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Introducing the 2023-26 IFAC Executive Officers

The IFAC Executive Officers coordinate and supervise the technical and executive activities of IFAC, in particular those activities in the cometence and carried on by the Technical Board, Conference Board, Publications Board and Executive Commitees. The President is the Chair of the Executive Officers and legally represents the Federation. In this issue Newsletter readers have the opportunity to learn more about the people responsible for leading IFAC through the 2023-2026 triennium.



IFAC President Dongil "Dan" Cho (KR)

Dong-II "Dan" Cho received his B.S.M.E. from Carnegie Mellon University (US) in 1980, M.S. from Massachusetts Institute of Technology (MIT) (US) in 1984, and Ph.D. from MIT in 1988. From 1987 to 1993, he was Assistant Professor in the Department of Mechanical and Aerospace Engineering at Princeton University (US). From 1993 to 2023, he was Professor in the Department of Electrical and Computer Engineering at Seoul National University (SNU) (KR). At SNU, he was the Director of Biomimetic Robot Research Center, the Director of Automation and Systems Research Institute, and the Director of Microsystems Technology Center. Since 2023, he holds the position of Professor Emeritus at SNU, as he

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How to download: App Store <u>apple.co/3mpaER7</u> Google Play <u>bit.ly/3lazFjx</u> Web version <u>ifac.floq.live</u>

You can also search for 'IFAC' in the Apple App Store or in the Google Play Store.

joined the RS Automation Company (KR) as the Chief Scientific Officer.

His research interests are in developing and applying new control and mechatronics technologies for motion control, robotics, and sensing. He developed a discrete-time disturbance observer method and a real-time adaptive vibration suppression method with discrete-time sliding more control to improve performance and robustness, and applied them to achieve highperformance in production servo systems. He also developed a new silicon technology and applied it to a plethora of medical devices, inertial sensors, and robotic sensors. He has published over 150 international journal articles and holds 150 patents. He is very keen on industrialization of university-developed new technologies, and was a founder and co-founder of two companies in Korea and USA. He has served on the board of directors of five other in Korea and currently serves on the board of directors of two additional companies in Korea.

For professional organizations, he has focused on serving IFAC and ICROS which is the Korean NMO of IFAC. He was a founding member of ICROS in 1995, and served as the President in 2017. In IFAC, he received the Outstanding Service Award in 2011 for nine years of dedicated contributions. He continued to serve IFAC as a Technical Board (TB) Vice Chair (2011-2014), a Council Member (2014-2017), a Vice President (2017-2020), and the President-Elect (2020-2023). He also served as a BOG Member of IEEE Control System Society (2017 and 2019), an AdCom Member of IEEE Electron Device Society (2006-2012), a BOG Member at Large of IEEE Electron Device Society (2012-2023), and a Steering Committee member of International Conferences on Solid-State Sensors, Actuators and Microsystems (2013-2021). He is also an elected member of National Academy of Engineering of Korea since 2009.

He has served on the editorial board of many international journals over the years, including as the Co-Editor-in Chief of IFAC's *Mechatronics* and Senior Editor of *IEEE Journal of MEMS*. He has actively volunteered for organizing conferences, including the 1997 Asian Control Conference (General Secretary), the 2005 IFAC World Congress (IPC Vice-Chair), the 2006 Transducers (Local Chair), the 2008 IFAC World Congress (IPC Chair), the 2011 IFAC World Congress (IPC No.6 December 2023

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The IFAC Journals

Automatica journals.elsevier.com/automatica

Control Engineering Practice journals.elsevier.com/controlengineering-practice

Engineering Applications of Artificial Intelligence journals.elsevier.com/engineeringapplications-of-artificialintelligence

Journal of Process Control journals.elsevier.com/journal-ofprocess-control

Annual Reviews in Control journals.elsevier.com/annualreviews-in-control

Journal on Mechatronics journals.elsevier.com/mechatronics

Nonlinear Analysis: Hybrid

Systems journals.elsevier.com/nonlinearanalysis-hybrid-systems

IFAC Journal of Systems & Control journals.elsevier.com/ifac-journalof-systems-and-control

> IFAC-PapersOnLine journals.elsevier.com/ifacpapersonline



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Vice-Chair), the 2017 ICROS (General Chair), the 2017 ICCAS (General Chair), the 2019 IEEE CCTA (Advisory Board), and the 2020 IEEE CDC (Advisor).

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In recognition of these contributions, he received the Korean Minister of Communications Award (2006), the Institute of Control, Automation and Systems (ICROS) Academic Award (2015), and the Korean Prime Minister's Award (2018), the Doyeon Changjo Medal (2021), and the Medal of Merit from the Korean government (2023).



IFAC President-Elect Maria Prandini (IT)

Maria Prandini was born in Brescia, Italy in 1969. She received the Laurea degree (cum laude) in Electrical Engineering from the Politecnico di Milano in 1994, and the Ph.D. degree in Information Technology from the University of Brescia in 1998. In 2002, she became an assistant professor at Politecnico di Milano, where she is currently full professor and chair of the Automation and Control Engineering Program. In 2017, she was awarded an August-Wilhelm Scheer Visiting Professorship and Honorary fellowship of the TUM Institute for Advanced Studies. Since January 2022, she is a Visiting Professor in Engineering at Oxford University for a 3-year period. She also held visiting positions at University of California at Berkeley (1998-2000 and 2005), Delft University of Technology (1998), Cambridge University (2000), and Swiss Federal Institute of Technology Zurich (2006).

Prandini has been active in IFAC, the IEEE Control Systems Society (CSS), and the Association for Computing Machinery (ACM). She was appointed member of the IFAC Policy Committee for the triennium 2017-2020, IEEE CSS Vice-President for Conference Activities in 2016 and 2017, elected member of the IEEE CSS Board of Governors for the term 2015-2017, and member of the ACM SIGBED Board of Directors in 2019-21. She served as the IFAC Vice-President, Conferences for the triennium 2020-2023.

She is associate editor for *IEEE Transactions on Control of Network Systems* and *Automatica*. Previously, she was editor for the IEEE CSS Electronic Publications and associated editor for *IEEE Transactions on Automatic Control*, *IEEE Transactions on Control Systems Technology*, and *Nonlinear Analysis: Hybrid Systems*. She is co-general chair of the IEEE Conference on Decision and Control (CDC) 2024 and, previously, of the Mediterranean Conference on Control and Automation 2022. She was program chair of the IEEE CDC 2021 and co-chair of the ACM International Conference on Hybrid Systems: Computation and Control 2018.

Prandini's research interests include databased methods for system analysis and design, stochastic and hybrid systems, distributed optimization. Her research studies are motivated by applications to the transportation and energy domains.

In 2018, she received the IEEE CSS Distinguished Member Award for contributions to stochastic, hybrid, and distributed control systems and outstanding service to the Control Systems Society related to electronic publications and conference activities. In 2020, she was elevated to IEEE Fellow for contributions to stochastic, hybrid and distributed control systems theory.



IFAC Vice President, Finances Silvia Mastellone (CH)

Silvia Mastellone is Professor for Control and Signal Processing at the University of Applied Science Northwestern Switzerland. She holds a PhD degree in Systems and Entrepreneurial Engineering from the University of Illinois at Urbana-Champaign, a MS degree in Electrical Engineering from the University of New Mexico and a Laurea degree in Computer Engineering from the University of Rome. She held several technical positions across different regions and companies including Xerox, Alenia Marconi Systems and ABB.

Between 2004 and 2008 she was a research assistant at the Coordinated Science Laboratory, University of Illinois Urbana Champaign. Between 2008 and 2016 she was a Principal Scientist at the ABB Corporate Research Center in Switzerland, where she led several research projects and contributed to define the research strategy in the areas of advanced control and optimization for energy systems.

In 2017 she joined University of Applied Sciences Northwestern Switzerland as professor. Her research interests include decentralized control and estimation of networked control sys-tems, applied to sustainable optimal operation and diagnostics for power conversion and energy systems. She collaborates with several companies such as ABB and the Swiss Federal Railway, SBB. Her research work is funded by the Swiss Federal Office of Energy, Innosuisse and the Swiss National Science Foundation (SNSF). She is co-author of many scientific publications and holds more than 10 international patents.

She is currently a Principal Investigator and an executive member of the NCCR-Automation, a

From the IFAC President

Dear IFAC Friends and Colleagues,

In this edition, I extend an invitation for your active participation in IFAC activities over the next two and a half years.

Firstly, our Council and Related Meetings are scheduled from June 24 (Monday) to June 26 (Wednesday), 2024, alongside the 2024 European Control Conference in Stockholm, SE. During this period, all three IFAC Board Meetings, several Executive Committee Meetings, and numerous Technical Committee (TC) Meetings will take place. These meetings are open and observers are welcome!

Secondly, there will be the first-round presentation of bids in Stockholm for the 2032 World Congress. The call for the bids has been announced to all National Member Organizations in October. I encourage you to start forming teams in the coming months and plan proposals for the 2032 World Congress. I remind you that the decisions for hosting the World Congress are currently not linked to the choice of the IFAC President. A separate call for 2029-2032 President candidates shall be released in early 2024. Please plan ahead for your World Congress location proposals and contact the Secretariat for any information.

Thirdly, as mentioned in the October Newsletter, we've observed significant changes in the focus of control theory, technology, and their applications over the past two decades. The Technical Board (TB), led by Carlos Eduardo Pereira, is actively evaluating the structure of our technical areas, represented by the thirty-nine technical committees (TCs). A proposal for a new TC has already been received and is under evaluation. If any NMOs or individuals wish to propose new TCs, now is the ideal time to do so. The Presidential Task Force (TF) on Future IFAC Technical Areas, chaired by Robert R. Bitmead, is actively evaluating inter-domain and cross-domain topics, as well as joint conferences. The TF will meet in person during the 2023 CDC to further develop these ideas. Contributions to both Task Forces are welcome: please send your ideas to tc-renewal@ifac-control.org.

Last but not least, all IFAC Affiliates and NMOs are expected to actively engage in IFAC Conferences through the Technical Board and its TCs. Since the last Newsletter, all thirty-nine TCs have formed new memberships and are currently updating their webpages while refining technical focuses. Please actively participate in these activities. Additionally, IFAC has eight journals, and we are always looking for volunteers as reviewers and editorial board members. Please consider participating in these core IFAC activities.

Thank you very much and I wish everyone a wonderful winter or summer season.

With best regards,

Dong-II "Dan" Cho, IFAC President 2023-2026



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member of the IEEE Control Systems Society Board of Governors and a member of the advisory board for the multiutility company IBB (Industrielle Betriebe Brugg).

She was a member of the Industry Committee (IndCom) for the International Federation of Automatic Control since its establishment in 2015 and an executive member of the same committee between 2017 and 2023. As member of the IFAC Industry Executive Committee, she contributed to the definition of strategies and best practices for connecting control research and technology innovation, leading to scientific and technological advancements in the field, and thus widening the impact and visibility of Automatic Control in our society.



IFAC Vice President, Conferences Richard Braatz (US)

Richard D. Braatz is the Edwin R. Gilliland Professor at the Massachusetts Institute of Technology (MIT) where he does research in control theory and applied mathematics and their application to advanced manufacturing systems. He received a BS from Oregon State University and an MS and PhD from the California Institute of Technology and was the Millennium Chair and Professor at the University of Illinois at Urbana-Champaign and a Visiting Scholar at Harvard University before moving to MIT.

He is the senior author of the textbook Fault Detection and Diagnosis in Industrial Systems. He has collaborated with more than 20 companies including IBM, United Technologies Corporation, and Dow Inc. His work has been recognized by the Donald P. Eckman Award and the John R. Ragazzini Education Award from the American Automatic Control Council, the Curtis W. McGraw Research Award from the Engineering Research Council, the IEEE Control Systems Society Transition to Practice Award, the Antonio Ruberti Young Researcher Prize, and best paper awards from IFAC and IEEE-sponsored control journals. He is a Fellow of IEEE and IFAC and was elected to the U.S. National Academy of Engineering in 2019.

Braatz has served on the editorial boards of many control journals including Automatica, Annual Reviews in Control, Journal of Process Control, IFAC-PapersOnLine, IEEE Transactions on Automatic Control, IEEE Control Systems,

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Acknowledgement to IFAC would be appreciated.

and Optimal Control Applications and Methods. His leadership roles within IFAC, IEEE, and the American Automatic Control Council (AACC) include as the Vice President, President, and Past President of AACC; Editor-in-Chief of *IEEE Control Systems Magazine*; Chair of the IFAC Technical Committee on Chemical Process Control; Chair of the IEEE CSS Technical Committee on Industrial Process Control; Vice-Chair of the IFAC Conference Board; and member of the AAAC Board of Directors and the IEEE CSS Board of Governors.

His extensive conference service includes as General Chair of the IEEE Conference on Decision and Control and the American Control Conference, Program Chair of the IFAC Symposium on Advanced Control of Chemical Processes and the American Control Conference, Society Review Chair of the American Control Conference, and a member of the program committees of numerous IFAC conferences and symposia.



IFAC Vice President, Technical Activities Carlos Eduardo Pereira (BR)

Carlos Eduardo Pereira is a Full Professor of Automation Engineering at the Federal University of Rio Grande do Sul (UFRGS) in southern Brazil. He served as Director of Operations at EMBRAPII, a Brazilian Industrial Innovation agency, from 2015 to 2023. Carlos holds a Dr.-Ing. degree in Automation Engineering from the University of Stuttgart (DE) and he B.S. and M.S. degrees in Electrical Engineering and Computer Science from UFRGS . He worked as Group Leader of the Embedded Information Devices Group at United Technologies Research Center (UTRC) from 2000 to 2001 and acted as Director of CETA - Center of Excellence in Advanced Technologies in Brazil from 2002 to 2007.

From 2008 to 2010 he was President of the Brazilian Automation Society, the Brazilian IFAC National Member Organization and later became Member and then President of the SBA Council. He has held several IFAC leadership positions, such as TC Chair for the IFAC TC on Manufacturing Plant Control, Vice-Chair of the TC on Telematics Control. IFAC Council Member (from 2011 to 2017), Vice -Co-Chair of the IFAC Technical Board and as a member of the IFAC Industry Committee (2017-2020). He served as IFAC Vice-President for Technical Activities during the triennium 2020-2023. He worked as General co-chair for several IFAC events held in Brazil (WRTP 1997, IMS 1998, IAD 2001, INCOM 2004, and TA 2016). He is an Associate Editor of the IFAC Journals Control Engineering Practice and Annual Reviews

of Control and is Deputy Editor-in-Chief of the IFAC Journal of Systems and Control. He has authored more than 500 technical publications in scientific conferences and journals.

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



IFAC Vice President, Publications Sarah K. Spurgeon (UK)

Sarah Spurgeon is the Head of the Electronic and Electrical Engineering Department within the UCL Faculty of Engineering Sciences in the UK. She received her B.Sc. and D.Phil. degrees from the University of York, York, U.K., in 1985 and 1988, respectively. She has held previous academic positions at the University of Loughborough, the University of Leicester and the University of Kent in the UK. Spurgeon was appointed as Professor of Engineering at the University of Leicester in 2002 and was Head of their Department of Engineering from 2006-2008. She was Professor of Control Engineering and Head of the School of Engineering and Digital Arts at the University of Kent from 2008-2016.

Spurgeon's research interests are in the area of systems modelling and analysis, robust control and estimation in which areas she has published over 300 research papers. She was awarded the Honeywell International Medal for 'distinguished contribution as a control and measurement technologist to developing the theory of control' in 2010 and an IEEE Millennium Medal in 2000. She was an IEEE Distinguished Lecturer for the Control Systems Society for the period 2011-2014.

From 2017-2019 Spurgeon was President of the Engineering Professors Council, the representative body for engineering in higher education in the UK. She has also served as a Board Member for EngineeringUK. This involvement reflects Sarah's career long commitment to inspiring the next generation of engineers as



well as promoting the value of engineering to society.

Spurgeon is currently Vice-President (Publications) for the International Federation of Automatic Control and has recently completed her term of office as a council member of the European Control Association. She is an elected member of the Board of Governors of the IEEE Control Systems Society and is Editor in Chief of IEEE Press. Within the UK, she is a Board Member of Dstl where she chairs the External Review College.



Vice President, Operations/IFAC Secretary Dimitri Peaucelle (FR)

Dimitri Peaucelle (FR) was born in Leningrad, USSR, in 1974. He obtained his Ph.D. degree in 2000 from Toulouse University. Since 2001 he is a full-time researcher at the French National Center for Scientific Research (CNRS), working at LAAS in Toulouse.

His research interests are in robust control, and extend to convex optimization over linear matrix inequalities (LMIs), positive systems, timedelay systems, static output-feedback design and direct adaptive control. He is also involved in computer-aided control design activities and is the main contributor to the Randomized and Robust Multi-Objective Control (R-RoMulOC) Toolbox. He has been involved in several industrial projects with aerospace partners for launcher, aircraft, and satellite robust control. He is the co-author (with Yoshio Ebihara and Denis Arzelier) of the monograph "S-Variable Approach to LMI-Based Robust Control". Since 2021 he is director of the French national network on Modeling, Analysis and Control of Dynamical Systems (GdR MACS).

Peaucelle has been a member of the IFAC TC2.5 on Robust Control since 2009 and TC 1.2 on Adaptive and Learning Systems since 2020. He participated in the organisation of IFAC-ROCOND in 2006 and served as General Chair for the 20th IFAC World Congress held in Toulouse, FR in 2017. He was Program Chair for the European Control Conference held (on-

IFAC Council- and Related Meetings 2024

IFAC Officials: Please note that the 2024 meetings will take place from 24-26 June 2024 in conjunction with the European Control Conference in Stockholm, SE!

New this triennium: Education Activities Committee

The New IFAC Education Activities Committee (EAC) has been established at the IFAC World Congress 2023 in Yokohama. The EAC's goals for the current triennium are to strengthen education activities across IFAC, to increase visibility and recognition of education and to strengthen collaborations on education activities within IFAC.

EAC will give a home to different education activities across IFAC including control education for undergraduate and postgraduate students but also outreach activities for a variety of audiences from primary school kids to the general public. The committee will also work closely with the TC vice chairs for education to enhance education activities in their TC as well as across IFAC.

The EAC's inaugural members are Steffi Knorn (Chair, DE), Maria Prandini (IT), José Luis Guzman (ES), Ubirajara Moreno (BR), Toru Namerikawa (JP), Lucy Pao (US) and Micky Rakotondrabe (FR). Members of the IFAC community can reach out to the Education Activites Committee using the newly-established email address <u>education@ifac-control.org</u>.

Submitted by: Staffi Knorn (DE), IFAC Education Activities Committee Chair (Technical Board Vice-Chair, IFAC Council ex officio/nonvoting)

> About the Education Activities Commitee Chair



Steffi Knorn (DE)

Steffi Knorn received her Diplom-Ingenieur (similar to MSc) title from Otto-von-Guericke-University Magdeburg, Germany, in 2008 and her PhD from the Hamilton Institute, National University of Ireland Maynooth in 2013 for her work on stability of 2D systems. After that, she spent 2013 as a postdoc at the University of Newcastle, Australia, followed by postdoctoral/ assistant professor position at Uppsala University in Sweden from 2014 until 2019. During that time, she expanded her research profile towards control of networked systems, sensor networks and energy harvesting in control systems.

In 2019 Knorn joined Otto-von-Guericke-University Magdeburg, Germany, as a junior professor in automation systems before becoming chair of control at Technische Universität Berlin, Germany, in 2021. Since 2023 she is the inaugural chair of IFAC Education Activities Committee. Knorn is an ex officio, non-voting member of the IFAC Council and additionaly serves on the IFAC Technical Board for the 2023-2026 triennium.

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IFAC Affiliates portal

This portal gives you access to IFAC services dedicated to individuals who signed up as IFAC Affiliates. The services include the possibility to share and consult information about other Affiliates. It also gives access to more advanced features such as:

-Receiving the IFAC Newsletter.

-Receiving alerts about the IFAC Conferences in your field/s of interest.

-Benefit for reduced registration fees at IFAC Conferences. Conferences are typically 10€ (or the local equivalent) less expensive for IFAC Affiliates, than for non-affiliates.

-Participating in IFAC Technical Activities.

-Organizing IFAC Conferences.

-Participating in IFAC Journals.

-Applying to IFAC Awards.

-Applying to the IFAC Activity fund.

-And more to come in the future!

Moreover, being an IFAC Affiliate is free of charge. Any individual who is interested in Control Engineering should sign up!

The IFAC Affiliates portal can be accessed at: affiliates.ifac-control.org/

How do I connect with IFAC?

-If you are not yet connected to IFAC and wish to join for free, select 'Sign-Up' and then 'Register for an IFAC Account'. Meanwhile you may also browse the Web public data.

- If you receive this Newsletter in your mailbox, this means you are already connected to IFAC and listed in our database. To access the portal for the first time, please 'Register for an IFAC Account' as above. It is needed for creating the login. In order to access to your existing data and save some time, please fill the form with the exact email address at which you receive the Newsletter.

Detailed instructions are available at: ifac-control.org/about/affiliate-registration

For any additional information, or if you require any assistance, please contact the IFAC Secretariat at <u>secretariat@ifac-control.org</u>

Please register or sign in to the portal soon, if you have not done so already. Please note that Affiliates who do not connect to the portal within a year will have their data removed from the database. They will still have the possibility to become an affiliate again, but it may temporarily prevent access to some services, such as receiving the Newsletter.



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Who's Who in IFAC



Christian Ott (AT) IFAC Council Ordinary Member

Christian Ott currently is Full Professor for robotics at Technische Universität Wien, Vienna, Austria. He received his Dipl.-Ing. degree in mechatronics from the University of Linz, Austria in 2001 and the Dr.-Ing. degree in control engineering from Saarland University, Saarbruecken, Germany in 2005. From 2001 to 2007, he was working as a researcher at the German Aerospace Center (DLR), Wessling, Germany. From 2007 to 2009, he was a Project Assistant Professor at the Department of Mechano-Informatics, University of Tokyo, Japan. After that Ott has been a team leader at DLR and led a Helmholtz Young Investigators Group for "Dynamic Control of Legged Humanoid Robots". From 2014 to 2022 he was head of the department for "Analysis and Control of Advanced Robotic Systems" in the Institute of Robotics and Mechatronics at DLR.

He has served as Associate Editor for the *IEEE Transactions on Robotics*, was Co-Editor-in-Chief for IFAC's journal *Mechatronics*, and is currently serving as Senior Editor for *The International Journal of Robotics Research*. Ott has been involved in several international conferences and was General Chair of Humanoids 2020 in Munich, Germany. In 2018 he received an ERC consolidator grant on energy efficient locomotion for elastic robots.

Ott became a IEEE Fellow in 2023. His current research interests include nonlinear robot control, elastic robots, whole-body control, impedance control, and control of humanoid robots.



Ming Cao (NL) IFAC Council Ordinary Member

Since 2016 Ming Cao has been a professor of networks and robotics with the Engineering and Technology Institute (ENTEG) at the University of Groningen, the Netherlands, where he started as an assistant professor in 2008. Since 2022 Cao is the founding director of the Jantina Tammes School of Digital Society, Technology and AI at the same university that promotes transdisciplinary research, education and public engagement activities. He received the Bachelor degree in 1999 and the Master degree in 2002 from Tsinghua University, China, and the Ph.D. degree in 2007 from Yale University, USA. From 2007 to 2008, he was a Research Associate at Princeton University, USA. He worked as a research intern in 2006 at the IBM T. J. Watson Research Center, USA.

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Cao is the 2017 and inaugural recipient of the Manfred Thoma Medal from IFAC and the 2016 recipient of the European Control Award sponsored by the European Control Association (EUCA). He is an IEEE Fellow. He is a recipient of a number of prestigious personal research grants, including the consolidator (2017) and starting (2011) grants from the European Research Council (ERC), and the vici (2023), vidi (2015) and veni (2009) grants from the Dutch Research Council (NWO).

He is a Senior Editor for Systems and Control Letters, an Associate Editor for IEEE Transactions on Automatic Control, IEEE Transaction on Control of Network Systems, IEEE Transactions on Neural Networks and Learning Systems, and IEEE Robotics & Automation Magazine, and was an associate editor for IEEE Transactions on Circuits and Systems and IEEE Circuits and Systems Magazine.

Cao is a member of the IFAC Council (since 2023) and a vice chair of the IFAC Technical Committee on Large-Scale Complex Systems (since 2014); he was a member of the IFAC Conference Board (2020-2023).

Cao's research interests include autonomous robots and multi-agent systems, complex networks and distributed decision-making processes.



Matilde Santos (ES) IFAC Council Ordinary Member

Matilde Santos is currently Full Professor for System Engineering and Automatic Control at the Computer Sciences Faculty, University Complutense of Madrid (UCM), Spain. She received her BSc and MSc degrees and her PhD in Physics from the UCM, Spain. She is a member of the European Academy of Sciences and Arts and of the Council of the International Federation of Automatic Control (IFAC). She also belongs to the Spanish Committee of Automatic Control (CEA). She has published many papers in international scientific journals and several book chapters. Santos has supervised more than 15 PhDs. She has worked on several national, European and international research projects, leading some of them. She has received several national and international awards. She serves as Associate Editor for different scientific journals. She has been involved in several international conferences.

Santos' current research interests include application of artificial intelligence techniques to different fields, mainly focus on intelligent control (fuzzy, neural networks, reinforcement learning), modeling and simulation, autonomous industrial vehicles, wind energy.



Bidyadhar Subudhi (IN) IFAC Council Ordinary Member

Bidyadhar Subudhi is currently serving as the Director of National Institute of Technology (NIT) Warangal, India on deputation from Indian Institute of Technology (IIT) Goa. He is a Professor in the School of Electrical Sciences at IIT Goa.

Subudhi received the Bachelor of Electrical Engineering from the NIT Rourkela, the Master of Technology in Control and Instrumentation from IIT Delhi and PhD degree in Control System Engineering from the University of Sheffield, United Kingdom in 2003. He served as a Post-Doctoral Research Fellow in the NUS Singapore in 2005. He was working as a Professor in the Dept. of Electrical Engineering in NIT Rourkela. He also served as a Visiting Professor at the Univ. of Saskatchewan, Canada and in Asian Institute of Technology, Bangkok in 2011 and 2013, respectively.

He was a recipient of the Prestigious Samanta Chandra Sekhar Award of the Odisha Bigyan Academy, Govt. of Odisha for his contribution to science and technology in the year 2013 and distinguished alumnus award NIT Rourkela 2021. He was awarded NITRAA Research Excellence Award in Electrical Sciences in 2019 and Outstanding Leadership Award by IEEE Computer Society, Bio-inspired Computing in 2022. He is a Fellow of the Indian National Academy of Engineering, Asia-Pacific Artificial Intelligence Association, IET (UK), and Distinguished Speaker for ACM. He serves as a Technical Committee Member of the IEEE Technical Committees on Intelligent Control, IEEE Consumer Electronics (Power and Energy), IFAC Computational Intelligence in Control, Steering Committee Member of the Asian Control Association, Member of the IFAC Council, and Vice-Chair of the IEEE Technical Committee on Consumer Electronics (Power and Energy).



He serves as an Editor with *IEEE Transaction* on Sustainable Energy, *IEEE Systems Journal*, *IEEE Access* and *IET Electronics Letter*. His research interests include System & Control, Control of Power System, Embedded System and AI & Machine Learning. He has supervised 40 PhD students, published 164 peer reviewed journal papers, 110 papers in conference proceedings, 14 book chapters and 8 books



Shuzhi Sam Ge (SG) IFAC Council Ordinary Member

Shuzhi Sam Ge holds many roles and honors including Fellow of SAEng, IEEE, IFAC, IET, and CAA. He is a professor in the Department of Electrical and Computer Engineering, PI Member of Institute for Functional Intelligent Materials, the National University of Singapore. Founder of Institute for Future (IFF), Qingdao University, China. Ge serves as President Elect of Asian Control Association, 2022-2024, IFAC as Council Member for 2023-2026, and the Steering Committee Chair of International Conference on Social Robotics.

He served as Vice President of Technical Activities and Membership Activities, 2009-2012, Member of Board of Governors, 2007-2009, and Chair of Technical Committee on Intelligent Control, 2005-2008, of IEEE Control Systems Society. He was the recipient of many award including National Technology Award from Singapore, IEEE Control Systems Society Distinguished Member Award, Al Grand Challenge Award from Al SG.

Ge's research interests include robotics, intelligent systems, and intelligent materials. He has (co)-authored nine books, and over 800 international journal and conference papers, with a high H index (110) and citations (58,000).



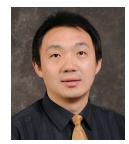
Ivan Petrovic (HR) IFAC Council Ordinary Member

Ivan Petrovic is a full professor at the Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia, where he heads the Laboratory for Autonomous Systems and Mobile Robotics – LAMOR. He is also co-director of the Center of Research Excellence for Data Science and Advanced Cooperative Systems. His research has focused on various aspects of automatic control, state estimation and machine learning and their application in the control of complex technical systems, with mobile robot and vehicle autonomy and human-robot interaction being among his main research interests over the last twenty years.

Petrovic has published his research results as author or co-author of more than 80 papers in scientific journals and 220 papers in proceedings of international conferences. He has actively participated as a collaborator or principal investigator in about 80 research and development projects at national and EU level. He is a Fellow of the Croatian Academy of Sciences and Arts and a full member of the Croatian Academy of Engineering.

He has been active in IFAC for almost 20 years. He has served TC 4.3 - Robotics as Vice Chair (2011-2017) and Chair (2017-2023), and at IFAC Congresses as IPC Technical Associate Editor (2014, 2017) and IPC Associated Editor (2020, 2023). He has also been a member of TC 7.5 - Intelligent Autonomous Vehicles since 2017. He has been actively involved in the organization of IFAC events: SYROCO 2012 (NOC Chair), SYROCO 2018 (IPC Chair), WROCO 2019 (IPC Co-Chair), IPC member for SYROCO since 2009, IAV 2019 and 2022, CAMS 2021, ICONS 2022, HMS 2022, BMS 2021, ALCOS 2019 and 2022.

Petrovic is co-author of about 25 publications presented at IFAC events/conferences (the first one at the IFAC WC 1996 in San Francisco) and in IFAC journals. Since 2020 he is Associate Editor of the IFAC journal *Mechatronics*.



Yang Shi (CA) IFAC Council Ordinary Member

Yang Shi received his B.Sc. and Ph.D. degrees in mechanical engineering and automatic control from Northwestern Polytechnical University, Xi'an, China, in 1994 and 1998, respectively, and the Ph.D. degree in electrical and computer engineering from the University of Alberta, Edmonton, AB, Canada, in 2005. He was a Research Associate in the Department of Automation, Tsinghua University, China, during 1998-2000. From 2005 to 2009, he was an Assistant Professor and Associate Professor in the Department of Mechanical Engineering, University of Saskatchewan, Saskatoon, SK, Canada. In 2009, he joined the University of Victoria, and now he is a Professor in the Department of Mechanical Engineering, University of Victoria, Victoria, BC, Canada.

Shi's current research interests include networked and distributed systems, model predictive control (MPC), cyber-physical systems (CPS), robotics and mechatronics, navigation and control of autonomous systems (AUV and UAV), and energy system applications.

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Shi received the University of Saskatchewan Student Union Teaching Excellence Award in 2007, and the Faculty of Engineering Teaching Excellence Award in 2012 at the University of Victoria (UVic). He is the recipient of the JSPS Invitation Fellowship (short-term) in 2013, the UVic Craigdarroch Silver Medal for Excellence in Research in 2015, the 2017 IEEE Transactions on Fuzzy Systems Outstanding Paper Award, the Humboldt Research Fellowship for Experienced Researchers in 2018; CSME Mechatronics Medal (2023); IEEE Dr.-Ing. Eugene Mittelmann Achievement Award (2023). He is IFAC Council Member: VP on Conference Activities of IEEE IES and the Chair of IEEE IES Technical Committee on Industrial Cyber-Physical Systems. Currently, Shi is Co-Editorin-Chief of IEEE Transactions on Industrial Electronics, and Editor-in-Chief of IEEE Canadian Journal of Electrical and Computer Engineering: he also serves as Associate Editor for Automatica, IEEE Transactions on Automatic Control, Annual Review in Controls, etc. He is a Distinguished Lecturer of IES.

He is a Fellow of IEEE, ASME, CSME, Engineering Institute of Canada (EIC), Canadian Academy of Engineering (CAE), and a registered Professional Engineer in British Columbia, Canada.

Editor's Note: The full listing of IFAC Council members for the 2023-2026 triennium can be accessed at <u>ifac-control.org/structure/</u> <u>council</u>

SEASON'S GREETINGS FROM THE IFAC SECRETARIAT!!!!!

WISHING IFAC NEWSLETTER READERS PEACE, LOVE, HEALTH, AND JOY! HERE'S TO NEW STARTS, NEW SUCCESSES, AND NEW IN-SPIRATIONS AND ALL THE BEST TO THE IFAC COMMUNITY AND YOUR LOVED ONES, FRIENDS, AND COLLEAGUES FOR THE NEW YEAR 2024!

PLEASE NOTE THAT THE IFAC SECRETAR-IAT WILL BE CLOSED FOR THE WINTER HOLI-DAYS IN AUSTRIA FROM 23 DECEMBER 2023 THROUGH 7 JANUARY 2024.

DIMITRI PEAUCELLE (IFAC SECRETARY/VICE PRESIDENT, OPERA-TIONS & IFAC NEWSLETTER EDITOR-IN-CHIEF)

> HARALD ALBRECHT, ELSKE HABERL, & KATHARINA WILLIXHOFER (IFAC SECRETARIAT)



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Calendar of IFAC Conferences

Title	2024	Place	Further Information
Conference on Australian & New Zealand Control Conference (in cooperation with IFAC) ANZCC 2024	February 01 – 02	Gold Coast Australia	anzcc.org.au/ANZCC2024/ I.vlacic@griffith.edu.au
8 th ACDOS Conference on Advances in Control and Optimization of Dynamical Systems ACODS 2024	March 12 – 15	Delhi NCR India	acods-conference.org/ naveen.babu@snu.edu.in
17 th IFAC Workshop on Discrete Event Systems WODES 2024	April/May 29 – 01	Rio de Janeiro Brazil	wodes2024.eventos.ufrj.br/ wodes2024@dee.ufrj.br
8 th IEEE/IFAC et al. International Conference on Control, Automation and Diagnosis ICCAD 2024	May 15 – 17	Paris France	<u>iccad-conf.com/</u> <u>contact@iccad-conf.com</u>
3 rd IFAC Workshop on Integrated Assessment Modeling for Environmental Systems IAMES 2024	May 29 – 31	Savona Italy	<u>iames.unige.it/</u> iames2024@dibris.unige.it
22 nd IFAC Conference on Technology, Culture and International Stability TECIS 2024	May 29 – 31	Waterford Ireland	conferences.ifac-control.org/tecis2024
12 th IFAC Symposium on Fault Detection, Supervision and Safety for Technical Processes SAFEPROCESS 2024	June 04 – 07	Ferrara Italy	safeprocess2024.eu/ silvio.simani@unife.it
7 th IFAC Conference on Analysis and Control of Nonlinear Dynamics and Chaos ACNDC 2024	June 05 – 07	London United Kingdom	acndc2024.org/
8 th IFAC Workshop on Lagrangian and Hamiltonian Methods for Nonlinear Control LHMNC 2024	June 10 – 12	Besançon France	conferences.ifac-control.org/lhmnc24
4 th IFAC Conference on Advances in Proportional-Integral-Derivative Control PID 2024	June 12 – 14	Almería Spain	arm.ual.es/pid2024/
6 th IFAC Workshop on Advanced Maintenance Engineering, Services and Technology AMEST 2024	June 12 – 14	Cagliari Italy	sites.unica.it/amest2024/ amest2024@unica.it
18th IFAC Conference on Programmable Devices and Embedded Systems PDES 2024	June 19 – 21	Brno Czech Republic	pdes-conference.eu/ pdes@pdes-conference.eu
EUCA Conference on European Control Conference (in cooperation with IFAC ECC 2024	June) 25 – 28	Stockholm Sweden	ecc24.euca-ecc.org/ ecc24@euca-ecc.org
17 th IFAC Symposium on Control of Transportation Systems CTS 2024	July 01 – 03	Ayia Napa Cyprus	
Conference on American Control Conference (in cooperation with IFAC ACC 2024	July) 08 – 12	Toronto Canada	acc2024.a2c2.org/
12 th IFAC Conference on Fractional Differentiation and its Applications ICFDA 2024	July 09 – 12	Bordeaux France	icfda2024.sciencesconf.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 Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie "BMK" gefördert.

Bundesministerium Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie



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Calendar of IFAC Conferences

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12 th IFAC Symposium on Control of Power and Energy Systems CPES 2024	July 10 – 12	Rabat Morocco	cpes2024.org/ cpes2024@unicaen.fr
12th IFAC Symposium on Advanced Control of Chemical Processes ADCHEM 2024	July 14 – 17	Toronto Canada	adchem2024.org/
20 th IFAC Symposium on System Identification SYSID 2024	July 17 – 19	Boston, MA USA	conferences.ifac-control.org/sysid2024/
2 nd IFAC Workshop on Aerospace Control Education WACE 2024	July 22 – 24	Bertinoro (Forlì) Italy	
26 th International Symposium on Mathematical Theory of Networks and Systems (in cooperation with IFAC) MTNS 2024	August 19 – 23	Cambridge United Kingdom	mtns2024.eng.cam.ac.uk/
8 th IFAC Conference on Nonlinear Model Predictive Control NMPC 2024	August 21 – 24	Kyoto Japan	<u>nmpc2024.org/</u> secretariat@nmpc2024.org
18th IFAC Symposium on Information Control Problems in Manufacturing INCOM 2024	August 28 – 30	Vienna Austria	incom2024.org/ incom2024@tuwien.ac.at
15 th IFAC Conference on Control Applications in Marine Systems, Robotics and Vehicles CAMS 2024	September 03 – 05	Blacksburg (VA) USA	ifac-cams2024.org/ cams2024@vt.edu
4 th IFAC Conference on Modelling, Identification and Control of Nonlinear Systems MICNON 2024	September 04 – 06	Lyon France	micnon2024.org/en contact@micon2024.org
7 th IFAC Workshop on Mining, Mineral and Metal Processing MMM 2024	September 04 – 06	Brisbane Australia	
12 th IFAC Symposium on Biological and Medical Systems BMS 2024	September 11 – 13	Villingen- Schwenningen Germany	
3 rd SACAC Control Conference Africa (in cooperation with IFAC) CCA 2024	September 16 – 17	Balaclava Mauritius	cca2024.org/ info@cca2024.org
4 th IFAC Workshop on Internet Based Control Education IBCE 2024	September 18 – 20	Ghent Belgium	
18 th IFAC Workshop on Time Delay Systems TDS 2024	September 24 – 27	Udine Italy	tds2024.uniud.it tds2024@uniud.it
Univ. Stuttgart, IST / IFAC Symposium on Systems Theory in Data and Optimization SysDo 2024	Sept./Oct. 30 – 02	Stuttgart Germany	sysdo2024.de
4 th AACC, IFAC Conference on Modeling, Estimation and Control Conference MECC 2024	October 27 – 30	Chicago (IL) USA	mecc2024.a2c2.org
5 th IFAC Workshop on Cyber-Physical-Human Systems CPHS 2024	December 12 – 14	Antalya Turkey	cphs2024.org/
Title	2026	Place	Further Information
23 rd IFAC World Congress WC 2026	August 23– 28	Busan Republic of Korea	<u>ifac2026.org</u> ifac2026@ifac2026.org

The IFAC Calendar of Conferences is constantly updated as addditional IFAC Conferences (Workshops, Symposia, and Conferences) are approved. Please check back often for the current status. The complete version of the IFAC Calendar of Conferences is available online at: ifac-control.org/events/