



**doc. RNDr. Ján Fúzer, PhD.**

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**Current position(s):**

Associate professor,

Institute of Physics, Faculty of Science P. J. Šafárik University

**Profile:**

Assoc. Prof. RNDr. Ján Fúzer, PhD in his scientific research he investigate magnetization processes at magnetic reversal of soft materials. He investigated amorphous and nanocrystalline materials prepared by rapid quenching, and currently he deals mainly with powdered, compacted metallic and composite materials. Furthermore, he also study non-oriented Fe-Si materials produced in the form of thin strips.

He is co-author of more than 74 scientific publications registered in the Current Content, 4 lectures at home and abroad and his publications have more than 330 citations.

He was member of organizing committees of domestic and foreign conferences, CSMAG (1995 - present), Conference of Czech and Slovak Physicists (2005), Magnetic Measurements (2015).

**Experience:**

1993 - 5-months PhD study stay at Technical University, Lyngby, Danmark

1997 - 2000 – Research co-worker at Dept. of Experimental physics, Faculty of Science P. J. Šafárik University

2003 – 5-months Postdoc. study stay at Leibniz Institute, IFW Dresden, Germany – grant DAAD

2007 - 3-months Postdoc. study stay at Leibniz Institute, IFW Dresden, Germany – grant NATO

2006 – 2012 - member of committee of the Slovak physical society

2014 – present, Associate professor at Department of Experimental physics, Department of Condensed Matter Physics, Faculty of Science P. J. Šafárik University

**Organisation of Scientific Meetings:**

1. Number of organizing committee of the conference CSMAG'98, 1998, Košice
2. Number of organizing committee of the conference CSMAG'01, 2001, Košice
3. Number of organizing committee of the conference –CSMAG'04, July, 12.-15. 2004, Košice
4. Number of organizing committee of the conference Conference of Czech and Slovak Physicists (2005)
5. Number of organizing committee of the conference CSMAG'07, 2007, Košice
6. Head of local organizing committee of the conference - CSMAG'10, 2010, Košice
7. Head of local organizing committee of the conference CSMAG'13, 2013, Košice
8. Number of organizing committee of the conference Magnetic Measurements 2015
9. Head of local organizing committee of the conference CSMAG'16, 2016, Košice

**Projects:**

1. project Hasylab, Hamburg, Germany, project II-20060031 EC (1.1.2006-31.12.2009), Soft Magnetic Co-based Bulk materials, principal investigator

2. Grant project of Slovak Research and Development Agency APVV-15-0259, Unconventional technology development of final processing of isotropic electrical steels (Principal investigator IMR SAS- RNDr. František Kováč, CSc), principal investigator of the UPJŠ partner.
3. Grant project of scientific grant agency of Ministry of Education and Slovak Academy of Sciences VEGA 1/0330/15, 2015 – 2018, Electromagnetic properties of soft magnetic composites, principal investigator.
4. Grant project of scientific grant agency of Ministry of Education and Slovak Academy of Sciences VEGA 1/0862/12, 2012 – 2015, Study of the influence of ferromagnetic and isolator parameters on the soft magnetic properties for electronics, principal investigator.
5. Progressive technology for the preparation of microcomposite materials for electrotechnics, MIKROMATEL, (applicant IMR SAS) 2620002 OP Research and Development, Priority Axis 2 - Support for Research and Development, 2.2 Transfer of knowledge and technology acquired through research and development into practice, OPVaV-2009/2.2/04-SORO, 526572 ITMS Project code:26220220105 –investigator
6. Research Centre for Advanced Materials and Technologies "PROMATECH", ŠF 26220220186, 2013-2015, ŠF EÚ 2007-2013 z OPVaV– investigator
7. Grant project of Slovak Research and Development Agency APVV-15-0115, 2016-2019, Structure Design and Functional Properties of Soft Magnetic Composite Materials Based on 3-D Transition Metals, investigator
8. 3 Grant project of scientific grant agency of Ministry of Education and Slovak Academy of Sciences VEGA (1994 – 2012), deputy of principal investigator.

**Five representative publications:**

1. E. A. Périgo, B. Weidenfeller, P. Kollár, J. Füzér, Past, present, and future of soft magnetic composites (Review), Applied Physics Reviews 5, (2018), 031301
2. Füzér, J., Kollár, P., Olekšáková, D., Roth, S., AC magnetic properties of the bulk Fe-Ni and Fe-Ni-Mo soft magnetic alloys prepared by warm compaction, Journal of Alloys and Compounds, 483(1-2) (2009) 557-559
3. S. Dobák, J. Füzér, P. Kollár, M. Strečková, R. Bureš, M. Fáberová, A comprehensive complex permeability approach to soft magnetic bulk cores from pure or resin coated Fe and pulverized alloys at elevated temperatures, Journal of Alloys and Compounds, 695, (2017), 1998-2007
4. Lauda, M., Füzér, J., Kollár, P., (...), Batkova, M., Batko, I., Magnetic properties and loss separation in FeSi/MnZnFe<sub>2</sub>O<sub>4</sub> soft magnetic composites, Journal of Magnetism and Magnetic Materials, 411 (2016) 12-17
5. Füzérová, J., Füzér, J., Kollár, P., Bureš, R., Fáberová, M., Complex permeability and core loss of soft magnetic Fe-based nanocrystalline powder cores, Journal of Magnetism and Magnetic Materials, 345 (2013) 77-81

**Patents:**

The patent application has been registered by the Patent Office. Bureš, R., Strečková, M., Fáberová, M., Kollár, P., Füzér, J., Method of Preparation of Magnetic Composites with Polymeric Electrical Insulating Bonding: Patent application PP 00095-2013. Banská Bystrica: ÚPV SR 2013.

**Fellowships / Awards / Memberships of Scientific Societies:**

1997 - Dean's Award, Faculty of Sciences P. J. Šafárik University, for best PhD student  
 2006-2012- member of committee of the Slovak physical society  
 2015-present- member of committee of the Slovak magnetic society  
 2014 – present - member of Academic senate of Faculty of Science