

# Annual Conference & General Assembly 2022

## 13-14 October 2022

EMPA, Dübendorf (near Zurich) Switzerland



### **Guided tours** On the Eawag and Empa Campus

The conference takes place on a campus comprising the Swiss Federal Institute of Aquatic Science and Technology (Eawag) and the Swiss Federal Laboratories for Materials Science and Technology (Empa). Innovative and solution-oriented, both conduct cutting-edge research in their own domains and place high value on bridging theory and practice to meet societal needs.

To take advantage of our presence there, you will have the opportunity to visit two remarkable and unusual buildings as well as two innovative laboratories:



#### Forum Chriesbach

This «Zero Energy House» is Eawag's main administrative building and was built in 2007 by Bob Gysin Partner BGP. The building embodies a synthesis of functionalism, aesthetics, and sustainability, and is considered to be one of the 'greenest' buildings in the world. Its large glassroofed atrium allows daylight and - a welcome feature in winter - the heat from the sun to enter the building. Besides, the blue glass panels turn to follow the sun and provide shade or let in the sun according to the season. You will be guided by Bob Gysin himself and further members of his team.

(Photo: © Roger Frei)

#### NEST

NEST is the modular research and innovation building of Empa and Eawag. At NEST, new technologies, materials and systems are tested, researched, further developed and validated under real conditions. Close cooperation with partners from research, industry and the public sector ensures that innovative construction and energy technologies are put onto the market faster. NEST contributes to making the use of resources and energy more sustainable and circular.



(Photo: © Zooey Braun)

#### Braun's Electrochemistry Laboratory and Spectroscopy Laboratory

The research group of Artur Braun is situated in the Empa Laboratory for High Performance Ceramics – and works on electrochemical energy storage and conversion. Solar fuel production by artificial photosynthesis has taken center stage in his group since over 15 years ago. They are internationally known for their fundamental research on elucidating the molecular processes in materials, which they study at x-ray synchrotron and neutron facilities worldwide.

Current projects include (i) the photoelectrochemical production of ammonia as fertilizer and fuel, (ii) the development of a solar energetized soft robot for exploration of unfriendly territories like Mars and Moon, (iii) the understanding of cosmic radiation tolerant cyanobacterial photoelectrodes for outer-space food and energy supply, (iv) cooperative processes in proton conductors.

The guided tour (split in two groups who can visit both labs) will be assisted by Dr Chen, Dr Kunene, Dr Ryzhkov and EPFL PhD Student Mr Bevione.



Braun team's work is supported by: