

EuroEAP 2018 – 8th international Conference on EAP

EuroEAP 2018, the 8th international conference on Electromechanically Active Polymer (EAP) transducers & artificial muscles, has been held in Lyon, France, on 5-6 June 2018. The conference was chaired by Claire Jean-Mistral (INSA de Lyon - LaMCoS) and was organized by the EuroEAP Society (www.euroeap.eu). The event has been attended by more than 130 participants from a diversity of countries worldwide (Europe, USA, Canada, Korea, Japan, China, Australia, New-Zealand) and was designed to maximize interactions among participants, with invited lectures followed by participant presentations that comprise a short oral and an extended poster session. The speakers invited to this edition were:

- Iain Anderson, University of Auckland, New Zealand
- Xuanhe Zhao, Soft Active Materials Laboratory, MIT, USA
- Michele Ghilardi, Queen Mary University of London, UK
- Francesco Greco, TU Graz, Institute of Solid State Physics, Austria
- Steffen Hau, Saarland University, Germany
- Shuo Li, Cornell University, USA
- José Martinez, Linköping University, Sweden
- Hidenori Okuzaki, University of Yamanashi, Japan
- Kathlin Rohlaid, University Cergy-Pontoise, France
- Helmut Schlaak, Darmstadt, Germany
- Jian Zhu, National University of Singapore, Singapore



Figure 1. EuroEAP 2018 picture

Sponsored by Solvay, the two best poster awards of this edition were:

- Xiaobin Ji, EPFL – Switzerland, Towards an untethered 800mg robot driven by three dielectric elastomer actuators operating below 300V
- Luigi Calabrese, U. of Trento – Italy, Dielectric elastomer based prototype of a mechanically resonating inchworm-like robot with unidirectional claws

The second edition of the “EuroEAP Society Challenge” was held during the conference. The final aim of this open competition, sponsored by ElastiSense, Parker and Wacker, was to captivate and inspire the imagination of experts and the public alike with the possibilities that EAP technologies empower. Seven teams were enrolled and the first three classified projects were:

- 1st Bruch Daniel (Saarland University) Dielectric Elastomer Loudspeaker who received 2,000 € as a cash prize
- 2nd Linnebach Philipp (Saarland University) DE technology demonstrator
- 3rd Philippe Loew (Saarland University) Haptic feedback demonstrator for touchscreens

The videos produced by the participants are available at the EuroEAP Society challenge Youtube channel (<https://www.youtube.com/channel/UCFt1cHQin-LIFtTJgsciOvQ>).

During the event, Helmut Schlaak (TU Darmstadt, Germany) was given an award by the EuroEAP Society “for his fundamental scientific contributions in the field of Transducers based on Dielectric Polymers”. Iain Anderson (University of Auckland, New Zealand) was awarded “for his fundamental scientific contributions in the field of Transducers based on Dielectric Polymers”.



Figure 2. The recipients of the 2018 EuroEAP Society awards, Pr. Helmut Schlaak (left) and Pr. Iain Anderson (right) with Claire Jean-Mistral and Edwin Jager

We gratefully acknowledge the industrial sponsors (Solvay, Wacker), the institutional sponsors (LaMCoS, INSA de Lyon, Institut Carnot Ingénierie@Lyon, IDEX U. de Lyon) and the media partners (Springer, IOP). The technical program, the Conference proceedings and pictures from the Conference are available at www.euroeap.eu/conference.

