ACE-X2017

11th International Conference on Advanced Computational Engineering and Experimenting Vienna (Austria) from 3-6 July, 2017

Gerhard A. Holzapfel is Professor of Biomechanics and Head of the Institute of Biomechanics at Graz University of Technology (TUG), Austria, since 2007. He is also Adjunct Professor at the Norwegian University of Science and Technology (NTNU), Trondheim, Norway, and Visiting Professor at the University of Glasgow, Scotland. Until 2013 he was Professor of Biomechanics and Adjunct Professor at the Royal Institute of Technology (KTH) in Stockholm, Sweden for 10 years. After his PhD in Mechanical Engineering in Graz he received an Erwin-Schrödinger Scholarship for foreign countries to be a Visiting Scholar at Stanford University (1993-95). He achieved his Habilitation at TU Vienna in 1996 and received the START-Award in 1997, which is the most prestigious research award in Austria for young scientists. Among several awards and honors in the past years he is listed in "The World's Most Influential Scientific Minds: 2014" (Thomas Reuters) and he received the Erwin Schrödinger Prize 2011 from the Austrian Academy of Sciences for his lifetime achievements.

Professor Holzapfel's research includes experimental and computational biomechanics and mechanobiology with an emphasis on soft biological tissues, the cardiovascular system including blood vessels in health and disease, therapeutic interventions such as balloon angioplasty and stent implantation, polarized light and second-hormonic imaging microscopy, magnetic resonance imaging and medical image processing; nonlinear continuum mechanics, constitutive (multi-scale) modeling of solids at finite strains such as cross-linked actin networks, growth and remodeling, nonlinear finite element methods, fracture and material failure.

Professor Holzapfel has authored a graduate textbook entitled "Nonlinear Solid Mechanics. A Continuum Approach for Engineering" (John Wiley & Sons), and co-edited six books. He contributed chapters to 20 other books, and published 160+ peer-reviewed journal articles. He is the co-founder and co-editor of the International Journal "Biomechanics and Modeling in Mechanobiology" (Springer-Verlag, Berlin, Heidelberg).