

Personal data

Family name: Kouhia
Given names: Reijo Juhani
Born 1960 in Hämeenlinna, Finland

Address

Tampere University of Technology
Civil Engineering, Structural Mechanics
P.O. Box 600, 33101 Tampere, Finland
e-mail: reijo.kouhia@tut.fi
tel: +358 40 8490561
URL: <http://www.tut.fi/rakmek/personnel/kouhia/>
Researcher ID: G-4272-2014, ORCID: 0000-0002-3378-5612



University Degrees

- Master of science (engineering) at Helsinki University of Technology, 18.3.1986. Grade: Pass with distinction.
- Licentiate's degree (engineering), at Helsinki University of Technology, 4.6.1990. Grade: Pass with distinction.
- Doctor of Science (technology), at Helsinki University of Technology, 11.10.1999. Grade: Pass with distinction.

Current position

Professor of solid mechanics at Tampere University of Tecnology, since 1.12.2011. Department of Mechanical Engineering and Industrial Systems 1.12.2011-31.12.2016 and Civil ENgineering 1.1.2017-.

Previous employment

- Teaching research scientist, Helsinki University of Technology, Structural Mechanics, 1.7.2004 - 30.11.2011. (After 1.1.2010 Aalto University School of Science and Technology).
- Adjunct professor (docent) in structural mechanics, Aalto University, 1.10.2009- 30.9.2014, and 1.12.2014-

Foreign research visits

- Eindhoven University of Technology, Faculty of Mechanical Engineering, Division Computational and Experimental Mechanics, September 1990 - December 1992.
- Institute of Computer Sciences, Academy of Sciences of the Czech Republic, May 2000.
- Lund University, Department of Mechanical Engineering, Division of Solid Mechanics, June - July 2003.

Duties as scientific expert

Academic dissertations

Acting twenty four times as a pre-examinator, member of the dissertation committee or an opponent in doctoral and licentiate's thesis in Finland, Sweden, France.

Acting as a reviewer

Reviewer for the following international journals: *Communications in Numerical Methods in Engineering*, *Computer Methods in Applied Mechanics and Engineering*, *Computers and Structures*, *Finite Elements in Analysis and Design*, *International Journal for Numerical Methods in Engineering*, *Journal of Sound and Vibration*, *Mathematics of Computation*, *SIAM Journal of Scientific Computing*, *IEEE Transactions on Control Systems Technology*, *Mechanics of Advanced Materials and Structures*, *European Journal of Computational Mechanics*, *International Journal of Fatigue*, *European Journal of Mechanics A/Solids*, *International Journal of Mechanical Sciences*.

Scientific positions of trust

- Editor in Chief of the Finnish journal *Rakenteiden Mekaniikka*, 1.1.2007-31.12.2017.
- Member of the executive committee of the Nordic Association for Computational Mechanics, since 2008.
- Secretary of the Finnish National Committee on Theoretical and Applied Mechanics, since 2013.
- Member of the general assembly of the IUTAM (International Union of Theoretical and Applied Mechanics), since 2013.

Prizes

Oscar Vilamo prize for the best dissertation of the year in civil engineering 1999.

Research funding - last four years

- Modelling the interaction of electromagnetic field on an anti-armour projectile, funded by MATINE (Scientific Advisory Board for Defence), 2014, 85000 euros.
- The effect of rapid load changes on the mechanical design of boilers. Funding from the CLEEN shock program FLEXe, 1.7.-30.12.2015, 80000 euros.
- Strategic funding of TUT to the project “Magneto-mechanical modelling for energy harvesting and energy efficiency” together with Prof. Pekka Ruuskanen and Assist. Prof. Paavo Rasilo. Total 150000 euros. 1.1.-31.12.2016.
- Manufacturing, numerics and micromechanics in engineering sciences (MaNuMiES). Tekes funded consortium, TUT solid mechanics share 108000 euros. Consortium leader prof. Arto Lehtovaara (TUT). 1.1.2016-31.12.2018.

Invited talks

- Continuation and iterative linear solvers, *the First French–Finnish Seminar on Innovative Methods for Advanced Technologies*, November 22–23, 2001, CSC-Scientific Computing Ltd., Espoo, Finland.
- Constitutive modelling of engineering materials, *Seminar on Computational Sciences*, Jyväskylä, April 14–15, 2005.
- On the stability of truss beams, *International Convention in Steel Construction*, Hämeenlinna, September 13–14, 2006.
- Some observations on the integration of inelastic constitutive models with damage, *The 19th Nordic Seminar on Computational Mechanics*, Lund, October 20–21, 2006.
- Lecturer of a short course: “Computational techniques for the non-linear analysis of structures (9 hours)”, University of Calabria, Department of Structural Mechanics 3.5.–5.5.2004.
- Keanote at IABSE-Workshop on Ignorance, Uncertainty and Human Errors in Structural Engineering, 16-17.2.2017. Helsinki, Finland.