

Short CV:



Oliver Röhrle is Professor for “Continuum Biomechanics and Mechanobiology” at the Cluster of Excellence for Simulation Technology (SimTech) at the University of Stuttgart, Germany, and leads the ATTRACT “Virtual Orthopedic Lab” at the Fraunhofer Institute for Manufacturing Engineering and Automation (Fraunhofer IPA) in Stuttgart. He received a Master of Science in Mathematics at the University of Wisconsin at Milwaukee, USA (1999) and his Diplom in “Wirtschaftsmathematik (Mathematics and Economical Affairs)” at the University of Ulm (2000). After his PhD in Applied Mathematics at the University of Colorado at Boulder, USA (2004), he spent 4 years as a research scientist at the Auckland Bioengineering Institute at the University of Auckland, New Zealand, before returning to Germany in 2008. In 2011, he received the Richard von Mises prize of the GAMM (Society of Applied Mathematics and Mechanics) and in 2012, he was awarded an ERC Starting Grant on „LEAD – Lower Extremity Amputee Dynamics”. His research focuses on various aspects of the musculoskeletal system, e.g., on novel chemo-electromechanical skeletal muscle models, biophysical recruitment models, virtual EMG predictions, continuum mechanical homogenisation techniques for skeletal muscle tissues and forward-dynamics simulations of multi-muscle systems using three-dimensional continuum-mechanical skeletal muscle models. Moreover, he is interested in dental applications.