# **Personal information:**

Name: Ing. Libor Beránek, Ph.D.

Date of Birth: 11. June 1980

Nationality: Czech

## **Contact information:**

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**Education:** 

2004-2011 Ph.D. Czech Technical University in Prague - Faculty of Mechanical Engineering

Dissertation: Research of the Surface of Composite Materials Regarding Their

Medical Use

1998-2004 Ing. Czech Technical University in Prague - Faculty of Mechanical Engineering

Diploma paper: Measuring and Monitoring in Quality Management Systems

#### Work experiences:

October 2015 – Today

Head of Technical Standards Committee 7 – Geometrical Product Specification

The Czech Office for Standards, Metrology and Testing

February 2014 – Today

Head of Department of Machining, Process Planning and Metrology, CTU in Prague

October 2010 – Today

Member of Technical Standards Committee 6 – Quality Management and Quality Assurance

The Czech Office for Standards, Metrology and Testing - organization subordinated to the Ministry of Industry and Trade

September 2010 - Today

Member of Technical Standards Committee 7 – Geometrical Product Specification

The Czech Office for Standards, Metrology and Testing - organization subordinated to the Ministry of Industry and Trade

May 2010 - Today

Head of measurement and training center Carl Zeiss, CTU in Prague

Custom measurement of geometrical product specifications and CMM programming Development and production of fixtures for CMM measurement

Training in the field of metrology and quality management

November 2006 - Today

Assistant Professor – Faculty of Mechanical Engineering, Czech Technical University in Prague

Department of Machining, Process Planning and Metrology

Division of quality management and metrology

Lector of classes: Engineering Metrology, Industrial metrology, Quality management, Quality management systems, Complex quality of production, Technology



March 2006 - 2011

## Member of The Center of Quality and Reliability, Czech Technical University in Prague

Modeling, simulation and subsequent optimization of production processes and systems using the tools of Digital factory, Industrial engineering - Designing new production processes and systems, Measurement system analysis – MSA

## Responsible manager of R&D projects at CTU in Prague:

FW01010048	Development of a new ceramic chimney pipes joint system
FW01010427	Development of shape complicated pressing tools production technology
FV40133	High precision CNC machining and finishing technologies for opto-mechanical assemblies
TH03010089	Truboprop engine performance improvement via advanced finishing technologies
TH03030170	Landfills leachate water reduction
TH01011405	Increasing the durability and serviceability of turbo compressor parts of Ti6Al4V in turboprop eng.
TA04020658	Development of design and technology of mobile tricanter
	bevelopment of design and teelmology of modile theanter
TA04010600	Development of progressive technologies of power grinding of dynamically loaded components for the energy and aerospace industries from difficult to machine super alloys with regard to the integrity of the surface
TA04010600 TA02011031	Development of progressive technologies of power grinding of dynamically loaded components for the energy and aerospace industries from difficult to machine super alloys

# **Publications**

Kellner, T., Kyncl, J., Pitrmuc, Z., Beranek, L., Kanak, M., Kyncl, M. Production process planning in Additive manufacturing and conventional machining technology manufacturing system, 2019, Manufacturing Technology, 19 (2), pp. 232-237.

Čapek, J.; Kolařík, K.; Neslušan, M.; Pitrmuc, Z.; Beránek, L.; Trojan, K.; Němeček, J.; Ganev, N. et al. Surface Integrity after Turning a Duplex Stainless Steel with Respect to Tool Geometry, Transactions of Famena, 2018, 42(4), 1-14. ISSN 1333-1124.

Pitrmuc, Z., Čapek, J., Kolařík, K., Beránek, L., Urban, J., Tool geometry influence on surface integrity of machined austenite stainless steel, 2016, Manufacturing Technology, 16 (2), pp. 425-431.

Pala, Z.; Fojtíková, J.; Koubský, T.; Musalek, R.; Strasky, J.; Čapek, J.; Kyncl, J.; Beránek, L. et al.Study of residual stresses, microstructure, and hardness in FeB and Fe2B Powder Diffraction. 2015, 30(S1), S83-S89. ISSN 0885-7156.

Kyncl, J.; Beránek, L.; Kolařík, K.; Pala, Z. The Research of the Surface Profile after Profiling of Inconel 738LC In: Procedia Engineering. Amsterdam: Elsevier B.V., 2014. p. 974-979. ISSN 1877-7058.

Beránek, L.; Kolařík, K. Surface Integrity Analysis of Duplex Steel by Design of Experiment Approach In: Procedia Engineering. Amsterdam: Elsevier B.V., 2014. pp. 630-637. ISSN 1877-7058.

Pala, Z.; Kolařík, K.; Beránek, L.; Čapek, J.; Kyncl, J.; Mušálek, R.; Ganev, N. Real Structure of Milled Inconel 738LC Turbine Blades In: Advanced Materials Research - Residual stresses IX. Zurich: TRANS TECH PUBLICATIONS LTD, 2014. p. 646-651. Residual Stresses IX. ISSN 1662-8985. ISBN 9783038351535.

Kolařík, K.; Pala, Z.; Čapek, J.; Beránek, L.; Vyskočil, Z.; Ganev, N. Non-Destructive Inspection of Surface Integrity in Milled Turbine Blades of Inconel 738LC In: Applied Mechanics and Materials. Uetikon-Zurich: Trans Tech Publications, 2014, pp. 9-15. ISSN 1660-9336. ISBN 978-3-03785-977-3.

#### **Applied research results**

Beránek, L.; Kyncl, J.; Kolařík, K.; Pala, Z.; Kyncl, J.; Kutěj, D., Experimental machine for testing the abrasion resistance, especially during pressing refractories, Czech Republic. Patent CZ 305959. 2016-04-06.

Beránek, L.; Kyncl, J.; Kellner, T.; Kyncl, M.; Slaný, M.; Kyncl, J.; Vostrovský, M.; Kovaříková, M. Mold for vibrocasted refractory materials, Czech Republic. Utility Model CZ 32284. 2018-11-06.

Beránek, L.; Kyncl, J.; Herman, A.; Novák, P.; Kellner, T.; Kyncl, M.; Kyncl, J.; Vostrovský, M. et al., The mold for vibrocasting materials, Czech Republic. Utility Model CZ 31719. 2018-04-24.

Beránek, L.; Kyncl, J.; Pitrmuc, Z.; Šimota, J.; Vyskočil, Z. Aerospace and power industry turbine blade fixture for plane grinding machine, Czech Republic. Utility Model CZ 30673. 2017-05-15.

Pitrmuc, Z.; Beránek, L.; Slaný, M.; Sommer, J.; Pala, Z.; Gergely, V. Verification of impact of vibrational tumbling technology on surface integrity and fatigue life, [Verified Technology] 2018.

Pitrmuc, Z.; Šimota, J.; Beránek, L.; Kyncl, J.; Vyskočil, Z, Super-alloys shaped surface high power grinding, [Verified Technology], 2016.

Beránek, L.; Sommer, J.; Štajnochr, L.; Pelikán, L.; Kyncl, J.; Kellner, T.; Kyncl, M. Technology production system tongue-groove, [Functional Sample] 2019.

Kellner, T.; Kyncl, J.; Beránek, L.; Kyncl, M., Gripping and handling technology with separate chimney brick blank, [Functional Sample] 2018.

#### **Summary**

WOS (8 publications), SCOPUS (14) a others publications (121), 1 patent, 6 utility models, 8 functional samples, 3 prototypes a 8 verified technologies