

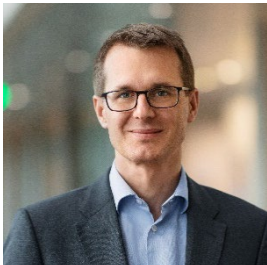
Newly elected Full Members in 2023



Roger Abächerli

Prof. Roger Abächerli has been appointed a Full Member of SATW in recognition of his outstanding achievements in the development of medtech products and his contributions to research and teaching in this field.

Roger Abächerli is a specialist in the regulation of medtech product developments especially in high-end processing such as artificial intelligence (AI) and machine learning (ML) focusing on GMLP. He is a board member of International Society of Computerized Electrocardiology, senior member of the IEEE, elected fellow of the AHA, ESC, EHRA and the American College of Cardiology. He worked for more than 15 years in the medtech industry in different positions mainly in R&D, most recently as global head of biomedical research and signal processing before switching to academia. After graduating as an Electrical Engineer (EPFL) and doing exchange studies (GaTech- Atlanta, USA; UCD -Ireland), he worked on his PhD at the Department of Radiology, CHU, in Nancy, France, and obtained it at the INPL in the same city.



Christoph Aeschlimann

Christoph Aeschlimann has been appointed a Full Member of SATW in recognition of his remarkable contributions as a visionary engineer and strategist in the communication systems field.

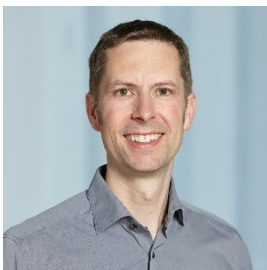
Christoph Aeschlimann has been Chief Executive Officer of Swisscom Group since June 2022. He has a degree in computer science from the EPFL and an MBA from McGill University, Canada. He began his professional career as a software developer at financial services provider Odyssey. After a short period with innovation services provider Zühlke, he returned to Odyssey, where he held a number of management positions. He then joined software development company ERNI, where he worked in various managerial positions, initially as Managing Director Switzerland, then as CEO of the group. Christoph Aeschlimann joined Swisscom in 2019 as Head of the IT, Network and Infrastructure division and member of the Group Executive Board.



Gion Caminada

Prof. Gion Caminada has been appointed a Full Member of SATW in recognition of his fundamental contributions to architecture in teaching, practice and research. His work is characterised by the vision of bringing culture and nature into harmony and promoting a sustainable housing policy.

Gion A. Caminada was born in Vrin. After training as a carpenter, he attended Zurich University of the Arts, then completed postgraduate studies at ETH Zurich. Since 1998, he has progressed from Assistant Professor to Associate Professor, through to Full Professor of Architecture and Design at ETH Zurich. He has an architectural practice in Vrin.



Christian Franck

Prof. Christian Franck has been appointed a Full Member of SATW in recognition of his outstanding achievements in teaching and research, particularly regarding the use of new climate-friendly insulating gases in electrical energy technology.

Christian M. Franck is Full Professor of High Voltage Engineering at ETH Zurich. He studied physics at the Universities of Bonn (Germany), Edinburgh (UK), and Kiel (Germany). He worked at the Max-Planck-Institute for Plasma Physics in Greifswald (Germany), receiving his PhD in experimental physics in 2003. Then he worked at the ABB Research Center in Baden (Switzerland) in the area of current interruption, limitation and high voltage insulation as a scientist and group leader.

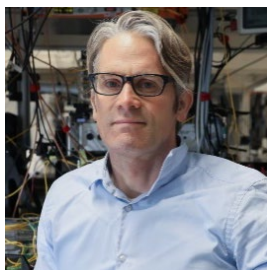
His current research and teaching is in the area of technologies for future electric energy transmission systems, focusing on high-voltage gaseous and solid insulation systems as well as current interruption.



Junguo Liu

Prof. Junguo Liu has been appointed a Full Member of SATW in recognition of his extraordinary contributions to linking climate scenarios with water risk assessment and the necessary hydraulic engineering measures.

Junguo Liu is a professor and vice president of the North China University of Water Resources and Electric Power, and a Chair Professor at the Southern University of Science and Technology in China. He is an elected member of Swiss Academy of Engineering Sciences, as well as Academia Europaea (The Academy of Europe). He is also a Fellow of the American Association for the Advancement of Science (AAAS), the Royal Meteorological Society (UK), and the Royal Geographical Society (UK). His research involves several areas including hydrology and water resources, global environmental change, and ecological restoration. He is a Highly Cited Researcher by Clarivate, Stanford University's World's Top 2% Scientists, and Elsevier Highly Cited Chinese Researchers.



Tobias J. Kippenberg

Prof. Tobias J. Kippenberg has been appointed a Full Member of SATW in recognition of his pioneering research in quantum optomechanics, the development of micro-resonator-based optical frequency combs and his contribution as the co-creator of photonic integrated circuit technology.

Full Professor in the Institute of Physics and Electrical Engineering at EPFL since 2013. He was Independent Max Planck Junior Research group leader at the Max Planck Institute of Quantum Optics in Garching, Germany where he demonstrated radiation pressure cooling of optical micro-resonators, and developed techniques with which mechanical oscillators can be cooled, measured and manipulated in the quantum regime that are now part of the research field of Cavity Quantum Optomechanics. Moreover, his group discovered the generation of optical frequency combs using high Q micro-resonators, a principle known now as micro-combs or Kerr combs. This discovery unlocked record data transmission rate which led to the development of new concepts in telecommunications in collaborations with industry.



Adrian Perrig

Prof. Adrian Perrig has been appointed a Full Member of SATW in recognition of his pioneering research and contributions to computer and network security, particularly the development and implementation of the new high-security SCION internet.

Adrian Perrig is a Professor at the Department of Computer Science at ETH Zurich, where he leads the network security group. He is also a Distinguished Fellow at CyLab, and an Adjunct Professor of Electrical and Computer Engineering at Carnegie Mellon University. From 2002 to 2012, he was a Professor of Electrical and Computer Engineering, Engineering and Public Policy, and Computer Science at Carnegie Mellon University. From 2007 to 2012, he served as the technical director for Carnegie Mellon's Cybersecurity Laboratory (CyLab). He earned his PhD degree in Computer Science from Carnegie Mellon University, and spent 3 years at UC Berkeley. He received his BSc degree in Computer Engineering from EPFL. He received the ACM SIGSAC Outstanding Innovation Award, and is a fellow of ACM and IEEE.



Robert Riener

Prof. Robert Riener has been appointed a Full Member of SATW in recognition of his outstanding achievements in research, development and clinical evaluation pertaining to rehabilitation robots and assistive technologies suitable for everyday use, particularly via the Cybathlon platform, which he initiated.

Robert Riener is Full Professor of Sensory-Motor Systems at ETH Zurich's Department of Health Sciences and Technology (D-HEST), as well as at Balgrist University Hospital. He studied, obtained a doctorate and secured his tertiary teaching qualification at TU Munich. In 1998, he spent a year doing postdoctoral work at the university Politecnico di Milano. Since 2003, Riener has been a professor at both ETH Zurich and the University of Zurich. From 2016 to the beginning of 2018, Riener was Head of D-HEST. Riener works on rehabilitation robotics, human-machine interaction, human movement learning and inclusion. He is also the founder of Cybathlon, for which he has received several awards, including an honorary doctorate from the University of Basel in 2018.



Christian Rüegg

Prof. Christian Rüegg has been appointed a Full Member of SATW in recognition of his outstanding achievements in the field of solid-state physics, as well as in the further development and instrumentation of neutron sources.

Christian Rüegg is Director of the Paul Scherrer Institute (PSI), holds a joint chair as Full Professor of Physics at ETH Zurich and EPFL, and is a professor at the University of Geneva. He represents the four research institutes PSI, Empa, WSL and Eawag on the ETH Board. Christian Rüegg studied physics at ETH Zurich and obtained a doctorate in 2005 at the ETH Zurich / PSI neutron-scattering laboratory. He subsequently worked at the London Centre for Nanotechnology. At PSI, he headed the Laboratory for Neutron Scattering and Imaging from 2011 to 2016, and the Research with Neutrons and Muons division from 2017 to 2020. He has been Director of PSI since April 2020. He represents PSI within national initiatives that promote innovation, such as Park Innovaare, Technopark Aargau and Switzerland Innovation.



Olga Sorkine-Hornung

Prof. Olga Sorkine-Hornung has been appointed a Full Member of SATW in recognition of her outstanding contributions to research and development in computer graphics, geometric modelling, digital geometry processing, computer animation and visual computing.

Olga Sorkine-Hornung is a professor of computer science at ETH Zurich, Switzerland, where she leads the Interactive Geometry Lab at the Institute of Visual Computing. Prior to joining ETH Zurich, she was an Assistant Professor at the Courant Institute of Mathematical Sciences, New York University (2008-2011). She earned her BSc in Mathematics and Computer Science and PhD in Computer Science from Tel Aviv University (2000, 2006). Following her studies, she received the Alexander von Humboldt Foundation Fellowship and spent two years as a postdoc at the Technical University of Berlin. Her primary research interests lie in computer graphics, geometry processing, 3D shape representation and modeling and discrete differential geometry.



Luc Thévenaz

Prof. Luc Thévenaz has been appointed a Full Member of SATW in recognition of his pioneering role in the development of fibre-optic technologies and new solutions for photonics-based sensors.

Luc Thévenaz obtained his MSc and PhD in physics from the University of Geneva, Switzerland. In 1988 he joined EPFL, where he currently leads a research group working on photonics, specifically fibre optics and optical sensing. Research topics include fibre sensors, slow & fast light, nonlinear fibre optics and laser spectroscopy in gases. During his career he has worked at Stanford University, as well as at universities in Korea, Israel and Australia. He is known for his innovative concepts for distributed fibre sensing pushing beyond barriers. He co-founded Omnisens, a company that is developing and commercialising advanced photonic instrumentation based on distributed fibre sensing. He is Fellow of the IEEE and Optica.



Tanja Zimmermann

Prof. Tanja Zimmermann has been appointed a Full Member of SATW in recognition of her innovative work on nanocellulose and the expansion of the practical applications of wood-based materials.

Tanja Zimmermann has been CEO of Empa as well as Professor of Materials Science and Technology at ETH Zurich and EPFL since 1 June 2022. Tanja Zimmermann received her doctorate from the University of Hamburg in 2007. As head of Empa's laboratory for Applied Wood Materials, she established cellulose nanocomposites as a research field. In 2017, she became a member of the institute's Directorate and became head of the Functional Materials department and co-head of the Research Focus Area Sustainable Built Environment. Data-based materials research is an important area of her work alongside the circular economy and resource efficiency. Tanja Zimmermann is a member of various national and international committees, scientific advisory boards and research commissions.