

# Dragan Marinković

Junior assistant at the Faculty of Mechanical Engineering, Niš

## General:

### Work address:

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## Personal:

Date of birth: 01.01.1976.  
Place of birth: Niš, Serbia  
Nationality: Serbian

## Education:

**1982 – 1994:** Primary school and high school in Niš, the best student and the best mathematician of the region of Niš, Diploma Vuk Karadžić,  
**1994 – 1999:** Studies on the Faculty of Mechanical engineering in Niš (10 semesters), average note and the note on diploma paper 10, the best student of the University of Niš  
**1999 – 2002:** Master studies on the Faculty of Mechanical Engineering in Niš, all exams passed, average note 10  
**2003 - 2006:** Ph.D. studies at the Otto-von-Guericke University in Magdeburg, the dissertation successfully defended in December 2006.

## Work experience and academic titles:

**2000 – 2002:** Junior assistant at the Faculty of Mechanical engineering, Niš

## References:

more than 30 published scientific and research papers in journals and national and international conferences  
5 development and scientific research projects,  
1 project for the industry.

## The fields of interest:

- **Active structures** – modeling and simulation of active structures,
- **Finite element method** – development of coupled fields elements for modeling active structures and application of the finite element method in structural analysis,
- **Transport technique** – modeling, simulation and analysis of dynamic processes,
- **Logistics** – material transport, warehousing, commissioning, informatics systems.

## Software:

OS: MS Windows 9x, 2000, XP; MS Word, MS Power Point, FEMAP, ProEngineer, COSAR, Ansys, Corel DRAW, MS Excel, Compaq Visual Fortran

## Foreign languages:

English, German, French

# SPISAK RADOVA

Dipl. inž. Dragana Marinkovića, asis. prip. MFN  
za period 2000. ÷ 2006. godine

## 1. DOKTORSKA DISERTACIJA

- 1.1 “A new finite composite shell element for piezoelectric active structures”, doktorska disertacija, Otto-von-Guericke Universität u Magdeburgu, Magdeburg, disertacija uspešno odbranjena decembra 2006.

## 2. NAUČNI I STRUČNI RADOVI SAOPŠTENI NA SKUPOVIMA, SIMPOZIJUMIMA, KONFERENCIJAMA I OBJAVLJENI U ZBORNICIMA I ČASOPISIMA

- 2.1 Jovanović M., Mijajlović D., Marinković D.: “Veliki numerički sistemi u inženjerskoj praksi”, YUINFO 2000, Kopaonik, Zbornik radova - CD, 2000.
- 2.2 Marinković Z., Jovanović M., Marinković D.: “Oblikovanje familije lakih hidrauličkih dizalica”, Prvi skup o konstruisanju, oblikovanju i dizajnu KOD-2000 Novi Sad, Zbornik radova, Fakultet tehničkih nauka Novi Sad, Novi Sad, 2000, str. 89 ÷ 94,
- 2.3 Jovanović M., Marinković Z., Marinković D.: “Parametarsko modeliranje - MCAE koncept familije proizvoda”, IRMES-2000, Kotor 2000., Zbornik radova, Mašinski fakultet - Podgorica Univerzitet Crne Gore, 2000., str. 145 ÷ 150.
- 2.4 Marinković Z., Radovanović B., Marinković D.: “Hidraulički sistem kod pokretnih podova”, 27. naučno-stručni skup HIPNEF 2000, Beograd, Zbornik radova, SMEITS, Beograd, 2000., str. 51 ÷ 55.
- 2.5 Marinković Z., Marković S., Marinković D.: “Linearization and solving of differential motion equations of crane driving mechanisms”, Presented at 5<sup>th</sup> YUSNM NIŠ 2000., The Scientific journal FACTA UNIVERSITATIS, Series Mechanical Engineering, Vol. 1, N<sup>o</sup>7, University of Niš, Niš, 2000., pp. 879 ÷ 886.
- 2.6 Marković S., Marinković D.: “Primena fuzzy logike kod portalno obrtnih dizalica”, 27. naučno-stručni skup HIPNEF 2000, Zbornik radova, Savez mašinskih i elektro-tehničkih inženjera i tehničara Srbije (SMEITS), Beograd, 2000., str. 112 ÷ 116.
- 2.7 Vulić A., Marinković Z., Marinković D.: “Razvoj familije planetarnih reduktora mehanizama za kretanje dizalica”, Osmi SEVER-ov simpozijum o mehaničkim prenosnicima snage, Subotica 2001., Zbornik radova, Sever Prenosnici ad, Subotica, 2001., str. 83 ÷ 88.
- 2.8 Jovanović M., Marinković Z., Marinković D.: “Simulacija havarijskih situacija regalnih dizalica”, Savetovanje sa međunarodnim učešćem UPRAVLJANJE RIZIKOM I OSIGURANJE U INDUSTRIJI, TRANSPORTU I SKLADIŠTENJU, Beograd, DUNAV PREVIING, Beograd, 2001., str. 298 ÷ 302.
- 2.9 Marinković Z., Jovanović M., Mijajlović D., Marinković D.: “Oblikovanje i proračun noseće konstrukcije i obrtnih čepova kod spredera”, Drugi skup o konstruisanju, oblikovanju i dizajnu, KOD-2002 Novi Kneževac, Zbornik radova, Fakultet tehničkih nauka Novi Sad, Novi Sad, 2002, str. 65 ÷ 72.
- 2.10 Marinković D., Jovanović M.: “Redizajn - optimalna geometrija nosača”, Drugi skup o konstruisanju, oblikovanju i dizajnu, KOD-2002 Novi Kneževac, Zbornik radova, Fakultet tehničkih nauka Novi Sad, Novi Sad, 2002, str. 53 ÷ 60.
- 2.11 Marinković Z., Marković S., Miltenović Đ., Marinković D.: “Simulacija procesa opterećenja i naprezanja vratila mehanizama mašina na elektromotorni pogon”, Naučno-stručni skup Jahorina-IRMES 2002, Jahorina 2002., Zbornik radova 1/2, JUDEK-a i Univerzitet u Srpskom Sarajevu – Mašinski fakultet, Srpsko Sarajevo, 2002., str. 153 ÷ 158.
- 2.12 Marinković Z., Jovanović M., Perić Lj., Marinković D., Milić P.: “Razvoj familije ventila MIN-AGH za velike cevne sisteme”, 28. naučno-stručni skup sa međunarodnim učešćem HIPNEF 2002, Vrnjačka Banja, Zbornik radova, Mašinski fakultet Univerziteta u Nišu i SMEITS, Niš, 2002., str. 89 ÷ 94.
- 2.13 Marinković Z., Marković S., Marinković D., Petrović G., Milić P.: “The Influence of Non-linear Excitations of Asynchronous Electric Motors on the Work of Driving Mechanisms of Cranes”, Presented at 6<sup>th</sup> ISNM-NSA NIŠ 2003, The Scientific journal FACTA UNIVERSITATIS, Series Mechanics, Automatic Control and Robotics, Vol. 3, N<sup>o</sup>15, University of Niš, Niš, 2003., pp. 1139 ÷ 1146.
- 2.14 Marinković Z., Vulić A., Marinković D.: “Electro-mechanical drives of butterfly valves”, International Conference “POWER TRANSMISSIONS ‘03”, Varna, 2003., Proceedings Sections III “Experimental investigations and applications” and CD, Balkan Association of Power Transmissions, Sofia, 2003., pp. 70 ÷ 75.
- 2.15 Marinković D., Gabbert U.: “Modeling of Laminate Composites With Embedded Piezoelectric Actuators and Sensors”, Presented at 6<sup>th</sup> ISNM-NSA NIŠ 2003, The Scientific journal FACTA UNIVERSITATIS, Series Mechanics, Automatic Control and Robotics, Vol. 4, N<sup>o</sup>16, University of Niš, Niš, 2004., pp. 115 ÷ 120.

- 2.16 Korchevskaya E., Mikhasev G., Marinković D., Gabbert U.: **"Buckling and Vibrations of Composite Laminated Cylindrical Shells under Axial Load"**, 6<sup>th</sup> Magdeburg Days of Mechanical Engineering, Otto-von Guericke University Magdeburg, 2004., Proceedings, pp. 183 ÷ 189.
- 2.17 Mikhasev G., Korchevskaya E., Gabbert U., Marinković D.: **"Local Buckling, Stationary and Non-stationary Vibrations of the Composite laminated Shells Having the Weakest Spots"**, Fourth International Conference on Thin-Walled Structures ICTWS, Proceedings, London, 2004., pp. 769 ÷ 776.
- 2.18 Marinković D., Gabbert U.: **"Shell finite element development for piezoelectric active composite laminates"**, 2. ForschungsForum FOMEKK, Proceedings, Stuttgart, 2004.
- 2.19 Marinković D., Köppe H., Gabbert U.: **"Finite Element Development for Generally Shaped Piezoelectric Active Laminates, part I - Linear Approach"**, The Scientific journal FACTA UNIVERSITATIS, Series Mechanical Engineering, Vol. 1, N<sup>o</sup> 10, University of Niš, Niš, 2004., pp. 11 ÷ 24.
- 2.20 Marinković Z., Marinković D., Petrović G.: **"Proračun radnog veka elemenata za spektre radnih napona sa dvoparametarskom raspodelom"**, Naučno-stručni skup Istraživanje i razvoj mašinskih elemenata i sistema IRMES '04, Kragujevac 2004., Zbornik radova, JUDEK-a i Mašinski fakultet u Kragujevcu, Kragujevac, 2004., str. 257 ÷ 262.
- 2.21 Marinković D., Gabbert U., Köppe H.: **"Linear and nonlinear analysis of active composite laminates"**, GAMM conference, Luxembourg, 2005, published in PAMM, Vol. 5, 2005., pp. 111-112.
- 2.22 Marinković D., Köppe H., Gabbert U.: **"Finite Element Development for Generally Shaped Piezoelectric Active Laminates, part II – Geometrically Nonlinear Approach"**, The Scientific journal Facta Universitatis, Series Mechanical Engineering, Vol. 3, N<sup>o</sup> 1, University of Niš, Niš, 2005., pp. 1 ÷ 16.
- 2.23 Marinković Z., Milić P., Marinković D., Petrović G., Marković S.: **"Modeling and Simulation of the Work of Transport Machines Driving Mechanisms With Frequenz Modulated Electromotor Drive"**, The Fifth International Conference HEAVY MACHINERY HM 2005, Mataruška Banja 2005., Proceedings, Faculty of Mechanical Engineering Kraljevo, 2005., pp. I A.73 ÷ I A.76.
- 2.24 Marinković D., Köppe H., Gabbert U.: **"Modeling and simulation of active composite laminates"**, 7<sup>th</sup> Magdeburg Days of Mechanical Engineering, Magdeburg, october 2005., Proceedings, Editors - Kasper, Roland et al., pp. 306-313, 2005.
- 2.25 Marinković Z., Vulić A., Marinković D., Petrović G., Marković S., Milić P.: **"Analysis of modeling and simulation of the work of elektromotor drives"**, The 2<sup>nd</sup> International Conference "POWER TRANSMISSIONS '06", Novi Sad , Proceedings, Balkan Association of Power Transmissions, Faculty of technical Sciences Novi Sad, 2006. pp. 441 ÷ 448.
- 2.26 Marinković Z., Milić P., Marinković D., Petrović G.: **"Modeliranje visokoregalnog skladišta i radnih ciklusa regalne dizalice"**, Drugi srpski seminar sa međunarodnim učešćem TIL 2006, Niš, 2006, Mašinski fakultet Univerziteta u Nišu, Niš, 2006., str. 139 ÷ 144.
- 2.27 Marinković Z., Vulić A., Petrović G., Marinković D., Milić P.: **"Analitičko određivanje funkcija opterećenja elemenata pogonskih mehanizama mašina"**, Naučno-stručni skup IRMES '06 – "Istraživanje i razvoj mašinskih elemenata i sistema, Mrakovica 2006", Zbornik radova, ADEK-o i Univerzitet u Banja Luci Mašinski fakultet, Banja Luka, 2006., str. 249 ÷ 254.
- 2.28 Petrović G., Marinković Z., Marinković D.: **"Modeling and Simulation of the Operation of the Excavator's Bucket Wheel Driving Mechanism"**, XVIII International Conference on "MATERIAL HANDLING, CONSTRUCTIONS AND LOGISTICS", MHCL'06, Belgrade, Proceedings, Mechanical Engineering Faculty University of Belgrade, Belgrade, 2006., pp. 139 ÷ 144.
- 2.29 Marinković D., Köppe H., Gabbert U.: **"Numerically efficient finite element formulation for modeling active composite laminates"**, Mechanics of Advanced Materials and Structures, Volume 13, Number 5, 2006., pp. 379 ÷ 392.
- 2.30 Marinković D., Köppe H., Gabbert U.: **"Development of a smart finite shell element and its numerical verification"**, First South-East European Conference on Computational Mechanics, SEECCM-06, Kragujevac, june 2006., Proceedings, Editors – M. Kojić and M Papadrakakis, pp. 236 ÷ 242.
- 2.31 Marinković D., Köppe H., Gabbert U.: **"Accurate modeling of the electric field within piezoelectric layers for active composite structures"**, accepted for publishing in "Journal of Intelligent Material Systems and Structures", 2006.
- 2.32 Gabbert U., Köppe H., Lefevre J., Marinković D., Nestorović T.: **"Overall computational design of smart composite lightweight structures for vibration and noise control"**, 7th World Congress on Computation Mechanics, Los Angeles, California, june 2006., Proceedings-CD, 2006.

### 3.0 RAZVOJNI I NAUČNO-ISTRAŽIVAČKI PROJEKTI

- 3.1 **"OPTIMIZACIJA INDUSTRIJSKIH CEVNIH ZATVARAČA I FORMIRANJE INFORMATIČKE BAZE PROIZVODA"**, projekat iz Programa tehnološkog razvoja, br. MIS. 3.07.0079., Ministarstva za nauku, tehnologiju i razvoj Republike Srbije, rukovodilac projekta Z. Marinković, Mašinski fakultet u Nišu, 2002 - 2003.

- 3.2 **“ROBOT DEVELOPMENT FOR INSPECTION OF SEWER SYSTEMS”**, Fraunhofer Institut, Magdeburg, 2002.
- 3.3 **“DINAMIKA I UPRAVLJANJE AKTIVNIH KONSTRUKCIJA”**, projekat iz Programa osnovnih istraživanja, br. 1828, Ministarstva za nauku, tehnologiju i razvoj Republike Srbije, rukovodilac projekta K. Hedrih (Stevanović), Mašinski fakultet u Nišu, 2002 – 2004.
- 3.4 **“THEORETICAL AND APPLIED MECHANICS OF THE RIGID AND SOLID BODIES. MECHANICS OF MATERIALS”**, Projekat iz Programa osnovnih istraživanja br. 144002, Ministarstva za nauku, tehnologiju i razvoj Republike Srbije, rukovodilac projekta K. Hedrih (Stevanović), Mašinski fakultet u Nišu, 2005 –
- 3.5 **“ENTWICKLUNG EINES FLEXIBLEN VIRTUAL-REALITY-OPERATIONS-SIMULATORS ZUR AUSBILDUNG UND INDIVIDUELLEN OPERATIONSPLANUNG BEIM EINSATZ IN DER LAPAROSKOPISCHEN CHIRURGIE UND VERWANDTEN FACHGEBIETEN”**, Institut für Mechanik, Otto-von-Guericke Universität, Magdeburg, 2006 –

#### **4.0 PROJEKTI URAĐENI ZA POTREBE PRIVREDE**

- 4.1 Jovanović M., Marinković Z., Marinković D.: **“Ekspertiza nosivosti rekonstruisane teleskopske hidrauličke dizalice HP 60/T LUKAS - Erlangen”**, Elaborat, Institut Mašinskog fakulteta u Nišu, Investitor JŽP Beograd – Sekcija za vuču i TKS u Nišu, Niš, 2000.

U Magdeburgu, 12.12.2006. god.

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