

Automatica: Changing of the Guard

Following a very successful and incredibly well attended meeting of the editorial board of Automatica, and after 11 very successful years at the helm, Professor Tamer Basar (US) handed over the reins of IFAC's Automatica journal to his longstanding deputy Professor Roberto Tempo, (IT) at a reception for the Editors and select guests on Monday 15 December, during CDC 2014 in Los Angeles, California, USA.

Tamer Basar is now serving IFAC as chair of the Publications Committee, one of IFAC's Executive Committees.

The reception provided an opportunity for IFAC and Elsevier to recognize the work of Professor Basar in establishing Automatica as the leading journal in the field of Control Engineering, to thank the Automatica Editors for their outstanding services to the publication, and to welcome Professor Tempo to his new role. As well as addresses from the outgoing

and incoming Editors in Chief, IFAC President Janan Zaytoon and IFAC Publisher Adam Wheeler honored Prof Basar on behalf of IFAC and of Elsevier for his services to Automatica as Associate Editor, Editor and Editor in Chief. Becky Lonberger, who has managed the Editorial Office for over 20 years, was also honored for her outstanding services to the journal during this time.

During the evening, former IFAC President Steve Kahne entertained the guests with a brief history of Automatica from its inception, which included some brief insights into IFAC's dealings with Bob Maxwell, the notorious but enigmatic business tycoon and former owner of Pergamon Press.



Left to right: New Automatica Editor-in-chief Roberto Tempo, Former Automatica Editor-in-chief/current IFAC Publications Committee chair Tamer Basar



IFAC Advisor Steve Kahne speaks to the crowd at the Automatica reception

Professor Tempo's tenure has begun on 1 January 2015. We wish Roberto all the very best.

Written by Adam Wheeler, IFAC Publisher, Elsevier Ltd., United Kingdom. Photos submitted by Janan Zaytoon, IFAC President.

The Automatica team



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IN THIS ISSUE:

**Automatica:
Changing of the Guard**

**Introducing the 2011 – 2014
IFAC Fellows:
Continuation in a series**

**Obituary:
Manfred Thoma**

Forthcoming Events

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 48 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.)

Introducing the 2011 – 2014 IFAC Fellows

Continuation in a series

A. Stephen Morse



A. Stephen Morse was born in Mt. Vernon, New York, USA. He received a BSEE degree from Cornell University, a MS degree from the University of Arizona, and a Ph.D. degree from Purdue University. From 1967 to 1970 he was associated with the Office of Control Theory and Application (OCTA) at the NASA Electronics Research Center in Cambridge, Mass.

Since 1970 Morse has been with Yale University where he is presently the Dudley Professor of Engineering. His main interest is in system theory and he has done research in network synthesis, optimal control, multivariable control, adaptive control, urban transportation, vision-based control, hybrid and nonlinear systems, sensor networks, and coordination and control of large grouping of mobile autonomous agents.

In addition to being an IFAC Fellow, Morse is a Life Fellow of the IEEE, a past Distinguished Lecturer of the IEEE Control System Society, and a co-recipient of the Society's 1993 and 2005 George S. Axelby Outstanding Paper Awards.

Morse has twice received the American Automatic Control Council's Best Paper Award and is a co-recipient of the Automatica Theory/Methodology Prize. In addition to being an IFAC Fellow he is the recipient of the IEEE's 1999 Technical Field Award for Control Systems and the American Automatic Control Council's 2013 Richard E. Bellman Control Heritage Award.

Morse is a member of the National Academy of Engineering (USA) and the Connecticut Academy of Science and Engineering (USA.)

This Newsletter may be reproduced in whole or in part. We encourage reprinting in national and local automatic control periodicals. Acknowledgement to IFAC would be appreciated.

Yutaka Yamamoto

Yutaka Yamamoto received his B. S. and M. S. degrees in engineering from Kyoto University, Kyoto, Japan in 1972 and 1974, respectively, and the M. S. and Ph. D. degrees in mathematics from the University of Florida, in 1976 and 1978, respectively. From 1978 to 1987 he was with the Department of Applied Mathematics and Physics, Kyoto University. In 1987 he joined the Department of Applied Systems Science as an associate professor and became a professor in 1997. He is currently a professor at the department of Applied Analysis and Complex Dynamical Systems, Graduate School of Informatics of Kyoto University.



His research and teaching interests are in realization and robust control of distributed parameter systems, learning control systems, and sampled-data systems, its application to digital signal processing, with emphasis on sound and image processing.

Dr. Yamamoto received the Sawaragi Memorial Paper Award in 1985, outstanding paper award of SICE in 1987 and in 1997, the best author award of SICE in 1990 and in 2000, the George S. Axelby Outstanding Paper Award in 1996, and the Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology Prizes for Science of Technology in 2007. He received the IEEE Control Systems Society Distinguished Member Award in 2009, and the Transition to Practice Award of the Control Systems Society in 2012, as well as the ISCIE Best Industrial Paper Award in 2009.

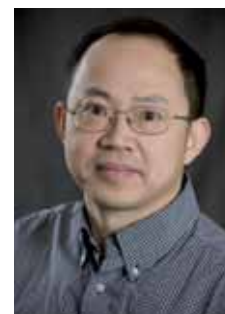
In addition to being an IFAC Fellow, Yamamoto is a Fellow of the IEEE and SICE.

Yamamoto served as the 2013 President of the IEEE Control Systems Society. He has served as vice president for Technical Activities of the CSS for 2005-2006, and as vice president for Publication Activities for 2007-2008.

Yamamoto was an associate editor of the IEEE Transactions on Automatic Control, Automatica, Systems and Control Letters, and is currently an associate editor of Mathematics of Control, Signals and Systems. He has served as a Senior Editor for the IEEE Transactions on Automatic Control for 2010-2011.

He also served as an organizing committee member of 35th CDC in 1996, MTNS '91 in Kobe, and as a member of program committees of several CDC's. He was the chair of the Steering Committee of MTNS, served as General Chair of MTNS 2006. He was a past President of ISCIE of Japan.

Tongwen Chen



Tongwen Chen received the BEng degree in Automation and Instrumentation from Tsinghua University (Beijing) in 1984, and the MSc and PhD degrees in Electrical Engineering from the University of Toronto in 1988 and 1991, respectively. From 1991 to 1997, he was with the Department of Electrical and Computer Engineering at the University of Calgary, Canada. Since 1997, he has been with the University of Alberta, Edmonton, Canada, and is presently a Professor of Electrical and Computer Engineering.

Chen has contributed to a number of research areas including sampled-data control, multi-rate systems and process control, and networked control systems. He co-authored with B.A. Francis the book *Optimal Sampled-Data Control Systems* (Springer, 1995). Moreover, some of his research results have been applied and implemented in the Canadian industry. In addition to being an IFAC Fellow, Dr. Chen is an IEEE Fellow and a Fellow of the Canadian Academy of Engineering. He received a Killam Professorship for 2006-2007 from the University of Alberta. He has served as an Associate Editor for several international journals, including *Automatica*, *IEEE Transactions on Automatic Control*, and *Systems and Control Letters*.

Pramod Khargonekar

Pramod Khargonekar received his B. Tech. Degree in electrical engineering from the Indian Institute of Technology, Bombay, India, in 1977, and M.S. degree in mathematics and Ph.D. degree in electrical engineering from the University of Florida (Gainesville, FL, USA) in 1980 and 1981, respectively.



Khargonekar was an assistant professor of electrical and computer engineering at the University of Florida from 1981 to 1984; associate professor from 1984 to 1988 and professor from 1988 to 1989 of electrical engineering at the University of Minnesota (Minneapolis, MN, USA); and professor of electrical engineering and computer science from 1989 to 2001 at the University of Michigan (Ann Arbor, MI, USA.) He was chairman of the Department of Electrical Engineering and Computer Science from 1997 to 2001 and also held the position of Claude E. Shannon Professor of Engineering Science at The University of Michigan. From 2001 to 2009, he was Dean of the College of Engineering at the University of Florida. He has held the Eckis Professorship in Electrical and Computer Engineering at the University of Florida since 2001. He served as Deputy Director of Technology at ARPA-E, U. S. Department of Energy in 2012-13. From March 2013, he has been serving as Assistant Director of the U.S. National Science Foundation, heading its engineering directorate.

Khargonekar's research and teaching interests are centered on theory and applications of systems and control. He has authored more than 130 refereed journal papers and 150 conference papers. He has supervised 32 doctoral students.

In addition to being an IFAC Fellow, Khargonekar was a recipient of the NSF Presidential Young Investigator Award, the American Automatic Control Council's Donald Eckman Award, the Japan Society for Promotion of Science fellowships, the IEEE W. R. G. Baker Prize Award, the IEEE CSS George Axelby Best Paper Award, the Hugo Schuck ACC Best Paper Award, and the Distinguished Alumnus and Distinguished Service Awards from the Indian Institute of Technology, Bombay. He is a Fellow of IEEE. At the University of Michigan, he received the Arthur F. Thurnau Professorship and the College of Engineering Research Excellence Award. The impact of his scholarly work has led to his recognition as a Web of Science Highly Cited Researcher.

Khargonekar has served as Associate Editor for IEEE Transactions on Automatic Control, SIAM Journal of Control, Systems and Control Letters, and International Journal of Robust and Nonlinear Control. He has been a member of the IEEE Control Systems Theory and Robust Control technical committees.

Obituary: Manfred Thoma 1929–2014

It is with great sadness to inform the IFAC community that former IFAC president Professor Manfred Thoma passed away on November 10, 2014 at the age of 85 years. His passing has left a big gap not only in his family and among his many friends, but in the whole "IFAC family", a phrase that Manfred Thoma lived out through his professional and personal friendships with colleagues worldwide.



IFAC President 1984–1987

From 1984 to 1987, Prof. Thoma was the 11th IFAC President and under his leadership, the 10th IFAC World Congress took place in Munich, Germany, in 1987. During his whole career and beyond Manfred Thoma was actively involved in IFAC. He was an IFAC Advisor and an IFAC Fellow, as well as a founding member of the Michel Cuenod Fund, a predecessor of the current IFAC Foundation, of which he was an invited expert from its founding through when he retired from the foundation work in 2011.

Manfred Thoma was appointed Professor for Automatic Control in 1967 at the Leibniz-Universität in Hannover, Germany, where he was chair of the Institute of Automatic Control until his retirement in 1997. Thoma's research predominantly dealt with state space methods, optimization and nonlinear control. With his comprehensive scientific expertise and his innovative ideas, he initiated a multitude of research and development projects and caused sustainable innovations. Thoma's research was often directly related to industrial problems and thus he was in close contact with industry throughout his career. This also manifested itself by having been elected as president of the INTERKAMA in Hannover for many years, one of the world's leading fairs for the process industry.

Manfred Thoma supported the automatic control community through academic service in many roles. Next to his many IFAC responsibilities, he has also been actively involved in the German IFAC National Member Organization VDI/VDE, and he held many offices, including dean, at his home university. He was also known for the organization of international conferences, including the workshop series "Control Theory" at the Mathematisches Forschungsinstitut Oberwolfach, Germany. Furthermore, he held many leading editorial positions, such as for the Springer „Lecture Notes in Control and Information Sciences," for which he was the founding editor.

Prof. Thoma received numerous honors including many honorary doctorates from universities throughout the world and the appointment as member of the Scientific Academies in Russia, the Ukraine and Hungary. In his desire to bring the international control community in the East and in the West closer together, Manfred Thoma was constantly travelling throughout the world. During his many trips, Prof. Thoma was always accompanied by a pair of binoculars. The ornithologist found distraction in parks worldwide and was even able to tell something new to biologists and rangers.

Amongst his colleagues and within the automatic control community, Manfred Thoma was appreciated extraordinarily. We cordially thank Manfred Thoma for his many contributions to IFAC and to the whole control community. We will hold his memory in highest esteem.

Submitted by Frank Allgöwer, IFAC President Elect 2014-2017

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

Automatica

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

Control Engineering Practice

<http://www.elsevier.com/locate/conengprac>

Engineering Applications of Artificial Intelligence

<http://www.elsevier.com/locate/engappai>

Journal of Process Control

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

Annual Reviews in Control

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

Journal on Mechatronics

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

Nonlinear Analysis: Hybrid Systems

<http://www.elsevier.com/locate/nahs>

Calendar of IFAC Events

Title	2015	Place	Further Information
8th TU Vienna/IFAC Conference on Mathematical Modelling MATHMOD 2015	February 18 – 20	Vienna Austria	http://www.mathmod.at e-mail: info@mathmod.at
IEEE/IFAC Workshop on Recent Advances in Sliding Modes RASM 2015	April 09 – 11	Istanbul Turkey	http://www.rasm.boun.edu.tr e-mail: not yet available
4th IFAC/SUT/ONR Workshop on Navigation, Guidance and Control of Underwater Vehicles NGCUV 2015	April 15 – 17	Girona Spain	http://ngcuv.udg.edu/ e-mail: mvs2015@unisalento.it
15th IFAC/IEEE/IFIP/IFORS Symposium on Information Control Problems in Manufacturing INCOM 2015	May 11 – 13	Ottawa Canada	http://incom2015.org/ e-mail: secr@incom2015.org
13th IFAC/IEEE Conference on Programmable Devices and Embedded Systems PDES 2015	May 13 – 15	Cracow Poland	http://pdes.polsl.pl/ e-mail: pdes@polsl.pl
3rd IFAC/IEEE Workshop on Multivehicle Systems MVS 2015	May 18	Genova Italy	http://mvs2015.unisalento.it/ e-mail: mvs2015@unisalento.it
2nd IFAC Workshop on Automatic Control in Offshore Oil and Gas Production OOGP 2015	May 27 – 29	Florianopolis Brazil	http://www.ifac-oilfield.ufsc.br/ e-mail: not yet available
5th IFAC Workshop on Dependable Control of Discrete Systems DCDS 2015	May 27 – 29	Cancun Mexico	http://not yet available e-mail: not yet available
Asian Control Conference (ASCC) in cooperation with IFAC	May – June 31 – 03	Kota Kinabalu Malaysia	http://ascc2015.com/ e-mail: secretariat@ascc2015.com
9th IFAC Symposium on Advanced Control of Chemical Processes ADCHEM 2015	June 07 – 10	Whistler Canada	http://www.adchem2015.ca/ e-mail: adchem.2015@ualberta.ca
IFAC Workshop on Advanced Control and Navigation for Autonomous Aerospace Vehicles ACNAAV 2015	June 10 – 12	Seville Spain	http://www.aero.us.es/acnaav15 e-mail: rvazquez1@us.es
2nd IFAC Conference on Embedded Systems, Computer Intelligence and Telematics CESCIT 2015	June 22 – 24	Maribor Slovenia	http://cescit2015.um.si/ e-mail: cescit2015@um.si
1st IFAC Conference on Modelling, Identification and Control of Nonlinear Systems MICNON 2015	June 24 – 26	St. Petersburg Russian Federation	http://micnon2015.org/ e-mail: not yet available
12nd IFAC Workshop on Time Delay Systems TDS 2015	June 28 – 30	Ann Arbor, MI USA	http://me.engin.umich.edu/dirifac/ e-mail: timedelay2015@umich.edu
American Control Conference (ACC) in cooperation with IFAC	July 01 – 03	Chicago, IL USA	http://www.a2c2.org/conferences/acc2015 e-mail: braatz@mit.edu
5th IFAC Workshop on Lagrangian and Hamiltonian Methods for Nonlinear Control LHMNC 2015	July 04 – 07	Lyon France	http://www.lhmn15.org/ e-mail: not yet available
10th IEEE, IEEE CSS, IFAC Workshop on Robot Motion and Control RoMoCo 2015	July 06 – 08	Poznan Poland	http://romoco.put.poznan.pl/ e-mail: piotr.mieszala@put.poznan.pl
8th IFAC Symposium on Robust Control Design ROCOND 2015	July 08 – 11	Bratislava Slovakia	http://www.rocond15.sk e-mail: info@rocond15.sk

Calendar of IFAC Events

Title	2015	Place	Further Information
European Control Conference (ECC) in cooperation with IFAC	July 15 – 17	Linz Austria	http://www.ecc15.at/ e-mail: secretariat@ecc15.at
12th INSTICC Conference on Informatics in Control, Automation and Robotics ICINCO 2015	July 21 – 23	Colmar, Alsace France	http://www.icinco.org/ e-mail: icinco.secretariat@insticc.org
CACHE Meeting on Foundations of Systems Biology in Engineering - FOSBE 2015 in cooperation with IFAC	August 09 – 12	Boston, MA USA	http://fosbe.org/ e-mail: rcraven@fosbe.org
4th IFAC Workshop on Engine and Powertrain Control, Simulation and Modeling E-COSM 2015	August 23 – 26	Columbus, OH USA	https://e-cosm2015.engineering.osu.edu/ e-mail: not yet available
10th IFAC Conference on Manoeuvring and Control of Marine Craft MCMC 2015	August 24 – 26	Copenhagen Denmark	http://www.conferencemanager.dk/mcmc2015/ e-mail: secretariat@mcmc2015.dk
4th IFAC Workshop on Mining, Mineral and Metal Processing MMM 2015	August 25 – 27	Oulu Finland	http://ifacmmm2015.automaatioseura.fi/ e-mail: office@automaatioseura.fi
4th IFAC Conference on Analysis and Control of Chaotic Systems CHAOS 2015	August 26 – 28	Tokyo Japan	http://ctrl.mech.se.tmu.ac.jp/chaos2015 e-mail: not yet available
11th IFAC Symposium on Robot Control SYROCO 2015	August 26 – 28	Salvador, BA Brazil	http://www.syroco2015.org/ e-mail: syroco2015@ece.ufrgs.br
9th IFAC Symposium on Biological and Medical Systems BMS 2015	Aug. – Sept. 31 – 02	Berlin Germany	http://www.bms2015.org e-mail: info@bms2015.org
9th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes SAFEPROCESS 2015	September 02 – 04	Paris France	http://safeprocess15.sciencesconf.org/ e-mail: contact@safeprocess2015.fr
SAFER, IFAC, IEEE, ITSC Symposium on Future Active Safety Technology Towards zero traffic accidents FAST-zero 2015	September 09 – 11	Gotheburg Sweden	http://fastzero15.net/ e-mail: info@fastzero15.net
5th IFAC Workshop on Distributed Estimation and Control in Networked Systems NecSys 2015	September 10 – 11	Philadelphia USA	http://necsys2015.seas.upenn.edu/index.html e-mail: not yet available
5th IFAC Conference on Nonlinear Model Predictive Control NMPC 2015	September 17 – 20	Seville Spain	http://disa.us.es/nmpc15/ e-mail: d1m@us.es
IEEE IFAC Multi-Conference on Systems and Control MSC 2015	September 21 – 23	Sydney Australia	http://www.msc2015.org/ e-mail: info@msc2015.org
16th IFAC Conference on Technology, Culture and International Stability TECIS 2015	September 24 – 27	Sozopol Bulgaria	http://www.tecis.tu-plovdiv.bg/ e-mail: tecis@tu-plovdiv.bg
16th IFAC Workshop on Control Applications of Optimization CAO 2015	October 06 – 09	Garmisch-Partenk. Germany	http://not yet available e-mail: not yet available
1st IFAC Workshop on Linear Parameter Varying systems LPVS 2015	October 07 – 09	Grenoble France	http://www.gipsa-lab.fr/LPVS2015/ e-mail: sssc2013@gipsa-lab.grenoble-inp.fr
5th IFAC Conference on Analysis and Design of Hybrid Systems ADHS 2015	October 14 – 16	Atlanta, Georgia USA	http://adhs15.gatech.edu/ e-mail: magnus@gatech.edu

Calendar of IFAC Events

Title	2015	Place	Further Information
17th IFAC/IEEE/CSS Symposium on System Identification SYSID 2015	October 19 – 21	Beijing China	http://sysid2015.info/index.html e-mail: secretariat@sysid2015.info
3rd IFAC Workshop on Internet Based Control Education IBCE 2015	November 04 – 06	Brescia Italy	http://not yet available e-mail: not yet available
Eng. Australia and others Conference on Australian Control Conference - AUCC 2015 in cooperation with IFAC	November 05 – 06	Gold Coast Australia	http://www.aucc.org.au/AUCC2015/ e-mail: not yet available
9th IFAC Symposium on Control of Power and Energy Systems CPES 2015	December 09 – 11	New Delhi India	http://www.cpes2015.org/ e-mail: info@cpes2015.org
Title	2016	Place	Further Information
7th IFAC Conference on Management and Control of Production and Logistics MCPL 2016	February 22 – 24	Bremen Germany	http://www.ldic-conference.org/ e-mail: not yet available
11th IFAC Symposium on Dynamics and Control of Process Systems, including Biosystems DYCOPS 2016	June 06 – 08	Trondheim Norway	http://dycops2016.org/ e-mail: dycops2016@itk.ntnu.no
2nd IFAC/IEEE CSS Workshop on Control of Systems Governed by Partial Differential Equations CPDE 2016	June 13 – 15	Bertinoro Italy	http://www.cpde2016.org/ e-mail: cpde2016@gmail.com
8th IFAC Symposium on Advances in Automotive Control AAC 2016	June 20 – 23	Kolmården Wildlife R. Sweden	http://not yet available e-mail: not yet available
8th IFAC/IEEE and others Conference on Manufacturing Modelling, Management and Control MIM 2016	June 28 – 30	Troyes France	http://mim2016.utt.fr/ e-mail: mim2016@utt.fr
20th IFAC Symposium on Automatic Control in Aerospace ACA 2016	August 21 – 25	Sherbrooke, Québec Canada	http://aca2016.ngcaerospace.com/ e-mail: aca2016@ngcaerospace.com
10th IFAC Symposium on Non-Linear Control Systems NOLCOS 2016	August 23 – 25	Monterey, CA USA	http://not yet available e-mail: not yet available
17th IFAC and others Symposium on Mining, Mineral and Metal Processing MMM 2016	Aug. – Sept. 31 – 02	Vienna Austria	http://www.ifacmmm2016.org/ e-mail: not yet available
Title	2017	Place	Further Information
20th IFAC World Congress	July 09 – 14	Toulouse France	http://www.ifac2017.org/ e-mail: contact@ifac2017.org

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