

Dubravka Mijuca

Full Professor

Faculty of Construction Management
Department of Civil Engineering
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EDUCATION

1999	PhD in computational mechanics – Natural science: Mathematics and Mechanics, Faculty of Mathematics, Department of Mechanics, University of Belgrade, Serbia
1995	MSc applied mechanics – Natural Sciences: Mathematics and Mechanics,, Faculty of Mathematics, Department of Mechanics, University of Belgrade, Serbia
1989	Bachelor in Applied mechanics, Faculty of Mathematics, Department of Mechanics, University of Belgrade, Serbia

Komentar [p1]: Navodi se samo godina sticanja titule. Ispod titule se navodi naziv visokoškolske ustanove u kojoj je titula stečena.

EMPLOYMENT HISTORY

2007	Full Professor	Faculty of Construction Management Department of Civil Engineering
1999	Associate Professor	Faculty of Mathematics, Department of Mechanics, University of Belgrade, Serbia
1990	Teaching assistant	Faculty of Mathematics, Department of Mechanics, University of Belgrade, Serbia

INDUSTRIAL EXPERIENCE

2014-...	Consultant for more international industrial subjects in the mechanical and civil engineering
2014–2018	Consultant VND – engineering and consulting, Belgrade, Serbia

MEMBERSHIPS	
2020	NAFEMS – član steering komiteta, međunarodno udruženje za računsku mehaniku
2004.	Društvo za računsku mehaniku Srbije
1995	NAFEMS – međunarodno udruženje za računsku mehaniku
1990.	Društvo za mehaniku Srbije

RESEARCH PROJECTS	
2009-2018	Mathematical Models and Optimization Methods with Applications, Project No. 144007, istraživač, Ministarstvo za nauku Republike Srbije
2012- 2013	Deutsche Forschungsgemeinschaft Geforderte, DFG-Projekt Schm 746/74-1, Improved toughness balance of nano particle filled polyamide composite simulation supported properties/morphology correlation, DFG Germany
2012-2013	Deutsche Forschungsgemeinschaft Geforderte, DFG Priority Programme 1420 "Biomimetic Materials Research: Functionality by Hierarchical Structuring of Materials", Theme: Numerical Simulation of Open Cell Foams in passive impact protection, , DFG Germany
2007-2010	Project PNII IDEI contract nr. 106/1 octombrie 2007. Caracterizare a bazata pecunoastere a capacitatii de amortizare a nanocompozitelor din materiale auxetices i nanotuburi de carbon. ID_247/2007. Institutul de mecanica solidelor academia. Romania
2006-2010	Implementation of the European regulative in heating and cooling of buildings No. NPEE 283011, rukovodilac projekta, Ministarstvo za nauku Republike Srbije
2003-2006	Mathematical modelling and development of methods and techniques for diagnosis of energetic efficiency in existing and new buildings. No. NPEE813-197b, rukovodilac projekta, Ministarstvo za nauku Republike Srbije
2002 – 2006	Mathematical methods and algorithms for 3d contours recognitions, No. 1645, Ministarstvo za nauku Republike Srbije, istraživač
2002 - 2006.	Development and implementation of the new reliable methods in mechanics of solid and fluids, No.1865, rukovodilac projekta, Ministarstvo za nauku Republike Srbije
2001-2005	FENet - A thematic network for promoting best practice industrial application of FE technology, Project number: GTC2 2000 33057, lokalni rukovodilac

	projekta FP5 European Union
1997-1998	Software for Continual Stress State Representation, No.I.1, 1556. Istraživač, Ministarstvo za nauku Republike Srbije
1995-1999	Contemporary Problems in Mechanics, No.04M01, istraživač, Ministarstvo za nauku Republike Srbije
1992-1995	Contemporary Problems in Mechanics, istraživač, Ministarstvo za nauku Republike Srbije

AWARDS	
2015.	Best technological innovation, third place, Ministry of Science Republic of Serbia ACCBOX New sustainable methodology for the soil-pile bearing capacity using wireless measurement and FEM approach, 2015
2010	Best technological innovation, seventh place, Ministry of Science Republic of Serbia - SUPPORT, New deep foundation pit excavation procedure, 2010

SELECTED PUBLICATIONS	
Mijuca D (2021) On the numerical structural calculation methods of the space structures as a reliable replacement for expensive testing, still a commodity and why. Serbian Astrobnomical society, ISBN 978-86-80019-99-4	
Duff IS and Mijuca D (2011) <i>On accurate and time efficient solution of primal-mixed finite-element equations in multiscale solid mechanics. International journal for Numerical Methods in Biomedical Engineering</i> , 27(1):95-112, DOI: 10.1002/cnm.1296	
Mijuca D (2010) <i>On a new 3D primal-mixed finite element approach for thermal stress analysis of multi-layered geometrically multiscale structures. Finite Elements in Analysis and Design</i> . 46: 299-310, DOI: 10.1016/j.finel.2009.11.001	
Mijuca D, Zibera A and Medjo B (2007) <i>A Novel Primal-Mixed Finite Element Approach for Heat Transfer in Solids</i> , Computational Mechanics, 39(4):367-381. DOI 10.1007/s00466-006-0034-0	
Mijuca D (2004) <i>On hexahedral finite element HC8/27 in elasticity Computational Mechanics</i> , Springer-Verlag, (33) 6:466-480 ISSN: 0178-7675	
Mijuca D, Zibera A and Medjo B (2005) A new multifield finite element method in steady state heat analysis. <i>Thermal Science</i> , Vol. 9(1): 111-130	
Mijuca D (2006) On Dimensional Reduction in Multiscale, Finite Element and Atomistic,	

Analysis in Solid Mechanics. <i>WSEAS TRANSACTIONS on APPLIED and THEORETICAL MECHANICS</i> , 1(1):.16-25, . ISSN 1991-8747
Mijuca D, Vukobrat M and Gajic D (2003) Three-dimensional finite element method in the heat analysis of buildings, <i>Termotehnika</i> , 29(1-4) 119-134
Mijuca D, Berković M and Grozdanović I (2001) <i>Some continuous stress mixed formulations and inf-sup test</i> . Computer Assisted Mechanics and Engineering Science, Vol.8, 141-153 , ISSN1232-308X.
Mijuca D, Berković M and Drašković Z (1998) <i>A direct sparse solution of the mixed finite element equations</i> . Computer Assisted Mechanics and Engineering Science, 5:21-30, ISSN1232-308X
Mijuca D, Berković M (1994) <i>Coordinate independent stress recovery procedure</i> . The PAMM's periodical BAM 1026/94, ISSN 0133-3526
Mijuca D, Berković M (1999)On the main properties of the primal-mixed finite element formulation, <i>Facta Universitatis Series Mechanics, Automatic Control And Robotics</i> , 2(9), 903-920, ISSN 0354-2009
Mijuca D (2002) <i>On the reliability of the new finite element HC8/27</i> , Facta Universitatis Series Mechanics, Automatic Control And Robotics, 3 (12): 385-396 ISSN 0354-2009
Mijuca D (2001)A new primal-mixed 3 ^d finite element, Facta Universitatis Series Mechanics, Automatic Control And Robotics, 3(11):167-178 ISSN 0354
Mijuca D (2007) <i>On Primal-Mixed formulation in Elasticity and Thermoelasticity</i> , Monograph, Faculty of Mathematics University of Belgrade (2007) ISBN 86-7589-054-0
Mijuca D, Berković M. (1997) <i>Some remarks on the energy norm and Z-Z error estimator</i> . SOLID MECHANICS, Vol. LXXXVII, book 3, 254-262 YU ISBN 86-7025-263-5
Mijuca D, Maksimovic S. Book of Papers. The First International Conference on Computational Mechanics, ISBN 86-7589-042-7, 2004
Mijuca D. Primal-mixed finite element approach in solid mechanics. Faculty of Mathematics University of Belgrade, 1999, Doctoral thesis
Mijuca D, Berković M (1996) On the Numerical Integration of Z-Z type Error Indicators, Second Serbian-Greek Symposium on Solid Mechanics, Belgrade .
Mijuca D, Berković M (1997). Efficient and reliable mixed finite element analyses of solid continua, <i>Euromech Colloquium 371</i> , Bad Herrenhalb, Germany
Mijuca D, Berković M (1998) On the current state on the computational mechanics, Symposium Contemporary Mathematics, Devoted to 125 anniversary of Faculty of Mathematics and to 190 years of teaching of mathematics in Serbia
Mijuca D (2002) A Novel Stress Results In The Finite Element Analysis Of Clamped Plates Obtained by Full 3D, EnginSoft, conference and users meeting: Virtual prototyping today: industrial impact and future trends, October 12-15, Stezzano . ISBN 88-87786-01-1
Mijuca D (2006) On dimensional reduction in multiscale, finite element and atomistic, analysis in solid mechanics, , 2nd WSEAS International Conference. on APPLIED and THEORETICAL

MECHANICS (MECHANICS '06), Venice, Italy, November 20-22 www.worldses.org/conferences/2006/venice/mechanics
Mijuca D (2006) ON THE ISSUE OF MULTISCALE ROBUSTNESS IN COMPUTATIONAL MECHANICS. Seminar in honor of 60 years of founding the Mathematical Institute of Serbia, December 13- 15
Mijuca D (2007) On the Issue of Multiscale Robustness in Computational Mechanics, by Dubravka Mijuca. Minisymposia: Computational Methods in Structural Analysis and Optimization by FEM, 1st INTERNATIONAL CONGRESS OF SERBIAN SOCIETY OF MECHANICS 1st ICSSM-2007, April, 10-13 Proceedings of the 1st International Congress of Serbian Society of Mechanics, ISBN 978-86-909973-0-5, pp. 675-682. (Presentation PPS)
Mijuca D (2008) (2008) On the multiscale simulations by mixed finite element method in thermoelasticity. 6th International Conference CoNuSS-2008 of Nuclear Society of Serbia , Session Nuclear Fusion, September 22-25, Belgrade, Serbia; http://nss.vin.bg.ac.yu/CoNuSS2008.htm
Mijuca D (2009) On Reliable Continuum Mechanics Formulations in Multiscale Simulations of Solids. Plenary lecture at the 4th IASME / WSEAS International Conference on CONTINUUM MECHANICS (CM'09), Cambridge, UK, February 24-26

TEXTBOOKS

Velimir Simonovic, Dubravka Mijuca, (2011) Mathematical Methodics (in Serbian: Metodika nastave matematike), Zavod za udžbenike Beograd, Cobiss 184385548, ISBN 978-86-17-17503-8

Dubravka Mijuca (2008), Introduction in Energy efficiency in buildings (In Serbian: Uvod u Energetsku efikasnost), Union – Nikola Tesla University
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