doc. Ing. Pavel Novák, Ph.D.

EDUCATION

1997-2002: Institute of Chemical Technology, Prague, specialization: Chemical technology of metals. M.Sc. degree (Ing. Title).
2002-2006: Institute of Chemical Technology, Thesis: *Plasma nitriding of the Nb-alloyed tool steel prepared by powder metallurgy*, defended 7th April 2006 (Ph.D. title).
2011: assoc. prof. ("doc." title), thesis: *Preparation, properties and applications of intermetallics*

PROFESSIONAL CARRIER

9/2006-8/2011: Department of Metals and Corrosion Engineering, Institute of Chemical Technology, Prague, assistant professor
since 9/2011: Department of Metals and Corrosion Engineering, University of Chemistry and Technology, Prague, assoc. prof.
since 2/2014: Faculty of Chemical Technology, University of Chemistry and Technology, Prague, vice-dean

MEMBERSHIP IN RESEARCH SOCIETIES AND EDITORIAL BOARDS

Materials (editorial board member)
Strojírenská Technologie/Manufacturing Technology (editorial board member)
Association for the Heat Treatment of Metals (steering committee member)
European Powder Metallurgy Association (EPMA)
Czech Society for New Materials and Technologies (CSNMT)

FIELDS OF STUDY AND RESEARCH TOPICS

Powder metallurgy, Intermetallics, Surface treatment of metals, Metallography, Electron microscopy and tribology

Particular research topics include research and development of Fe-Al-Si and Ti-Al-Si based high temperature alloys, shape memory alloys prepared by powder metallurgy, study of the mechanism of reactive sintering and mechanical alloying processes and the development of ultrafine tool materials.

INTERNATIONAL COOPERATION

Member of the IG15102 "ITHACA" project team, active cooperation with Lukasiewicz – Krakow Technology Institute, Poland (formerly IOS Krakow), focused on SPS and HP SPS methods, Universita Politecnica delle Marche, Ancona, Italy (transmission electron microscopy of ultrafine intermetallics), Ghent University, Belgium (in-situ XRD for the description of the formation of intermetallics in reaction synthesis processes) and ad-hoc cooperation with other partners in Europe.

PUBLICATIONS

Author of 152 papers on WoS, H index = 21

Selected recent papers

Novák, P., Nová, K. Oxidation Behavior of Fe–Al, Fe–Si and Fe–Al–Si Intermetallics, Materials, 2019, Vol. 12, 1748.

Novák, P., Vanka, T., Nová, K., Stoulil, J., Průša, F., Kopeček, J., Haušild, P. Structure and properties of Fe-Al-Si alloy prepared by mechanical alloying, Materials, 2019, Vol. 12, 2463.

Nová, K., Novák, P., Průša, F., Kopeček, J., Čech, J. Synthesis of Intermetallics in Fe-Al-Si System by Mechanical Alloying, Metals, 2019, Vol. 9, 20.

Hosseini, S., Novák, P. On the Formation of A1NiCo Nano-Quasicrystalline Phase during Mechanical Alloying through Electroless Ni-P Plating of Starting Particles, *Materials*, 2019, Vol. 12, 2294.

Novák, P., Barták, Z., Nová, K., Průša, F. Effect of Nickel and Titanium on Properties of Fe-Al-Si Alloy Prepared by Mechanical Alloying and Spark Plasma Sintering, *Materials*, 2020, Vol. 13, 800.