Ing. Drahomír Dvorský, Ph.D.
Born: 27. 12. 1991 in Dvůr Králové nad Labem, Czech Republic
Nationality: Czech
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- **EDUCATION**
  - **2016 – 2020 PhD:** University of Chemistry and Technology Prague; Czech Republic
  - **2014 – 2016 Master:** University of Chemistry and Technology Prague; Czech Republic
  - **2011 – 2014 Bachelor:** University of Chemistry and Technology Prague; Czech Republic
- **CURRENT POSITIONS**
  - **2020 – present Postdoctoral fellow**

Department of Functional Materials, FZU – Institute of Physics of the Czech Academy of Sciences, Czech Republic, Full-time job

- **PREVIOUS POSITIONS**
  - **2020 – 2022 Research fellow**

Department of Metals and Corrosion Engineering; Faculty of Chemical Technology; University of Chemistry and Technology Prague; Czech Republic, Part-time job

  - **2011 – 2020 Research fellow**

Department of Metals and Corrosion Engineering; Faculty of Chemical Technology; University of Chemistry and Technology Prague; Czech Republic, Full-time job

  - **2018 – 2020 Professional staff member in research and development**

Department of Progressive and Structural materials, FZU – Institute of Physics of the Czech Academy of Sciences, Czech Republic, Part-time job

- **MAIN RESEARCH ACTIVITIES IN LAST FIVE YEARS**

- **Biodegradable metallic materials**
  - Powder metallurgy of magnesium and its alloys; Chemical and heat treatment of magnesium powders. Development of new alloys with high ignition temperature; Zn-based biodegradable alloys and their thermomechanical treatment.

- **Additive manufacturing of metallic materials**
  - Characterization of materials based on Al and Fe.

- **AWARDS**
  - **2015 – Preciosa Foundation –** scholarship for young material scientists
  - **2016-2020 Scholarship of Emil Votoček –** an award of the University of Chemistry and Technology for students with publication activity
  - **2022 Otto Wichterle award** – an award of the Czech Academy of Sciences for young scientists (up to 35 years old)
  - **2022 – 2024 Support for perspective postdoctoral human resources** – an award of the Czech Academy of Sciences for perspective postdoctoral fellows

- **MANAGED GRANT PROJECTS**
  - **2025**: Kink strengthening using double extrusion of Mg-Y-Zn alloy, Institute of Light Metals (Joint Usage Research Centers) – Principal Investigator
  - **2024**: Strengthening of Mg-Y-Zn alloy by introducing kinks into microstructure prior to extrusion, Institute of Light Metals (Joint Usage Research Centers) – Principal Investigator
  - **2023**: The influence of extrusion conditions on mechanical properties of Mg-Y-Zn alloy with Mille-Feuille microstructure, Institute of Light Metals (Joint Usage Research Centers) – Principal Investigator
  - **2022**: Study of LPSO phases in magnesium alloys, Mobility project at Magnesium Research Center of Kumamoto University – Principal Investigator
  - **2019**: Influence of thermomechanical processing on the ignition temperature of the magnesium alloys for aviation industry, IGA (a student grant at the University of Chemistry and Technology, Prague) – Principal investigator
  - **2018**: Advanced magnesium alloys with high ignition temperature for application in aviation industry, IGA (a student grant at the University of Chemistry and Technology, Prague) – Principal investigator

○ **2017**: Magnesium biodegradable material with continuous network of MgF_2 prepared by powder metallurgy, IGA (a student grant at the University of Chemistry and Technology, Prague) – Principal investigator

- **FOREIGN INTERNSHIPS**

○ **4/2022 – 10/2022 Magnesium Research Center of Kumamoto University, Japan**
6 months internship on study of LPSO phases in Mg-Y-Zn alloy under supervision of prof. Kawamura.
○ **11/2023 - Magnesium Research Center of Kumamoto University, Japan** – working on project
○ **9/2024 - Magnesium Research Center of Kumamoto University, Japan** – working on project
○ **5/2025 - Magnesium Research Center of Kumamoto University, Japan** – working on project

- **INVITED SEMINARS**

○ 7th September 2022 – Seminar: Kyushu Mg Network: Different approaches in the preparation of magnesium alloys, Kumamoto University
○ 8th March 2023 - Seminar: Various preparation methods of Mg-based materials, Department of Physics of Materials, Charles University
○ 2th July 2025 – Conference talk: Processing strategies for tailoring strength and ductility in Mg-Y-Zn alloy, Thermec 2025, Tours, France.

- **SUPERVISION OF STUDENTS AND POSTDOCTORAL FELLOWS**

○ **2018 – 2020** Supervisor or tutor of three bachelor students and four master students.

- **SCIENTOMETRIC DATA:**

○ Papers in journals with IF Jimp: 42
○ Papers in refereed journals Jneimp.: 26
○ Conferences: 21
○ **h-index:** 16 (WOS)
○ **Sum of Times Cited (Jimp):** 690 (WOS)

- **FOREIGN COLLABORATION**

○ **Prof. Yoshihito Kawamura:** Advanced magnesium materials with LPSO phases; Magnesium Research Center, Kumamoto University, Japan
○ **Ing. Miroslav Čavojský, Ph.D.:** Thermomechanical treatment of metallic materials; Institute of Materials and Machine Mechanics, Slovak Academy of Sciences, Slovak Republic
○ **Ing. Martin Balog, Ph.D.:** Powder metallurgy, Centre for Advanced Material Application, Slovak Academy of Sciences, Slovak Republic
○ **Ing. Anna Dobkowska, Ph.D.:** Atomization and characterisation of Mg materials; Warsaw University, Warsaw, Poland
○ **Dr. Alessandro Gambardella, Ph.D.:** Preparation of coating and surface analysis. IRCSS Istituto Ortopedico Rizzoli, SC-Laboratorio di Scienze e Tecnologie, Bologne, Italy
○ **Ing. Mariusz Kulczyk, Ph.D.:** Hydrostatic extrusion; Institute of High-Pressure Physics of Polish Academy of Science, Warsaw, Poland