

Advanced Optochemical Sensors for Environmental Applications

Speaker: Torsten Mayr, Graz University of Technology



The tutorial will give an introduction to luminescence spectroscopy and explain the principles of optochemical sensors. The versatility of this technology is illustrated. Applications of optochemical sensors for oxygen, pH, CO₂ and recent advances in optochemical sensor technology will be presented.

About the speaker: Torsten Mayr received his Dipl.Chem. and PhD degrees from University of Regensburg, Germany, in 1999 and 2002, respectively. He was Postdoc research fellow at the Karolinska Institute in Stockholm, Sweden, from 2002 to 2004, and works as Assistant Professor at the Institute of Analytical Chemistry and Radiochemistry at Graz University of Technology since then. He received a PhD scholarship from the German Environmental Foundation (DBU) in 1999, and a guest-researcher scholarship of the Swedish Wenner-Gren foundation in 2003. He published 31 papers in peer-reviewed journals and holds 2 patents. His research interests are optical chemical sensors and biosensors, sensor arrays and multiplex analysis, luminescence spectroscopy, functionalised micro- and nano particles, and miniaturisation of optical sensors.

