Dear Friends and Colleagues,

We are looking forward to welcoming you to Cape Town for the IFAC World Congress!

From the International Programme Committee side, the technical programme includes 11 plenary lectures and two thousand-odd papers that will be presented over five days of parallel invited-, regular- and interactive-sessions. The final programme, author and keyword indices, and the “My Program” feature are available at ifac.papercept.net/conferences/conferences/IFAC14/program/. The Congress will include thirteen interactive sessions in which authors will be making short oral presentations and presenting their work by means of posters or other interactive means. Finally, the technical programme includes pre-congress tutorials, technical visits and a team from ETH Zurich (Switzerland) showing off their amazing quad-copters in action at a public lecture. The Congress has around 6500 authors from 73 countries, including 156 authors from 11 countries in Africa.

We are satisfied that the 19th IFAC World Congress will offer the high technical quality and interaction opportunities that you have come to expect from an IFAC World Congress.

I hope that you will also be taking the opportunity of visiting South Africa as part of your Congress plan. You should try to meet the people of South Africa, appreciate our history, see the natural beauty and see some wildlife. It will be early spring so it may still be cool but the end of winter is a perfect time to go on safari as the grass is short and animals are easier to spot. If you are limited to the vicinity of Cape Town, there are many sights to see – the iconic Table Mountain and Kirstenbosch National Botanical Gardeen are part of the Cape Floral Region UNESCO World Heritage Site; Robben Island where Nelson Mandela was imprisoned is a cultural World Heritage Site; the Cape Winelands; to name just a few. You can get further tourism advice and information by visiting the congress website www.ifac2014.org

Kind regards

Ed Boje, IPC co-chair
Introducing the IFAC Fellows

Sigurd Skogestad

Sigurd Skogestad is a professor in chemical engineering at the Norwegian University of Science and Technology (NTNU) in Trondheim. Born in Norway in 1955, he received the Siv.ing. degree (M.S.) in chemical engineering at NTNU in 1978. After finishing his military service at the Norwegian Defence Research Institute, he worked from 1980 to 1983 with Norsk Hydro in the areas of process design and simulation at their Research Center in Porsgrunn, Norway. Moving to the US and working 3.5 years under the guidance of Manfred Morari, he received the Ph.D. degree from the California Institute of Technology in 1987. He has been a full professor at NTNU since 1987. During the period 1999 to 2009 he was Head of Department of Chemical Engineering. He was at sabatical leave at the University of California at Berkeley in 1994-95, and at the University of California at Santa Barbara in 2001-02.

The author of about 200 international journal publications and 200 conference publications, he is the principal author together with Ian Postlethwaite of the book „Multivariable feedback control” published by Wiley in 1996 (first edition) and 2005 (second edition). Dr. Skogestad was awarded „Innsitting to the King” for his Siv.ing. degree in 1979, a Fullbright fellowship in 1983, received the Ted Peterson Award from AIChE in 1989, the George S. Axelby Outstanding Paper Award from IEEE in 1990, the O. Hugo Schuck Best Paper Award from the American Automatic Control Council in 1992, and the Best Paper of the Year 2004 Award from Computers and Chemical Engineering. He was an Editor of Automatica during the period 1996-2002 and is member of the IFAC Technical Board for the period 2008 to 2014, and was elected into the Process Control Hall of Fame in 2011.

Professor Skogestad has graduated 34 PhD candidates (1990-2012). He presently has a group of about 6 Ph.D. students and is the Head of PROST which is the strong point center in process systems engineering in Trondheim and involves about 50 people in various departments.

The goal of his research is to develop simple yet rigorous methods to solve problems of engineering significance. Research interests include the use of feedback as a tool to (1) reduce uncertainty (including robust control), (2) change the system dynamics (including stabilization), and (3) generally make the system more well-behaved (including self-optimizing control). Other interests include limitations on performance in linear systems, control structure design and plantwide control, interactions between process design and control, and distillation column design, control and dynamics. His other main interests are mountain skiing (cross country), orienteering (running around with a map) and grouse hunting.

Eduardo Sontag

Eduardo Sontag received his undergraduate degree in Mathematics from the University of Buenos Aires (Argentina) in 1972, and his Ph.D. in Mathematics from the University of Florida (USA) in 1976, working under Rudolf E. Kalman.

Since 1977 he has been with the Department of Mathematics at Rutgers University, where he is a Distinguished Professor of Mathematics, a member of the Cancer Institute of New Jersey and the Graduate Faculties of the Computer Science Department and the ECE Department, as well as the Director of the Center for Systems and Control and of the Biomatics Undergraduate Interdisciplinary Degree, and founding member of the BioMapS Institute for Quantitative Biology.

His current research interests are broadly in applied mathematics, and specifically in systems biology, dynamical systems, and feedback control theory. In the 1980s and 1990s, Sontag introduced new tools for analyzing the effect of external inputs on the stability of nonlinear systems (“input to state stability”) and for feedback design (“control-Lyapunov functions”), both of which have been widely adopted as paradigms in engineering research and education. He also developed the early theory of hybrid (discrete/continuous) control, and worked on learning theory applied to neural processing systems as well as in the foundations of analog computing.

Starting around 1999, his work has turned in large part to developing basic theoretical aspects of biological signal transduction pathways and gene networks, as well as collaborations with a range of experimental and computational biological labs dealing with cell cycle modeling, development, cancer progression, infectious diseases, physiolog y, synthetic biology, and other topics. He has published about 500 papers in fields ranging from control theory and theoretical computer science to cell biology, with over 26,000 citations, including a book with over 2,200, a paper with nearly 1,300, and a dozen papers with over 400 citations each.

In addition to being an IFAC Fellow, Sontag is a Fellow of IEEE, AMS, and SIAM, and was awarded the Reid Prize by SIAM in 2001, the Bode Prize in 2002 and the Control Systems Field Award in 2011 from IEEE, and the 2002 Board of Trustees Award for Excellence in Research and the 2005 Teacher-Scholar Award from Rutgers University.
Introducing the IFAC Fellows

Bozenna Pasik-Duncan

Bozenna Pasik-Duncan, Professor of Mathematics and Courtesy Professor of EECS of University of Kansas since 1984, received her M.S. degree from Mathematics Department of Warsaw University in 1970, and her Ph.D. and Habilitation Doctorate degrees from Mathematics Department of Warsaw School of Economics in 1978 and 1986 respectively. She was a faculty member of the Mathematics Department of Warsaw School of Economics, 1970-1984. Her research interests are primarily in stochastic adaptive control, system identification and estimation, stochastic analysis, and STEM education. She is an author/co-author of more than 150 technical articles and 3 books. She has held visiting research appointments in Poland, Hungary, Czech Republic, France, Italy, Japan and China.

In IEEE Control Systems Society (CSS) she has served in a number of capacities, such as the Chair of CSS Technical Committee on Control Education, 2002-2012, CSS Liaison to IEEE Women in Engineering Committee, 2006-2012, a member of CSS Conference Editorial Board, an Associate Editor of Transactions on Automatic Control (TAC), 1990-1997, Chair of Standing Committees on Assistance of Engineers at Risk, Women in Control, and International Affairs, Chair of Task Force on Globalization, Associate Editor at Large of TAC, 1997-2002, two term elected member of CSS Board of Governors, Vice-President of CSS, 1998-1999. She was founder of CSS Women in Control Group in 1988. Each year since 2000 she has been organizing workshops for high school teachers and students at the CDCs and ACCs. She has also held positions in Polish Mathematical Society and SIAM, and currently in AACC and IFAC as Chairs of Technical Committees on Control Education, and as Chair of IFAC Harold Chestnut Control Engineering Textbook Selection Committee.

Among awards that she has received in addition to the IFAC Fellow are: IEEE Fellow; IEEE Third Millennium Medal; Distinguished Member of the CSS; University of Kansas Women’s Hall of Fame; NSF Career Advancement Award; Polish Ministry of Higher Education and Science Award; IREX Fellowship for research in the US; Kemper Fellowship for excellence in teaching and outreach; University of Kansas HOPE (Honor to Outstanding Progressive Educator) award; Louise Hay Award; and Service to Kansans Award.

Sanjoy K. Mitter received his Ph.D. degree from the Imperial College of Science and Technology (United Kingdom) in 1965. He taught at Case Western Reserve University (USA) from 1965 to 1969. He joined MIT (USA) in 1969 where he has been a Professor of Electrical Engineering since 1973. He was the Director of the MIT Laboratory for Information and Decision Systems from 1981 to 1999. He has also been a Professor of Mathematics at the Scuola Normale, Pisa, Italy from 1986 to 1996. He has held visiting positions at Imperial College, London; University of Groningen, Holland; INRIA, France; Tata Institute of Fundamental Research (India) and ETH, (Zürich, Switzerland), as well as several other American universities.

Mitter was the Ulam Scholar at Los Alamos National Laboratories in April 2012 and the John von Neumann Visiting Professor in Mathematics at the Technical University of Munich, Germany, in May-June 2012. He was awarded the AACC Richard E. Bellman Control Heritage Award for 2007. He was the McKay Professor at the University of California, Berkeley (USA) in March 2000, and held the Russell-Severance-Springer Chair in Fall 2003. In addition to being an IFAC Fellow, Mitter is a Fellow of the IEEE and a Member of the National Academy of Engineering. He is the winner of the 2000 IEEE Control Systems Award. He was elected a foreign member of Istituto Veneto di Scienze, Lettere ed Arti (Italy) in 2003. In 1988, he was elected to the National Academy of Engineering.

Mitter’s current research interests are Communication and Control in a Networked Environment, the relationship of Statistical and Quantum Physics to Information Theory and Control and Autonomy and Adaptiveness for Integrative Organization.

Sizhao Joe Qin

Sanjoy Mitter

Dr. Sizhao Joe Qin is the Fluor Professor of Process Engineering and Vice Dean at the Viterbi School of Engineering at University of Southern California (Los Angeles, CA, USA.) He obtained his B.S. and M.S. degrees in Automatic Control from Tsinghua University (Beijing, China) in 1984 and 1987, respectively, and his Ph.D. degree in Chemical Engineering from University of Maryland at College Park (College Park, MD, USA) in 1992. Qin’s research interests include statistical process monitoring and fault diagnosis, model predictive control, system identification, building energy optimization, semiconductor process control, and control performance monitoring. He is a co-director of the Texas-Wisconsin-California Control Consortium where he has been principal investigator for 18 years.

In addition to being an IFAC Fellow, Qin is a Fellow of IEEE. He is a recipient of the National Science Foundation CAREER Award, the 2011 Northrop Grumman Best Teaching award at Viterbi School of Engineering, the DuPont Young Professor Award, Halliburton/Brown & Root Young Faculty Excellence Award, NSF-China Outstanding Young Investigator Award, Chang Jiang Professor of Tsinghua University awarded by the Ministry of Education of China, and an IFAC Best Paper Prize for the model predictive control survey paper published in Control Engineering Practice. He is currently an Associate Editor for Journal of Process Control, IEEE Control Systems Technology, and IEEE Transactions on Control Systems Technology, and IEEE Transactions on Industrial Informatics. Qin has published over 100 papers in SCI journals, with over 4300 ISI WoS citations and an h-index of 35.

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.
The 4th IFAC Workshop on Distributed Estimation and Control in Networked Systems (NecSys) was held Wednesday and Thursday, September 25 - 26, 2013 at the conference center Rhine- Moselle-Hall in Koblenz, Germany. The workshop was organized by the Institute of Automation and Computer Control of Ruhr-Universität Bochum and partly sponsored by the Deutsche Forschungsgesellschaft (DFG, German Research Foundation.)

The workshop was organized in a non-traditional format with 9 plenary sessions and 4 technical poster sessions. This non-traditional format was in keeping with the NecSys tradition and was comparable to the workshop format of NecSys '09 in Venice, Italy, NecSys'10 in Amecy, France and NecSys'12 in Santa Barbara, California, USA.

This workshop format has proven to lead to ample opportunities for stimulating discussions, scientific networking and collaborations and was well received by the participants, who in turn actively could present their own field of research and also could keep up with the research of others in their chosen field.

Professor Maurice Heemels of Eindhoven University (Netherlands) and Professor Bart de Schutter of Delft University (Netherlands) chaired the international program committee in charge of the peer review process. 81 papers were submitted out of which 62 were accepted for presentation at the workshop.

The workshop attracted participants from 17 countries, among them the United States of America, Australia, China, Japan, France, Italy, the Netherlands, Sweden and many more.

The workshop was opened by an address of the workshop’s conference chair, Professor Jan Lunze of Ruhr-University Bochum (Germany.) Professor Frank Allgöwer of Stuttgart University (Germany) represented IFAC and also gave a short address on the first conference day.

There were nine plenary speakers:
- Moritz Diehl, KU Leuven, Belgium
- Paulo Tabuada, UCLA, Los Angeles, CA, USA
- Thilo Gross, University of Bristol, UK
- João Pedro Hespanha, University of California at Santa Barbara, USA
- Jürgen Kurths, Humboldt University Berlin, Germany
- Malcolm C. Smith, University of Cambridge, UK
- Cristian Luis Huepe Minolleti, Northwestern University, Evanston, IL, USA
- Patrick Thiran, École Polytechnique Fédérale de Lausanne, Switzerland
- Vincent D. Blondel, University of Louvain, Belgium.

The topics ranged from Event-triggered and Self-triggered Control in Wired and Wireless Control Systems, Collective Decision-making in Humans, Locusts, and Fish to Networks, Complexity, and Emergence in Music.

Each of the four poster sessions were subdivided into four categories:
- Control under communication restraints
- Distributed Control and Estimation
- Distributed optimization and MFC and
- Multi agent systems and consensus.

The technical program, information about each presented poster and the list of plenary speakers together with titles and abstracts are available at the conference website:
http://www.necsys2013.ruhr-uni-bochum.de

NecSys 2013 was a great success, as confirmed by attendees who praised the technical schedule, content and organization. Also widely approved were the networking possibilities allowed by the workshop’s overall structure, the appealing venue and the offered social events (welcome reception, Rhine River cruise, and vineyard excursion), that allowed for a more informal exchange and were quote “very authentic and memorable.”

Submitted by Professor Dr.-Ing. Jan Lunze Institute of Automation and Computer Control, Ruhr-University Bochum

Introducing the IFAC Fellows
Laurent Praly

Laurent Praly graduated as an engineer from Ecole Nationale Superieure des Mines de Paris in 1976 and received his PhD in Automatic Control and Mathematics in 1988 from Universite Paris IX Dauphine (France.)

After working in industry, Praly joined the Centre Automatique et Systemes (The Systems and Control Centre) at Ecole des Mines de Paris in 1980.

Praly’s main interest is in observers and feedback stabilization/regulation for controlled dynamical systems under various aspects – linear and nonlinear, dynamic, output, under constraints, with parametric or dynamic uncertainty, disturbance attenuation or rejection. On these topics he is contributing both on the theoretical aspect with many academic publications and the practical aspect with applications in power systems, electric drives, mechanical systems, aerodynamical and space vehicles.

Participants of the Provisional Committee, 24 - 27 April 1957 in Düsseldorf from left to right: Ruppel (DE), Racecyr (USSR), Nowacki (PL), Naumov (USSR), Oldenburger (US), Letov (USSR), Mrs L. Schröder (DE), Müller (DE), Bamford (UK) (for Welbourn), Grebe (DE), Broida (FR)

It is with great sadness that we wish to inform the IFAC community that Lieselotte Schröder has passed away on June 6, 2014, in Cologne, Germany, at the age of 93.

Lieselotte Schröder was instrumental in the founding and running of IFAC. Together with Gerhard Ruppel, she was involved in the organization of the conference “Regelungstechnik – Moderne Theorien und Ihre Verwendbarkeit” (“Control – Modern Theories and their Usefulness”) in Heidelberg in September 1956. It was at this conference that the idea of an international association for control was born.

Schröder and Ruppel went on to prepare the foundation of IFAC in Paris in 1957, and kept hosting and running the IFAC secretariat within VDI in Düsseldorf, Germany until 1971. During those years, Lieselotte Schröder was employed by VDI and worked for the VDI/VDE Fachgruppe Regelungstechnik, the predecessor of the German NMO in IFAC.

Submitted by Dieter Westerkamp, VDI, German NMO in IFAC
## FORTHCOMING EVENTS

### August 2014

| Title                                                                 | 2014          | Place                  | Further Information                        |
|-----------------------------------------------------------------------|---------------|------------------------|--------------------------------------------|
| 19th IFAC World Congress                                              | August 24 – 29| Cape Town, South Africa | http://www.ifac2014.org/ email: info@ifac2014.org |
| IEEE, IFAC, and others Workshop on Human Cyber Physical System Interaction Control for the Human Welfare H-CPS-I 2014 | September 22 – 23 | Paris, France | http://h-cps-i.sciencesconf.org/myspace e-mail: mariana.netto@ifsttar.fr |

### 2015

| 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 |
| 15th IFAC/IEEE/IFIP/IFORS Symposium on Information Control Problems in Manufacturing INCOM 2015 | May 11 – 13 | Ottawa, Canada | http://incom2015.org/ e-mail: secret@incom2015.org |
| 13th IFAC/IEEE Conference on Programmable Devices and Embedded Systems PDES 2015 | May 13 – 15 | Cracow, Poland | http://not yet available e-mail: not yet available |
| 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://not yet available e-mail: not yet available |
| 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 |
| Title                                                                 | 2015     | Place                     | Further Information                                      |
|----------------------------------------------------------------------|----------|---------------------------|----------------------------------------------------------|
| 12th IFAC Workshop on Time Delay Systems TDS 2015                    | June 2015| Ann Arbor, MI USA         | http://me.engin.umich.edu/dirifac/                       |
|                                                                     |          |                           | e-mail: timedelay2015@umich.edu                          |
| American Control Conference (ACC) in cooperation with IFAC           | July 2015| Chicago, IL USA           | http://www.a2e2.org/conferences/acc2015/                |
|                                                                     |          |                           | e-mail: braatz@mit.edu                                   |
| 8th IFAC Symposium on Robust Control Design ROCOND 2015              | July 2015| Bratislava, Slovakia       | http://www.rocond15.sk                                   |
|                                                                     |          |                           | e-mail: info@rocond15.sk                                 |
| European Control Conference (ECC) in cooperation with IFAC           | July 2015| Linz, Austria             | http://www.ecc15.at/                                    |
|                                                                     |          |                           | e-mail: secretariat@ecc15.at                             |
| AIChE’s, PD2M Meeting on Foundations of Systems Biology in Engineering - FOSBE 2015 in cooperation with IFAC | August 2015| Boston, MA USA | http://not yet available                                 |
|                                                                     |          |                           | e-mail: not yet available                                |
| 4th IFAC Conference on Analysis and Control of Chaotic Systems CHAOS 2015 | August 2015| Tokyo, Japan             | http://not yet available                                 |
|                                                                     |          |                           | e-mail: not yet available                                |
| 9th IFAC Symposium on Biological and Medical Systems BMS 2015        | Aug. – Sept. 2015| Berlin, Germany | http://not yet available                                 |
|                                                                     |          |                           | e-mail: not yet available                                |
| 9th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes SAFEPROCESS 2015 | September 2015| Paris, France | http://safeprocess15.sciencesconfs.org/                  |
|                                                                     |          |                           | e-mail: contact@safeprocess2015.fr                       |
| 5th IFAC Conference on Nonlinear Model Predictive Control NMPC 2015  | September 2015| Seville, Spain | http://not yet available                                 |
|                                                                     |          |                           | e-mail: not yet available                                |
| 16th IFAC Conference on Technology, Culture and International Stability TECIS 2015 | September 2015| Sozopol, Bulgaria | http://www.tecis.tu-plovdiv.bg/                          |
|                                                                     |          |                           | e-mail: tecis@tu-plovdiv.bg                             |
| 5th IFAC Conference on Analysis and Design of Hybrid Systems ADHS 2015 | October 2015| Atlanta, Georgia USA | http://not yet available                                 |
|                                                                     |          |                           | e-mail: not yet available                                |
| 17th IFAC/IEEE/CSS Symposium on System Identification SYSID 2015     | October 2015| Beijing, China | http://sysid2015.info/index.html                         |
|                                                                     |          |                           | e-mail: secretariat@sysid2015.info                       |
| 9th IFAC Symposium on Control of Power and Energy Systems CPES 2015  | December 2015| New Delhi, India | http://not yet available                                 |
|                                                                     |          |                           | e-mail: not yet available                                |
| Title                                                                | 2016     | Place                     | Further Information                                      |
| 7th IFAC Conference on Management and Control of Production and Logistics MCPL 2016 | February 2016| Bremen, Germany | http://not yet available                                 |
|                                                                     |          |                           | e-mail: not yet available                                |