Prof. dr. sc. Vedrana Kozulić
Identification number from Records of Scientific Workers: 176112

Curriculum vitae

Date of birth: 13. January 1962. Nationality: Croatian. Name of employer: University of Split, Faculty of Civil Engineering, Architecture and Geodesy, Department of Technical Mechanics. Type of business: Full Professor (Tenure) – (since 2016.). Position held: Head of the Chair.Title Master of technical science: 1993. (title of thesis: Numerical analysis of structures consisting of shells and columns). Title Ph. D. of technical science: 1999. (title of thesis: Numerical modelling by the fragment method with Rbf functions). Research subjects: numerical modelling of linear and nonlinear problems in technical mechanics; problems of continuum discretization; modeling of engineering structures and development of new numerical procedures in order to improve the quality of approximate solutions; development of numerical algorithms for meshless modeling of engineering problems on irregular areas.
From 1990-2002 she was employed at the Faculty of Civil Engineering at the University of Split as a research assistant and taught at the Department of Technical Mechanics as an assistant in the subjects Mechanics 2 and Applied Theory of Elasticity. From 2002-2009 she was employed at the Faculty of Civil Engineering at the University of Rijeka, where she gave lectures on the subjects Construction Statics 1 and Construction Statics 2. From 2009 until today, she has been employed at the Faculty of Civil Engineering, Architecture and Geodesy in Split, where she teaches the following subjects: Technical Mechanics 1 and Technical Mechanics 2 at the professional undergraduate study of civil engineering, Mechanics of deformable bodies and Surface structures at the university graduate study of civil engineering, Numerical modeling of shell structures and Meshless numerical methods and associated adaptive techniques at the university postgraduate (doctoral) study of civil engineering.

Vedrana Kozulić was principal investigator in the scientific project funded by MSES in the Republic of Croatia. Name of this project is ˝Adaptive meshless modeling in design of engineering structures˝ (083-0831541-1534) (2007.-2013.). The main purpose of the project was representation of the role of atomic basis functions in the field of numerical mechanics, and possibilities for developing of their application in engineering practice for solving problems which have not yet successfully solved by classic numerical procedures used, for example, in the Finite Element Method.
She participated as a researcher in 8 scientific research projects: Nonlinear numerical modelling of civil engineering structures (2-11-054) (1991.-1996.), Numerical modelling of engineering structures (083133) (1997.-2000.), Numerical modelling of spatial engineering structures (083132) (2000.-2002.), Modern numerical modelling of tunnels and underground structures (0083041) (2002.-2005.), Numerical modelling of quasi-brittle materials (0114002) (2002.-2005.), Groundwater flow modeling in karst aquifers (HRZZ-UIP-2013-11-8103) (2014.-2017.), Preventing, Managing and Overcoming Natural-Hazards Risks to mitiGATE economic and social impact (PMO-GATE), Programme 2014 - 2020 INTERREG V-A Italy – Croatia, (2019.-2022.), Multiphysics modelling of surface-subsurface water systems, IP-2020-02-2298 HRZZ (2020.-2025.).
She co-authored one textbook. She has published over 100 scientific papers, among them 5 papers published as chapters in scientific books with an internationally recognized review indexed into databases Cambridge Scientific Abstracts, INSPEC, Google Scholar and Scopus, 12 papers in CC journals and SCI, SCI-Expanded bases, 16 scientific papers in journals indexed in WoS, 6 scientific papers in journals with an internationally recognized review indexed in other bases, 36 papers in Proceedings of International meetings, 12 papers in proceedings from domestic scientific conferences. She had 3 invited lectures at international conferences, 16 lectures at international conferences and 7 lectures at national conferences. She participated in the work of 25 international and 8 domestic scientific meetings. She reviewed scientific papers in journals Applied Mathematics and Computation, Transactions of FAMENA, Applied Mathematical Modelling, Građevinar, International Journal for ENGINEERING MODELLING, and Scientific Reports.
In addition to her teaching and scientific activities, she participated in the creation of a number of studies and reports on the numerical analysis of engineering structures. She was a collaborator in the creation of a number of professional projects of structures. For the needs of the profession, she created several computer programs for numerical analysis and calculation of engineering structures.
She is a member of scientific societies: Croatian Society of Mechanics, Central European Association for Computational Mechanics (CEACM), European Mechanics Society (EUROMECH).