Wojciech Sumelka, Assistant Professor
Poznan University of Technology, Poland
wojciech.sumelka@put.poznan.pl
www.put.poznan.pl/~wojciech.sumelka

Archives of Mechanics

Editor-in-Chief

Prof. Henryk Petryk

Dear Editor

I believe that the current content of the deeply revised article showing an original concept of fractional continua being the generalisation of classical one is enough to be considered for publication in *Archives of Mechanics*. All reviewers remarks are taken into account. Contrary to previous version of the paper, there is an additional author, because of numerical implementation which is now more general.

Yours sincerely,

Wojciech Sumelka

P.S.

Currently I am an Associate Professor in Poznan University of Technology, Poland. In 2009 I have received Ph.D. degree in the field mechanics of materials with the monograph under the title "The Constitutive Model of the Anisotropy Evolution for Metals with Microstructural Defects". I am Author and co-author of over 60 papers including: 15 papers in scientific journals, 5 chapters in monographs and 1 full monograph.

My most recent papers:

Wojciech SUMELKA, Thermoelasticity in the Framework of the Fractional Continuum Mechanics, *Journal of Thermal Stresses*, (DOI:10.1080/01495739.2014.885332), 2014

W. SUMELKA, Fractional viscoplasticity, *Mechanics Research Communications*, 56, pp. 31-36, 2014

W. SUMELKA, The role of the covariance in continuum damage mechanics, *ASCE Journal of Engineering Mechanics*, 139, 11, pp. 1610-1620, 2013

W. SUMELKA, T. Łodygowski, Thermal stresses in metallic materials due to extreme loading conditions, *ASME Journal of Engineering Materials and Technology*, 135, 2, pp. 021009-1-8, 2013

SUMELKA, T. Łodygowski, Reduction of the number of material parameters by ANN approximation, *Computational Mechanics*, 52, 2, pp. 287-300, 2013

W. SUMELKA, T. Łodygowski, The influence of the initial microdamage anisotropy on macrodamage mode during extremely fast thermomechanical processes, *Archive of Applied Mechanics*, 81, 12, pp. 1973-1992, 2011

A. Glema, T.Łodygowski, **W. SUMELKA,** Nowacki's Double Shear Test in the Framework of the Anisotropic Thermo-Elasto-Vicsoplastic Material Model, *Journal of Theoretical and Applied Mechanics*, 48, 4, pp. 973-1001, 2010

A. Glema, T.Łodygowski, P. Perzyna, **W. SUMELKA,** The Numerical Analysis of the Intrinsic Anisotropic Microdamage Evolution in Elasto-Viscoplastic Solids, *International Journal of Damage Mechanics*, 18, 3, pp. 205-231, 2009

W. SUMELKA, The Constitutive Model of the Anisotropy Evolution for Metals with Microstructural Defects, *Publishing House of Poznan University of Technology*, pp. 132,Poznań, Poland, 2009