

28th Annual SSB+RM Meeting at Empa, St. Gallen

The SSB+RM Annual Meeting was held at Empa – Swiss Federal Laboratories for Materials Science and Technology, St. Gallen, Switzerland, on September 4th and 5th of September, 2024. This dynamic event hosted 93 participants and featured 3 keynote speakers, 3 invited speakers, 17 oral presentations, 13 rapid-fire presentations, and 33 posters.

Day 1 Highlights:

The meeting kicked-off with a 'Career Path Roundtable', organized by the Young Scientists (YS) of the SSB+RM. The session featured inspiring talks from Martin Stoddart (AO Research Institute Davos), Morteza Aramesh (ETH Zurich), Stéphanie Boder-Pasche (CSEM Neuchatel), and Jessica Gilgenbach (SmartPath AG). These speakers shared their unique insights into navigating careers in academia and industry, offering practical advice on job applications, CV writing, leadership, work-life balance, and family planning. The interactive panel format allowed young scientists to engage with many questions.



In the afternoon, Markus Rottmar (Empa), the society's president, warmly welcomed participants. The session was centered around the theme, 'Latest Technologies & Breakthroughs on Classic Biomaterials'. Invited speaker, Ardemis Boghossian (EPFL), delivered an engaging talk on 'Bioengineering Near-Infrared (NIR-II) Optical Nanosensors', setting the stage for oral presentations on titanium implants, cardiac tissue engineering, and stem cell therapy. A fast-paced rapid-fire session followed, with 7 researchers giving succinct, elevator pitches on their projects.

Later, Dominique Pioletti (EPFL) gave a keynote presentation on 'Thermomechanobiology: the next frontier for treating osteoarthritis'. Additional oral



presentations explored calcium phosphate-induced osteogenesis, and the toxicology of advanced biomaterials on the airways. The day concluded with the 30th General Assembly and an inspiring talk from 2024 RMS Research Award Winner Stéphane Bernhard (ETH Zurich) on supramolecular engineering of hydrogels for drug delivery.

Day 2 Highlights:

The second day focused on Regenerative medicine approaches. Patricia Dankers (TU Eindhoven) opened with a keynote on 'Complex tissue-inspired materials based on supramolecular polymers'. This was followed by oral presentations covering topics on in vitro skin models, skeletal muscle tissue engineering, and mRNA delivery. Mark Tibbitt (ETHZ) then gave an invited talk, which paved the way for oral presentations on corneal biomaterial engineering, bone reconstruction, and local drug and antibiotic delivery biomaterials. A second round of rapid-fire presentations showcased the elevator pitches given by 6 young scientists.

In the afternoon, Florian Groeber-Becker (Fraunhofer ISC) delivered a keynote on 'Advancements in In vitro Human Barrier modeling', which set the scene for presentations on 3D models of vascularized bone tissue, fibrosis, cardiac tissue, and glioblastoma. The session ended with invited speaker Laura Suter-Dick (FHNW) giving a talk on 'Multicellular liver microtissues for the investigation of liver fibrosis'. The meeting wrapped up with the presentation of the awards winners, which included Antonio Sileo (Uni Basel) who was awarded Best Oral Presentation, Asia Badolato (ETH Zurich) who was awarded Best Rapid Fire Presentation, and Katharina Hast (Empa), who was awarded Best Poster Presentation.

