based on the proposed invited sessions and open invited tracks. Plenary and Semi-Plenary presentations will respectively take place each morning and end of afternoon. The preliminary World Congress global schedule provides a quick overview of all the program features. IFAC 2017 has a social media presence on Twitter with the hashtag #IFAC2017. The IFAC community is encouraged to follow the Twitter account, as well as check the World Congress webpage for updates. The website for IFAC 2017 is:

<http://www.ifac2017.org>

Calendar of IFAC Events

Title	2016	Place	Further information
IEEE - CSS, The Asian Control Association, IFAC Conference on Australian Control Conference (in cooperation with IFAC) AUCC 2016	November 03 – 04	Newcastle Australia	http://www.aucc2016.org.au/ e-mail: not yet available
4th IFAC Symposium on Telematics Applications TA 2016	November 06 – 09	Porto Alegre - RS Brazil	http://ifactelematics2016.ece.ufrgs.br/ e-mail: ifactelematics2016@ece.ufrgs.br
8th INSTICC (SCITEPRESS) IFAC et al. Conference on International Joint Conference on Computational Intelligence IJCCI 2016	November 09 – 11	Porto Portugal	http://www.ijcci.org/ e-mail: ijcci.secretariat@insticc.org
13th European et al. IFAC Workshop on Advanced Control and Diagnosis ACD 2016	November 17 – 18	Lille France	http://www.acd2016.eu/ e-mail: acd2016@gandi.fr
12th IFAC Workshop on Intelligent Manufacturing Systems IMS 2016	December 05 – 07	Austin, TX USA	http://www.ifacims2016.com/ e-mail: contact@imscenter.net
1st IFAC IEEE CSS, et al. Conference on Cyber-Physical & Human-Systems CPHS 2016	December 07 – 09	Florianopolis Brazil	http://www.cphs2016.org/ e-mail: not yet available
Title	2017	Place	Further information
ASET, IFAC, IEEE International Conference on Advanced Systems and Electrical Technologies IC_ASET 2017	January 14 – 17	Hammamet Tunisia	http://aset.ieee.tn/ e-mail: not yet available
Conference on American Control Conference (in cooperation with IFAC) ACC 2017	May 24 – 27	Seattle, WA USA	http://acc2017.a2c2.org/ e-mail: jingsun@umich.edu
20th IFAC World Congress 2017	July 09 – 14	Toulouse France	http://www.ifac2017.org/ e-mail: contact@ifac2017.org
IEEE - CSS, IFAC, SICE, ICROS Conference on Asian Control Conference (in cooperation with IFAC) ASCC 2017	December 17 – 20	Gold Coast Australia	https://www.ascc2017.com/ e-mail: l.vlacic@griffith.edu.au
Title	2018	Place	Further information
9th TU Wien/IFAC Vienna International Conference on Mathematical Modelling MATHMOD 2018	February 21 – 23	Vienna Austria	http://www.mathmod.at/ e-mail: info@mathmod.at
16th IFAC/IEEE et al. Symposium on Information Control Problems in Manufacturing INCOM 2018	June 11 – 13	Bergamo Italy	http://not yet available e-mail: not yet available
IFAC Workshop on Networked & Autonomous Air & Space Systems NAASS 2018	June 13 – 15	Santa Fe, NM USA	http://not yet available e-mail: not yet available
Conference on American Control Conference (in cooperation with IFAC) ACC 2018	June 27 – 29	Milwaukee, WI USA	http://not yet available e-mail: not yet available
18th IFAC/IEEE CSS Symposium on System Identification SYSID 2018	July 09 – 11	Stockholm Sweden	http://not yet available e-mail: not yet available

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