

Ile Mircheski

Curriculum vitae

Personal data

First Name /Surname: Ile Mircheski
Address: ul. Rugjer Boshkovikj 9/2-1, 1000 Skopje, Macedonia
Telephone: Mob.: +38970 271 185
e-mail: ile.mircheski@mf.edu.mk
web: http://design.mf.edu.mk/Professors/ile_mirceski
Nationality: Macedonian

Work experience

1987-2012

2019-today, Associate professor at the Faculty of Mechanical Engineering – Skopje at the subjects: Computer-Aided Design; Engineering Design; Design with Plastics;
2014-2019, Assistant professor at the Faculty of Mechanical Engineering – Skopje at the subjects: Computer-Aided Design; Engineering Design; Design with Plastics;
2007-2004, Teaching Assistant at the Faculty of Mechanical Engineering – Skopje at the subjects: Engineering Design; Design with Plastics; Computer-Aided Design; Product Development; Machine Elements 1; Machine Elements 2; Finite element analysis (FEA); Eco-Design.
2005-2007, Mittal Steel Skopje-Factory for Cold Rolling Mill- Assistant manager for production on flat galvanized steel strip.
2004-2005, Professor in private school at the subjects: Mathematics and Computer Science, in private school “Algoritam Center”.

Education

Dates: 2011-2014
Title of qualification awarded: PhD
Doctor Thesis title: “Design for disassembly methodology in decision-making for develop of fasteners in the product assembly”,
Research area: Engineering Design, Design for Disassembly, Computer-Aided Design.
Educational organization: Sts Cyril and Methodius University, Faculty of Mechanical Engineering, Skopje, Macedonia

Dates: 2005-2009
Title of qualification awarded: MSc
Master Thesis title: “Numerical modeling and analysis of comfort in driver’s seat in passenger automobile”
Research area: Engineering Design, Computer-Aided Design.

Educational organization: Sts Cyril and Methodius University, Faculty of Mechanical Engineering, Skopje, Macedonia

Dates 1999-2004

Title of qualification awarded BSc Diploma

Thesis title: "Hydraulic, Pneumatic and Automatics"

Design area: Hydraulic, Pneumatic and Automatics

Educational organization: Sts Cyril and Methodius University, Faculty of Mechanical Engineering, Skopje, Macedonia

Personal skills and competences

Languages English (fluently);

Computer skills Microsoft Office, AutoCAD Mechanical, SolidWorks, Inventor, Catia V5R19, Abaqus, SolidWorks Simulation, SolidWorks Motion, SolidWorks FlowSimulation, SolidWorks Plastics.

Personal interests Engineering design; Design for Disassembly; Computer-aided design; Analysis of seat comfort; Parametric modeling; Modeling and Simulation; Engineering Design with plastics; Eco-design;

Teaching

Graduate study courses:

1. Engineering design
2. Computer-aided design
3. Design with plastics

Postgraduate studies courses:

1. Computer-aided design

Doctoral studies courses:

1. Ergonomic methods in engineering design
2. Design for environment

Books

Published books for the students:

1. Computer-aided design, 2016
2. Design with plastics, 2020

Research interest: Engineering design; Design for Disassembly; Computer-aided design; Modeling and Simulation; Engineering Design with plastics; Eco-design;

Recent papers:

1. Simonovski P., Mircheski I., : "Comparison between analytical and numerical methods for solving of maximum contact pressure on the tooth surface for spur gear with straight teeth", Fourth International Scientific Conference for Machines and Machine elements, Technical University of Sofia, 6-8 November 2008, papers collection, ISBN 978-954-580-260-7, Sofia, pp. 122-133.
2. Mircheski I., Sidorenko S., : "Synchronization of four basic ergonomic parameters for the driver's comfort in vehicles", 33rd Conference on Production Engineering of Serbia with Foreign Participants, University of Belgrade, Faculty of Mechanical Engineering, Department for Production Engineering, 16-17 June 2009, papers collection, ISBN 978-86-7083-662-4, Belgrade, pp. 323-326.
3. Ile MIRČESKI, Vojislav MILTENOVIĆ, Tatjana KANDIKJAN, Milan BANIĆ,: "Systematic Approach in Integrated Product Development through Application of KaLeP model", Journal of Mechanical Engineering Design,

ADEKO – Faculty of Technical Sciences - Novi Sad, Republic of Serbia, Vol.12 No 1, 2009, UDK 62-1/8, ISSN 1450-5401, pp. 21-32, http://www.konstmas.uns.ac.rs/eng/nr1_2009.html.

4. Mircheski I., Kandikjan T.: “Implementation of KaLeP educational model in integrated product development”, Mechanical Engineering - Scientific Journal, Faculty for Mechanical Engineering - Skopje, Vol.28 Number 2, 2009, UDK 658.5, ISSN 1857-5293, pp 77-87.

5. Mircheski I., Sidorenko S.: “An analysis of four concepts for driver's seat comfort in passenger vehicles”, International Scientific Conference – Management of Technology Step to Sustainable Production, MOTSP 2010, 2-4 June 2010, Rovinj, Republic of Croatia, papers collection, ISBN 978-953-6313-09-9.

6. Mircheski I., Kandikjan T., Simonovski P., : “Virtual testing and experimental verification of seat comfort in driver’s seat for passenger automobile”, International Congress Motor Vehicles & Motors 2010 (MVM2010) – SUSTAINABLE DEVELOPMENT OF AUTOMOTIVE INDUSTRY, 7-9 October 2010, Kragujevac, Republic of Serbia, Proceedings of papers, ISBN 978-86-86663-57-3, pp 74-81.

7. Mircheski I., Kandikjan T., Simonovski P., : “Virtual testing and experimental verification of seat comfort in driver’s seat for passenger automobile”, International Journal for Vehicle Mechanics, Engines and Transportation Systems – Mobility & Vehicle Mechanics, University of Kragujevac – Faculty of mechanical engineering, Vol.36, Number 2, June 2010, UDC 621+629(05)=802.0, ISSN 1450-5304, pp 7-20, <http://scindeks.nb.rs/article.aspx?artid=1450-53041002007M>.

8. Ile Mircheski, Viktor Iliev and Darko Babunski: “Planning of cascade compensator for control with hydraulics system”, X International Scientific Conference ETAI 2011, Ohrid, Republic of Macedonia, 16-20 September 2011, ISBN 978-608-65341-0-3.

9. Viktor Iliev, Ile Mircheski and Darko Babunski: “Simulation model for automatic control of the hvac systems”, X International Scientific Conference ETAI 2011, Ohrid, Republic of Macedonia, 16-20 September 2011, ISBN 978-608-65341-0-3.

10. Sofija Sidorenko, Jelena Micevska and Ile Mircheski: “Design of modular wheelchair for children with cerebral palsy”, 34th International conference on production engineering, University of Niš, Faculty of Mechanical Engineering, Serbia, 28 – 30 September, 2011, <http://spms.masfak.ni.ac.rs/end/session/education.html>, ISBN: 978 – 86 – 6055 – 019 – 6.

11. Sofija Sidorenko, Jelena Micevska and Ile Mircheski: “Application of virtual mannequins in the process of design and evaluation of modular wheelchair”, The Scientific Journal FACTA UNIVERSITATIS, series Mechanical Engineering, Vol. 9, No 1, 2011, pp. 107 – 118, UDC 681.3.02, University of Niš, Serbia, <http://facta.junis.ni.ac.rs/me/me.html>, ISSN 0354-2025.

12. Mircheski, I., Kandikjan, T.: „Design for disassembly methodology for determination of optimal disassembly sequence based on contact relations between components and fasteners in the product assembly”, 11th International Scientific Conference MMA 2012 –Advanced production technologies, Faculty of technical sciences Novi Sad, Serbia, September 20-21, 2012, <http://www.ftn.uns.ac.rs/mma2012/>, ISBN 978-86-7892-429-3.

13. Mircheski, I., Kandikjan, T., Prangoski, B.: “A mathematical model of non-destructive disassembly process”, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Transstellar Journal Publications and Research Consultancy Private Limited (TJPRC), Impact Factor (JCC): 3,2516, November 30, 2012, <http://www.tjprc.org/journals.php?jtype=2&id=67#>, ISSN (Online): 2249-8001.

14. Ile Mircheski and Marko Gradišar (HeliPro Slovenia): "Finite element analysis for orthopaedic applications", 4th BioTiNet Workshop, Workshop topic: Biomaterials for Orthopaedic Applications, Cité Universitaire, Neuchâtel, Switzerland, 26-28 June 2013, <http://www.biotinet.eu/fellows.html>
15. Ile Mircheski and Marko Gradišar (HeliPro Slovenia): "3D Finite element analysis of Ti-based alloy prostheses", BioTiNet Winter School: Materials Development on the Nanoscale, University of Vienna, Vienna, Austria, 25 February - 01 March 2014, http://www.biotinet.eu/WinterSchool_agenda.html
16. MIRCHESKI I., KANDIKJAN T., AND SIDORENKO S.,: "Comfort analysis of vehicle driver's seat through simulation of the sitting process", Technical Gazette, Josip Juraj strossmayer University of Osijek, Slavonski brod, Croatia, vol.21 number 2, march-april 2014, udk/udc 62(05)=163.42=iii, ISSN 1330-3651, pp 291-298. (jif = 0.601, jcr 2014 by thomson reuters, april, 2014), http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=178167
17. Mircheski, I., Kandikjan, T. and Pop-Iliev, R., "3D CAD integrated method for optimizing the design for non-destructive disassembly", Digital Proceedings of TMCE 2014 Symposium, Tools and Methods of Competitive Engineering (TMCE), Delft University of Technology, Budapest, Hungary, May 19-23, 2014, ISBN/EAN 9789461861771, pp 801-812. <http://tmce.io.tudelft.nl/?special=proceedings&page=proceedings>.
18. Ile Mircheski and Marko Gradišar (HeliPro Slovenia): "Optimisation of porous structure morphology for an orthopaedic implant with improved performance and durability", BioTiNet Final Conference, Leibniz Institute for Solid State and Materials Research Dresden (IFW Dresden), Germany, 4-8 November 2014, http://www.biotinet.eu/Final_conference_agenda.html.
19. Tatjana Kandikjan, Sofija Sidorenko and Ile Mircheski: "Industrial design, challenges, development, education and application", Presing, Journal of the chamber of authorized architect and authorized engineers in Republic of Macedonia, number 22, December 2014, ISSN 1857-7 44X, pp 36-41.
20. Mircheski, I., Kandikjan, T. and Pop-Iliev, R., "Automating non-destructive product disassembly sequence generation", Book of proceedings of the 1st international conference on engineering and natural sciences (ICENS) 2015, Yıldız Technical University of Istanbul, Skopje, R. Macedonia, May 15-19, 2015, pp 606-616, <http://www.icens2015.com/>.
21. Ile Mircheski: "Optimal non-destructive disassembly sequence of technical products", Scientific monograph: Methods and techniques for industrial development, Chapter: Product and process development, Faculty of Mechanical engineering in Maribor, Slovenia, ISBN 978-961-248-493-4, October 2015, pp 129-143, <http://cobiss.izum.si/scripts/cobiss?command=DISPLAY&base=COBIB&RID=83841281>
22. Ile Mircheski: "Computational testing of Ti-based orthopaedic implant with porous structure by using of finite element method", 11th International course for young researchers, Topic: Computational engineering, sponsored by DAAD Germany, organizer Technical University of Sofia, Pamporovo, Bulgaria, 26-30 May, 2015, ISSN 1314-0779, pp 91-102.
23. Ile Mircheski: "Computer-aided design of stirrup cutting and bending machine for mass production", 11th International course for young researchers, Topic: Computational engineering, sponsored by DAAD Germany, organizer Technical University of Sofia, Pamporovo, Bulgaria, 26-30 May, 2015, ISSN 1314-0779, pp 71-84.
24. Ile Mircheski and Marko Gradišar: "3D Finite element analysis of porous Ti-based alloy prostheses", Computer Methods in Biomechanics and Biomedical Engineering (CMBBE), ISSN: 1025-5842 (Print) 1476-8259 (Online), Published online: 25 Mar 2016, Vol. 19, No. 14, pp. 1531-1540, Journal Impact Factor: 1.850 ©2015 Thomson Reuters, 2015 Journal Citation Reports®, 2016 Informa UK Limited, Taylor & Francis Group, <http://dx.doi.org/10.1080/10255842.2016.1167881>.

25. Ile Mircheski, Remon Pop-Iliev and Tatjana Kandikjan: "A method for improving the process and cost of non-destructive disassembly", *Journal of Mechanical Design (JMD)*, Published online: 18.8.2016, Vol. 138, Issue 12, Journal Impact Factor: 1.688 ©2015 Thomson Reuters, 2015 Journal Citation Reports®, ASME Digital Collection, <http://mechanicaldesign.asmedigitalcollection.asme.org/article.aspx?articleid=2546128>.
26. Ile Mircheski, Petar Simonovski, Nikola Avramov, Tashko Rizov: "3d finite element analysis of tooth contact of spur gear", *Book of proceedings of 5th International Conference on Power Transmission BAPT 2016*, Faculty of Mechanical engineering-Skopje, Ohrid, R. Macedonia, 5-8th October, 2016, pp 187-193, ISBN 978-608-4624-25-7, <http://www.bapt2016.mf.edu.mk/Programme/>
27. Nikola Avramov, Petar Simonovski, Ile Mircheski, Tashko Rizov: "Modification of the diaphragm spring fingers beginnings and its influence on the spring stress distribution and stiffness curve", *Book of proceedings of 5th International Conference on Power Transmission BAPT 2016*, Faculty of Mechanical engineering-Skopje, Ohrid, R. Macedonia, 5-8th October, 2016, pp 199-205, ISBN 978-608-4624-25-7, <http://www.bapt2016.mf.edu.mk/Programme/>
28. Todor Davcev, Tashko Rizov, Nikola Avramov, Ile Mircheski: "Influence of oil quality and viscosity on some quality components of vehicle power transmission", *Book of proceedings of 5th International Conference on Power Transmission BAPT 2016*, Faculty of Mechanical engineering-Skopje, Ohrid, R. Macedonia, 5-8th October, 2016, pp 218-221, ISBN 978-608-4624-25-7, <http://www.bapt2016.mf.edu.mk/Programme/>
29. Ile Mircheski, Andrzej Łukaszewicz, Roman Trochimczuk: "Design of bicycle plastic bottle holder and technological aspects by using solidworks plastic", *Proceedings of the XXIV Ukrainian-Polish Conference on CAD in Machinery Design. Implementation and Educational Issues – CADMD 2016*, Lviv Polytechnic National University and Warsaw University of Technology, Poster presentation, Lviv, Ukraine, 21-22 October 2016, pp 17-22, ISBN 978-617-607-977-4, <http://cad.lp.edu.ua/cadmd/>
30. Roman Trochimczuk, Andrzej Łukaszewicz, Tadeusz Mikołajczyk and Ile Mircheski: "Mechatronic and MCAD modelling of novel telemanipulator for minimally invasive surgery", *Proceedings of the XXIV Ukrainian-Polish Conference on CAD in Machinery Design. Implementation and Educational Issues – CADMD 2016*, Lviv Polytechnic National University and Warsaw University of Technology, Poster presentation, Lviv, Ukraine, 21-22 October 2016, pp 25-26, ISBN 978-617-607-977-4, <http://cad.lp.edu.ua/cadmd/>
31. Tatjana Kandikjan, Sofija Sidorenko, Ile Mircheski and Jelena Micevska: "Scientific monograph of industrial design student projects, with title: Design the evolution 2", *University "St. Cyril and Methodius", Faculty of Mechanical engineering - Skopje*, 2016.
32. Ile Mircheski, Tashko Rizov: "Nondestructive disassembly process of technical device supported with augmented reality and RFID technology", *Book of proceedings of 13th International Conference on Accomplishments in Mechanical and Industrial Engineering – DEMI2017*, Faculty of Mechanical engineering – Banja Luka, Bosnia & Herzegovina, 26-27th May, 2017, pp 877-885, ISBN: 978-99938-39-72-9, <http://demi.rs.ba/2017/>

33. Ile Mircheski, Tashko Rizov: "Improved nondestructive disassembly process using augmented reality and RFID product/part tracking", Tem journal - Technology Education Management informatics, Novi Pazar, Serbia, Vol. 6, Issue 4, pp. 671-677, November 2017, ISSN 2217-8309, <https://dx.doi.org/10.18421/TEM64-04>.
34. Bojan Boshevski, Ile Mircheski: "Bicycle helmet design and the virtual validation of the impact, aerodynamics and production process", Facta Universitatis, series: Mechanical Engineering, Nis, Serbia, Vol. 15, Issue 3, pp. 353-366, November 2017, ISSN 0354-2025, <http://casopisi.junis.ni.ac.rs/index.php/FUMechEng>.
35. Mircheski, I.: „Determination of disassembly interference matrix and improved nondestructive disassembly sequences for the product”, 13th International Scientific Conference MMA 2018 –Flexible Technologies, Faculty of technical sciences Novi Sad, Serbia, September 28-29, 2018, pp. 191-194, http://www.mma.ftn.uns.ac.rs/mma_history.html, ISBN 978-86-6022-094-5.
36. Ile Mircheski, Andrzej Łukaszewicz, Ryszard Szczebiot: „Injection process design for manufacturing of bicycle plastic bottle holder using CAx tools”, Procedia Manufacturing, Elsevier, Vol. 32, pp. 68-73, 2019, <https://doi.org/10.1016/j.promfg.2019.02.184>
37. Ile Mircheski, Andrzej Łukaszewicz, Roman Trochimczuk and Ryszard Szczebiot: „Application of CAX system for design and analysis of plastic parts manufactured by injection moulding”, Proceedings of the 18th International Scientific Conference: Engineering for rural development, Latvia University of Life Sciences and Technologies Faculty of Engineering, indexed in Web of Science and Scopus, 22-24.5.2019, ISSN 1691-5976, pp. 1755-1760, <http://www.tf.llu.lv/conference/proceedings2019/>
38. Roman Trochimczuk, Andrzej Łukaszewicz, Ryszard Szczebiot and Ile Mircheski: „Modeling, programming and simulation of robotized workcells created for industrial and service needs”, Proceedings of the 18th International Scientific Conference: Engineering for rural development, Latvia University of Life Sciences and Technologies Faculty of Engineering, indexed in Web of Science and Scopus, 22-24.5.2019, ISSN 1691-5976, pp. 1313-1318, <http://www.tf.llu.lv/conference/proceedings2019/>

International research projects:

1. Tatjana Kandikjan (project coordinator), Ile Mircheski (participant)

Tempus Joint European Project (Tempus_JEP_41128): "Development of Master's Studies in Industrial Design and Marketing"

Project duration: 2007-2009

EU Partners: University of Applied Sciences in Aachen, Germany, University of Maribor, Slovenia, Johnson Controls, Burscheid, Germany and Philips Lighting, Aachen.

2. Voislav Miltenovic (region project coordinator), Tatjana Kandikjan (local project coordinator), Ile Mircheski (participant).

Project: "Implementation of Learning Module for Product Development According to KaLeP Model".

DAAD Program: "Academic Reconstruction of South Eastern Europe"

Project duration: 2005-2009

Partners: IPEK Karlsruhe, Germany and five universities from South Eastern Europe.

3. Milan Kjosevski (local project coordinator), Ile Mircheski (participant).

Project: "Transport EU-Western Balkan network for training, support and promotion of cooperation in FP7 research activities" Acronym: "TRANSBONUS"

European project under Seventh Framework program (FP7)

Grant agreement number: 218699

Project duration: 2009-2011

4. Marko Gradišar (local project coordinator for Slovenia-HELIPRO d.o.o), Ile Mircheski (participant - <http://www.biotinet.eu/fellows.html>).

Project: "Academic-Industrial Initial Training Network on Innovative Biocompatible Titanium-base Structures for Orthopaedics".

International project from the FP7 program "BioTiNet"

Project duration: 2010-2014

EU Partners: Leibniz-Institut für Festkörper-und Werkstoffforschung Dresden - Germany; Institut National Polytechnique de Grenoble – France; Katholieke Universiteit Leuven – Belgium; Universität Wien – Austria; The Chancellor, Masters and Scholars of the University of Cambridge – UK; Politechnika Warszawska – Poland; University of Ioannina – Greece; The Chancellor, Masters and Scholars of the University of Oxford - UK, "Jozef Stefan" Institute- Slovenia; Universitat Autònoma Barcelona- Spain; PX Precimet SA – Switzerland; HELIPRO d.o.o – Slovenia.

5. Prof. Dr. Petar Stankov (Course director), Prof. Dr. Marko Serafimov (Coordinator in R. Macedonia, Ass. Prof. Dr. Ile Mircheski (participant).

Project: "11th International course for young researchers" Topic: Computational engineering.

DAAD Program: "Stability pact for South-Eastern Europe"

Project duration: 2002-2015

Partners: Prof. Dr. Friedrich Dinkelacker, Project coordinator, Leibniz University of Hannover, Germany.

National projects:

1. Tatjana Kandikjan (project coordinator), Ile Mircheski (participant), Project: „Milan Design Week 2012 Participation“, International project, Ministry of Culture, Republic of Macedonia. Project duration: 2012

2. Tatjana Kandikjan (project coordinator), Ile Mircheski (participant), Project: "Estuary", national project, Ministry of Culture, Republic of Macedonia, Project duration: 2012

3. Tatjana Kandikjan (project coordinator), Ile Mircheski (participant), Project: „Design the evolution 2“, International project, Ministry of Culture, Republic of Macedonia, Project duration: 2016

4. National project: GET bike, project coordinator: Ile Mircheski, project manager: Toshko Ristov, students: Filip Poposki, Marko Naseski, Martin Spasovski, Ina Krstevska, Aleksandar Jankovich и Igor Dzambaski. Project duration: 2018-2019. Funded by: Fund for innovation and technology development in R. Macedonia and company Venito Komerc from Kavadarci.

5. National project: „ Development of smart bumps“, project coordinator: Viktor Nastev, designer: Ile Mircheski, and other. Project duration: 2018-2020. Funded by: Fund for innovation and technology development in R. Macedonia and company STSS-Smart traffic safety systems doel Skopje.

6. Project: "Development of model for nondestructive product disassembly using augmented reality and RFID", project coordinator: Ile Mircheski, participant: Tashko Rizov, Jelena Dzokokj, Tatjana Kandikjan, Ognen Tuteski and Nikola Avramov. Project duration: 2017-2018. Funded by: University Ss."Ciril and Methodius" in Skopje, R.Macedonia