



# ING. BRANISLAV KUNCA, PHD.

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## ◦ DETAILS ◦

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Date of birth  
09.03.1993

Nationality  
Slovenská

Driving license  
B

## ◦ LINKS ◦

[Employee website](#)

## ◦ SKILLS ◦

Microsoft Office

CAD Software (Fusion 360)

LabVIEW

Linux

OriginPro

C language

Prusa printers - Mini+, i3 MK3s, i3  
MK3S+, MMU2S

Ender printers - Ender 3 V2

PrusaSlicer

## ◦ LANGUAGES ◦

Anglický jazyk C1

Slovenský jazyk

## ◦ HOBBIES ◦

3D printing CAD design Swing dances  
Fruit growing Scientific and 20th  
century literature

## 👤 PROFILE

Researcher with years of experience in the field of composite ferromagnetic materials. Capable of solving complex problems, with emphasis on detail and quality of solutions. I offer high analytical thinking, insight into current technology progress and trends as well as high degree of flexibility and adaptability.

## 📁 EMPLOYMENT HISTORY

### Researcher at Institute of Experimental Physics SAS, Košice

August 2020 — Present

Research in the field of nanocrystalline soft magnetic materials, with emphasis on modification of functional properties by conventional and atypical annealing processes.

I am author of 8 Current Contents papers. Besides research I am main designer and developer of the ultra-rapid annealing furnace for processing under vacuum/protective atmosphere. Furthermore I am developer of the software for micromagnetic analysis using the macroscopic quantity data.

For the last 2 years I have been responsible for English version of the official website of my employer.

### Lecturer at Technical university of Košice, Košice

February 2019 — June 2019

Teaching laboratory exercises from the subject Physics I.

## 🎓 EDUCATION

### PhD., Technical university of Košice, Košice

September 2016 — August 2020

Faculty of Electrical Engineering and Informatics

Field of study: **Engineering Physics.**

### Ing., Technical university of Košice, Košice

September 2014 — June 2016

Faculty of Electrical Engineering and Informatics

Field of study: **Engineering Physics.**

## ⚙️ COURSES

### Autodesk Certified Associate in CAD for Mechanical Design, Autodesk Inc.

April 2022 — April 2025

## 🌱 EXTRA-CURRICULAR ACTIVITIES

### Lecturer and organizer at Swing Dance Košice, o.z., Košice

July 2018 — Present

Preparation and propagation of the events organized by dance community Swing Dance Košice. Lecturing at workshops and dance lessons.

### Main organizer at Language Café, Košice

June 2017 — March 2019

Main organizer and coordinator at community language meetings Language Café.

## INTERNSHIPS

### **Researcher at Monash University, Melbourne, Australia**

October 2019 — December 2022

Research visit at Department of Materials science and Engineering, Monash University.

### **Researcher at Joint Institute for Nuclear Research , Dubna, Rusko**

July 2015 — August 2015

Research visit at Frank Laboratory of Neutron Physics, JINR.



### **Scientific identifiers**

ORCID: 0000-0001-8668-1035

ResearcherID : AAE-2056-2020

### **Projects**

#### Current projects:

- **APVV 19-0369:** NOVEL NANO/MICRO-STRUCTURED METALLIC MATERIALS PREPARED BY UNCONVENTIONAL PROCESSING ROUTES
- **MAD SAS - VAST:** PREPARATION AND STUDY OF STRUCTURAL AND MAGNETIC PROPERTIES OF CORE/SHELL COFE<sub>2</sub>O<sub>4</sub>/FE<sub>3</sub>O<sub>4</sub> NANOPARTICLES FOR ADVANCED MAGNETIC HYPERTHERMIA
- **VEGA 2/0171/19:** RAPIDLY QUENCHED METALLIC ALLOYS AND COMPOSITES FOR MAGNETIC AND MAGNETOCALORIC APPLICATIONS

#### Finished projects:

- **APVV-15-0621:** ATOMIC STRUCTURE AND UNIQUE PROPERTIES OF INTERMETALLICS, AMORPHOUS, NANOCRYSTALLINE AND COMPLEX METALLIC ALLOYS
- **VEGA 2/0171/19:** RAPIDLY QUENCHED METALLIC ALLOYS AND COMPOSITES FOR MAGNETIC AND MAGNETOCALORIC APPLICATIONS
- **VEGA 2/0173/16:** RAPIDLY QUENCHED SOFT AND HARD MAGNETIC COMPOSITES FOR ENERGY AND SENSOR APPLICATIONS
- **JRP SAS-TUBITAK MAGSAT -** NOVEL SOFT MAGNETIC CORES TAILORED FOR USE IN SPACE QUALIFIED MAGNETOMETERS AND SATELLITE DEVICES
- **MAD SAS - VAST:** RESEARCH ON PREPARATION AND MAGNETIC PROPERTIES OF CO/COO CORE-SHELL NANOPARTICLES
- **MagElMat:** DEVELOPMENT OF NOVEL MULTIFUNCTIONAL MATERIALS FOR NEXT GENERATION MAGNETOELECTRIC SENSORS AND DATA STORAGE DEVICES