



## Speaker Biography

**Speaker Name:** Dr. Dmitry Rychkov

**Organization:** University of Potsdam

**Acronym:** UP

**Full name:** University of Potsdam, Faculty of Science, Applied Condensed Matter Physics

### Short Biography

Dmitry Rychkov was born in St Petersburg, Russia in 1977. He studied physics at Herzen State Pedagogical University of Russia, where he obtained a diploma and Ph.D. degree in 1999 and 2002, respectively. Since 2002, he worked as an assistant professor at the Department of General and Experimental Physics at Herzen University teaching general physics courses. In 2004, he was promoted to Associate Professor. He was awarded three times a DAAD fellowship within the framework of the “Lomonosov” exchange programme, and was a winner of the Samsung Award for Young Scientists and a Potanin Foundation Award for outstanding young university professors. He is now a Senior Scientist at the University of Potsdam in the Applied Condensed-Matter Physics group. His present work focuses on charge-storage mechanisms in polymer electrets and the investigation of soft elastomeric materials for dielectric elastomer actuators.

### Current Position and Experience (relevant for the event)

As a senior researcher at the Applied Condensed Matter Physics group at the University of Potsdam, he is responsible for the development and characterization of soft capacitive sensors for the SENSKIN project. His past experience in more than 10 public and industry funded project helps a great deal in the development of these non-conventional sensors. In previous projects, he has dealt with scientific problems that can now be considered as building blocks for SENSKIN. To mention just a few: the group has studied the elastic properties of elastomeric materials, as well as electrical strength and breakdown-related phenomena. It has developed different types of compliant electrodes that can be used in dielectric elastomer actuators and capacitive sensors. Its experience with pressure-sensitive piezoelectric sensors helps a lot with the development of the internal architecture of the SENSKIN sensor.