europass Curriculum vitae

PERSONAL INFORMATION

Josef Štětina

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WORK EXPERIENCE

01/05/2018–Present

Director of Institute, Professor

Institute of Automotive Engineering, Faculty of Mechanical Engineering, Brno (Czech Republic)

Director of Institute, University teacher, researcher

01/05/2016–30/04/2018

Professor

Energy Institute, Brno University of Technology, Faculty of Mechanical Engineering, Brno (Czech Republic)

University teacher, researcher

01/06/2008–30/04/2016

Associate Professor

Energy Institute, Brno University of Technology, Faculty of Mechanical Engineering, Brno (Czech Republic)

University teacher, researcher

31/05/1994–31/05/2008

Assistant Professor

Energy Institute, Brno University of Technology, Faculty of Mechanical Engineering, Brno (Czech Republic)

University teacher, researcher

01/11/1987–30/05/1994

Internship

Department of Internal Combustion Engines and Vehicles, Brno University of Technology, Faculty of Mechanical Engineering, Brno (Czech Republic)

Researcher

EDUCATION AND TRAINING

01/06/2016

Professor, Machines and Equipment

Brno University of Technology, Faculty of Mechanical Engineering, Czech Rep., Brno (Czech Republic)

01/04/2008

Associate Professor, Thermal Engineering

Faculty of Metallurgy and Materials Engineering, VSB-Technical University Ostrava, Czech Rep., Ostrava (Czech Republic)

01/09/2002–01/06/2007

Doctor (Ph.D.), Thermal Engineering and Fuel in Industry

Faculty of Metallurgy and Materials Engineering, VSB-Technical University Ostrava, Czech

Rep., Ostrava (Czech Republic)

01/09/1982–30/06/1987

Mechanical engineering, Transport and handling technology

Brno University of Technology, Faculty of Mechanical Engineering, Czech Rep., Brno (Czech Republic)

PERSONAL SKILLS

Mother tongue(s): Czech

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

Teacher / high school teacher with experience of more than 20 years.

Lecturers more than 100 appearances at international conferences

Organisational / managerial skills

Experience in managing research teams, from the management grant projects.

- Currently, I lead a team of four researchers
- Experience in leading and managing software projects
- Currently leads a team of software development for Doosan Skoda Power

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital skills - Self-assessment grid

Extensive experience with MS Windows operating systems with hardware and configuring computer networks and computers at the level of the controller; programming languages FORTRAN, C, C ++, C #, PHP, Pascal (Delphi), PYTHON,LabView and Matlab

Other skills

H-index: 7 (dle Web of Science)

Publications

MAUDER, T.; CHARVÁT, P.; ŠTĚTINA, J.; KLIMEŠ, L. Assessment of Basic Approaches to Numerical Modeling of Phase Change Problems—Accuracy, Efficiency, and Parallel Decomposition. *JOURNAL OF HEAT TRANSFER-TRANSACTIONS OF THE ASME,* 2017, roč. 139, č. 8, s. 1-5. ISSN: 0022-1481.

KLIMEŠ, L.; POPELA, P.; MAUDER, T.; ŠTĚTINA, J.; CHARVÁT, P. Two-stage stochastic programming approach to a PDE-constrained steel production problem with the moving interface. *Kybernetika,* 2017, roč. 53, č. 6, s. 1047-1070. ISSN: 0023-5954.

KLIMEŠ, L.; ŠTĚTINA, J. A rapid GPU- based heat transfer and solidification model for dynamic computer simulations of continuous steel casting. Journal of Materials Processing Technology, 2015, roč. 226, č. 1, s. 1-14. ISSN: 0924- 0136. (IF(2014)2,236)

MAUDER, T.; ŠANDERA, Č.; ŠTĚTINA, J. Optimal Control Algorithm for Continuous Casting Process by Using Fuzzy Logic. Steek Research International WILEY. ISSN 1611-3683 2015. p. 121-135. (IF(2014)1,023)

KLIMEŠ, L.; ŠTĚTINA, J.; BUČEK, P. Impact of casting speed on the temperature field of continuously cast steel billets. Materiali in tehnologije. 2013. 47(4). p. 507 - 513. ISSN 1580-2949. (IF=0,555 Citace=2).

KAVIČKA, F.; DOBROVSKÁ, J.; STRÁNSKÝ, K.; SEKANINA, B.; ŠTĚTINA, J.; MAUDER, T.; MASARIK, M. Breakout of a Slab as the Result of Changes in the Thermo-physical Properties of Continuously Cast Steel. Fatigue & Fracture of Engineering Materials & Structures. 2013. 2013(2). p. 1 - 10. ISSN 8756-758X. (IF=1,058).

ŠTĚTINA, J.; MAUDER, T.; KLIMEŠ, L.; KAVIČKA, F. Minimization of surface defects by increasing the surface temperature during the straightening of a continuously cast slab. Materiali in tehnologije. 2013. 47(3). p. 311 - 316. ISSN 1580-2949. (IF=0,555 Citace=1).

MAUDER, T.; ŠANDERA, Č.; ŠTĚTINA, J. A fuzzy-based optimal control algorithm for a continuous casting process. Materiali in tehnologije. 2012. 46(4). p. 325 - 328. ISSN 1580-2949. (IF=0,571 Citace=5).

ŠTĚTINA, J.; KAVIČKA, F. The influence of chemical composition of steels on the numerical simulation of a continuously cast of slab. Materiali in tehnologije. 2011. 45(4). p. 363 - 368. ISSN 1580-2949. (IF=0,804 Citace=5).

KAVIČKA, F.; ŠTĚTINA, J.; SEKANINA, B.; STRÁNSKÝ, K.; DOBROVSKÁ, J.; HEGER, J. The optimization of a concasting technology by two numerical models. Journal of Materials Processing Technology. 2007. 185(1-3). p. 152 - 159. ISSN 0924-0136. (IF=0,816 Citace=14).

Projects

An adaptive front tracking method for parallel computing of phase change problems, (investigator, 2015-present GAČR)

Numerical & stochastic model of the concast steel blanks of rectangular profile (investigator 2009-2011 GAČR)

VUT ŠANCE - Complex system for dynamic control quality continuously cast steel, (co-researcher 2014-2016)

The attenuation of fluid temperature oscillations using latent heat thermal storage (co-researcher 2011-2013 GAČR)

Analysis of influence of metallurgical-material and technological parameters of concast steel blanks on their quality and process stability (co-researcher 2011-2013 GAČR)

Cooperation with industry

Doosan Škoda Power Mathematical model ACC (2016)

BOSCH Develop of a simulation mathematical model production line (2016)

ENBRA International research and development project model for the conversion of meteorological data (2014-2015)

POSCO Korea Unsteady Fuzzy control and optimization of continuous casting of steel (2014)

VVC Ironworks Podbrezová Slovakia Deployment of off-line and on-line model of the temperature field billet continuous casting and their integration into the information system steelworks (2011)

VITKOVICE STEEL Optimization of the conditions of cooling of the top surface of the slab (2011)

Driving licence B