Ing. Štěpán Jeníček

Name: Štěpán Maiden name: ---

Surname: Jeníček

Birthday: 25. 10. 1982 Nationality: Czech

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Residence: Družstevníků 53, Pilsen, Czechia e-mail: jeniceks@rti.zcu.cz

Education:

2013 **Training for project administrators**, University of West Bohemia in Pilsen, Czech

Republic Faculty

2002 – 2008 University of West Bohemia in Pilsen, Faculty of Mechanical Engineering, Czech

Republic, Field of study: Technology, metrology, quality assurance, Title: Ing.

2005 – 2008 **University of West Bohemia in Pilsen,** Faculty of Mechanical Engineering, Czech Republic, Graduate of the certificate program of quality management, Competence

for activities in the field of quality control and management according to ISO standards 9000 series, EN series 45000 and Act No. 505/90 Coll. on metrology.

Work experiences:

2008 present

University of West Bohemia in Pilsen

2013-present: Regional Technological Institute: Head of laboratory of Experimental Forming, senior researcher

- organization of research, development, and operational activities of the workplace so that the tasks of publicly supported research and development projects, contract research contracts, and other activities of a contractual nature are fulfilled in the required quality and within the required deadlines
- organization of operation and maintenance of workplace infrastructure
- leading three teams of students and young researchers cooperating with industry as a mentor in two projects Zéta (TAČR), leading two teams of students in university grants for student research work
- study of the relationship between the parameters of thermal and thermomechanical processing of materials, their microstructure and properties
- development of technologies for processing difficult-to-form materials
- development of deformation technologies for ultrafine-grained microstructures
- optimization of forming processes and heat treatment
- creation of material-technology models for highly complex dynamic forming processes

2011-2012: Regional Technological Institute: Junior researcher

• self-governing solution of scientific, research, and development tasks in the field of heat treatment and forming of materials

2008-2017: Researcher in Research Centre of Forming Technology: researcher

- creation of material-technology models for highly complex dynamic forming processes
- reducing energy and time demands of thermomechanical processes
- developing alternative ways of connecting high strength materials via forming techniques

Collaborations on research projects in last 5 years:

- 2015 2020 Key researcher, solving one partial aim in project LO1502, Development of Regional Technological Institute, funding organisation: MŠMT
- 2019 2021 Mentor of project TJ02000274: Determination of the principles and processes taking place during the stabilization annealing of austenitic stainless steels used in nuclear power, funding organisation: Technology Agency of the Czech Republic, Program: Zéta
- 2019 2020 Key researcher, coordinator of one sub-project "Development of high-strength manganese steel suitable for hot stamping technologies", TN01000015, funding organisation: Technology Agency of the Czech Republic (TAČR), Program: NCK
- 2015 2018 effiPRESS -- Development of energy-efficient press hardening processes based on innovative sheet and tool steel alloys and thermo-mechanical process routes, funding organisation: EUROPEAN COMMISSION, RFSR-CT-2015-00019
- 2020 2022 Mentor of project TJ04000265: Optimization of properties of maraging steel with reverse austenite and TRIP effect, funding organisation: TAČR, Program: Zéta
- 2015 2019 Support of UWB commercial opportunities, Subproject 2 and 6, TG02010011, funding organisation: Technology Agency of the Czech Republic
- 2017 2019 Improvement of Properties and Complex Characterization of New Generation Fe-Al-O Based Oxide Precipitation Hardened Steels, funding organisation: The Czech Science Foundation, 17-01641S

5 important results:

- KUČEROVÁ, L., ZETKOVÁ I., JENÍČEK, Š., BURDOVÁ, K. Hybrid parts produced by deposition of 18Ni300 maraging steel via selective laser melting on forged and heat treated advanced high strength steel, Additive manfuacturing, 2020, vol. 32, 101108. (Q1, IF=7.173)
- Fabian Dittrich, Jonny Kaars, Bohuslav Masek, Stepan Jenicek, Martin Franz-Xaver Wagner, Peter Mayr, HAZ characterization of welded 42SiCr steel treated by quenching and partitioning, Journal of Materials Processing Technology, Volume 268, 2019, Pages 37-46, ISSN 0924-0136,(Q1, IF 4,669)
- JIRKOVÁ, H. JENÍČEK, Š., KUČEROVÁ, L., KURKA, P. . High-strength steel components produced by hot metal gas forming. MATERIALS SCIENCE AND TECHNOLOGY, 2019, č. 11.02.2019, ISSN: 0267-0836) (IF 1.835)
- JENÍČEK, Š., JIRKOVÁ, H., VOREL, I., Technology of production of high-strength forging parts by progressive quenching using internal heat of material, verified technology, 2018
- MAŠEK, B. ., JIRKOVÁ, H. ., RONEŠOVÁ, A. ., JENÍČEK, Š. ., ŠTÁDLER, C. . Method of Achieving Trip Microstructure in Steels by Means of Deformation Heat. Alexandria, patent US20130081741A1, Virginia, USA, 2015.

Publications activities:

- 71 publication on Scopus
- 33 publication on WOS
- 94 in total
- co-author of 2 CZ patents
- co-author of 2 US patens
- 4 verified technologies
- 3 utility design
- 8 functional samples
- 24 research reports
- H-index 5 (Scopus)
- ResearcherID:I-7775-2016
- ORCID:0000-0002-7492-7437