Curriculum Vitae

Personal details	Ing. Jan Vlček, Ph.D.
	Email: vlcekj@fzu.cz
	Phone: +420 266 052 646
	ORCID 0000-0001-5292-8044
	Gender: male | Nationality: Czech

Education	2009 - 2014 PhD study, Field of Study: Chemical and Process Engineering, University of Chemistry and Technology in Prague, Thesis: Study of Nanostructured Diamond Films
	2007 - 2009 Masters study, Field of Study: Engineering Informatics and Process Control, University of Chemistry and Technology in Prague, Thesis: Preparation of Thin Films by Pulsed Laser Deposition
	2004 - 2007 Bachelor study, Field of Study: Process Engineering, Informatics and Management, University of Chemistry and Technology in Prague, Thesis: Discovering of Gases and Vapors by Electronic Nose

Further training	06/2016 - research stay at Karlsruhe Institute of Technology (KIT), Institute of Nanotechnology, Germany, " Preparation and characterization of specific (n,m) SWCNTs for nano-carbon based electronics and opto-electronic applications "
	06/2017 - research stay at Weizmann Institute (WIS), Rehovot, Israel, research group of prof. Daniel H. Wagner

Work experience	2014 - Nowadays – Research Scientist, Institute of Physics AS CR
	2014 - Nowadays - Assistant Professor, Department of Physics and Measurements, University of Chemistry and Technology
	2013 - 2014 - Research Assistant, Department of Physics and Measurements, University of Chemistry and Technology
	2009 - 2014 - Doctoral Student, Institute of Physics AS CR

Research activities in last 5 years	Experience with design and construction of high vacuum and ultra-high vacuum deposition systems for thin films deposition by pulsed laser deposition, PVD and CVD. Deposition techniques for thin films (PE CVD, MW PE CVD, PLD, sputtering, PVD). Vacuum technology. Expert experience in gas sensing by chemical conductivity sensors. Experience with diagnostic techniques: SEM, EDX, TEM, XRD, XPS, XRF, Raman Spectroscopy. Diagnostics of plasma by optical emission spectroscopy. Electrotransport and magnetic properties measurement by PPMS.
	Research in the field of organic thin film-based semiconductor for photovoltaic and optoelectronic applications. Nanocomposite thin films containing nanocarbons for electronics.
	Research in the safety field of solid-state gas sensors for detection of chemical warfare agents, taggants of explosives and harmful gases.

Projects (last 5 years)	2023 – 2025 - Project GAČR (23-05878S) "Thin films of transition metal complexes with vacant positions in the ligand field for gas sensing application" Principal Investigator
	2019 – 2021 - Project GAČR (19-02804S) "Nanostrukturované heteropřechody pro chemirezistory" member of research team
	2017 – 2021 - Project GAČR (17-19910Y) "Mn based Heusler alloys for spintronics" Member of research team
	2018 – 2020 – Project GAČR (18-09347S) "Black metals for utilization in quartz crystal microbalance sensors" member of research team
	2017 – 2019 - GAČR (17-13427S) "Detection mechanisms on chemiresistors with a sensitive layer based on nanostructured oxides" member of research team
	2017 – 2020 - Inter-Excelence (Inter-COST LTC 17058) MŠMT "Nano-Carbon Composite Materials for Thin Films Gas Sensors and Photovoltaics" Principal Investigator
	2016 – 2020 - COST Action CA15107 "Multi-Functional Nano-Carbon Composite Materials Network" (MultiComp) Member of management committee for Czech Republic

Teaching and supervision	Supervising of students of Bc. (supervisor), MSc. (supervisor) a PhD (supervisor, supervisor - specialist) at University of Chemistry and Technology in Prague and Czech Technical University in Prague.
	Teaching in bachelors and masters study programmes - Nano and Micro Technology in Chemical Engineering, Sensors and Cybernetics in Chemistry, Process Engineering and Management at University of Chemistry and Technology in Prague, subject: **Optical and Electron Microscopy**.

Invited talks at international conferences	UV Laser Modification of Nanodiamond Morphology, MATCON 2011 Oxford, University of Oxford, UK, March 28-31, 2011
	Modification of Nanodiamond Seeded Surfaces before nano-crystalline diamond growth by UV-laser treatment, NIST Gaithersburg, MD, USA, December 7, 2010

Prizes and awards	Preciosa Foundation Award for doctoral students (2012)

Conferences organization	MultiComp Autumn Prague Meeting 2019, September 12–13, 2019, Prague Conference chairs: Jan Vlček, František Fendrych, Sharali Malik http://multicomp.vscht.cz

Bibliography	H-index(WOS): 11 Number of papers in international journals: 28 Number of citation (WOS): 318