

Dr. Christian Hellmich is Full Professor for Strength of Materials and Computational Mechanics in the Department of Civil Engineering at the Vienna University of Technology (TU Wien). At this university, he received his engineering degree in 1995, his Ph.D. Degree in 1999, and his Habilitation degree in 2004. Between 2000 and 2002. he was a Max Kade Postdoctoral Fellow in the Department of Civil and Environmental Engineering at the Massachusetts Institute of Technology. His work is strongly focussed on well-validated material and (micro)structural models, both for materials such as concrete, soil, rock, wood, or bone as well as man-made biomaterials, and for structures such as tunnels, pipelines, bridges, or the vertebrate skeleton including implants and tissue engineering scaffolds - with complementary experimental activities if necessary. He has led several projects for the tunnel and pipeline industry, as well as interdisciplinary and international research activities sponsored by the European Commission, including the coordination of the mixed industry-academia consortium "BIO-CT-EXPLOIT" at the crossroads of numerical simulation and computer tomography, or the cross-domain COST action NAMABIO integrating engineers, physicists, (stem) cell biologists, and medical doctors across the European continent and beyond. He has published more than 110 papers in international refereed scientific iournals in the fields of engineering mechanics, materials science, and theoretical biology, more than 20 book chapters, and more than 120 papers in refereed conference proceedings. Dr. Hellmich has served as the Chairman of both the Properties of Materials Committee of the Engineering Mechanics Division of the American Society of Civil Engineers and the Poromechanics Committee of the Engineering Mechanics Institute (EMI), as associate editor of the Journal of Engineering Mechanics (ASCE) and as co-editor in Chief of the Journal of Nanomechanics and Micromechanics (ASCE). As community service, he has (co-)chaired and/or supported more than 50 international conferences (including chairmanship of the 2013 Biot Conference on Poromechanics and the 2015 CONCREEP conference; both EMI-ASCE-supported), and he has reviewed for more than 120 different scientific journals and 14 science foundations. He was awarded the Kardinal Innitzer Science Award of the Archbishopry of Vienna in 2004 (for his habilitation thesis), the Science Award of the State of Lower Austria in 2005 (for his achievements in the micromechanics of hierarchical composites), and he was the recipient of the 2008 Zienkiewicz Award for Young Scientists in Computational Engineering Sciences, sponsored by the European Community on Computational Methods in Applied Sciences (ECCOMAS). For further activities in the multiscale poromicromechanics of bone materials, he received one of the highly prestigious ERC Grants of the European Research Council in 2010; and he was elected member of the Young Academy of the Austrian Academy of Sciences in 2011. In 2012, he was rewarded the prestigious Walter L. Huber Research Prize of the ASCE, for his contributions to the microporomechanics of hierarchical geomaterials and biomaterials; and he was elected Fellow of EMI in 2014.