

prof. RNDr. Ján Dusza, DrSc. academician SLS

Institute of Materials Research of the Slovak Academy of

Sciences

Watsonova 47/A, 040 01 Košice, Slovakia

Phone.: +421 55 7922489 E-mail: jdusza@saske.sk

URL: http://www.sav.sk/index.php?lang=en&doc=user-

org-user&user no=1414

Current position(s):

Senior Researcher

Head of the Division of ceramic and non-metallic systems

Head of the Research Centre for Advanced Materials and Technologies PROMATECH

Profile:

He is a physicist, scientist and scientific manager with an international reputation in the field of advanced materials, nanomaterials and nanotechnologies. He has a wide experience in coordination/activities of international projects (e.g. EC - 5FP, 6FPs and 7FP, COST, Phare, Royal Society and Interreg projects). Since 1989 he spent a number of years at the world leading research institutions and was awarded by Alexander von Humboldt, Liese Meitner, Hertha Filnberg and European Commission Fellowships. Publications: over 300, beside these 5 monography with cca 1700 citations and 3 patents in the field of advanced ceramics. He is a member of numerous international organizations - committee, (e.g. CEN, ESIS – head of TC6 Ceramics, VAMAS, Euroscience, Hungarian Academy of Sciences, etc), scientific board of international journal, organization committee of international conferences (e.g., Fractography of Advanced Ceramics). He has supervised 13 PhD students. Currently supervising 3 Ph.D. students. Main Awards: Slovak Academy of Sciences awards for excellent research activities and for infrastructure building, Dennis Gabor Award, Jedlik Anyos Award, etc.Academician of the World Academy of Ceramics and Fellow of the European Ceramic Society.

Experience:

1976 –	Institute of Materials Research of the Slovak Academy of Sciences
2013 -2017	member of the Presidium of Slovak Academy of Sciences
1999-2000	Austrian Research Center Seibersdorf – Hertha Filnberg fellowship
1998-1999	Joint Research Center, Institute of Advanced Materials, European Commission,
	Petten – EC Fellow
1995	University of Vienna, Vienna – Lisa Meitner fellowship
1989-1990	Max Planck Institut, PML, Stuttgart – Alexander von Humboldt Fellowship

Organisation of Scientific Meetings:

O' Samsation	or belefithe freetings.
2018 –	Co-Chairman of Organising Committee, 15. International Symposium on Novel and
	Nano Materials, 16.7.2018, Lisabon, Portugal
2018 –	Member of the Scientific Committee, FEMS Junior EUROMAT 2018, July 8-12,
	2018, Budapest, Hungary.
2016 - 2000	Co - Chairman and Founding Chair of the serii of this Conference from year 2000,
	Fractography of Advanced Ceramics V., 09.1012.10.2016, Smolenice, Slovakia.
2016 –	Co-Chairman of Organising Committee, 14. International Symposium on Novel and
	Nano Materials, 38.7.2016, Budapest, Hungary
2015 –	member of the Organising Committee, 14th International Conference European
	Ceramic Society 2015 Toledo Spain

2014 –	member of the International Advisory Board 13th International Ceramic Congress -
	CIMTEC, June 8-13, 2014, Montecatini Terme, Italy.
2012 –	General Chairman of Organising Committee, E-MRS 2012 Fall Meeting,
	Symposium - ceramics and ceramic based nanocomposites, September 17-21, 2012,
	Warsaw, Poland.

Projects:

- 1. Research Centre for Advanced Materials and Technologies "**PROMATECH**", ŠF 26220220186, 2013-2015 coordinator, *projekt podporený v programovom období ŠF EÚ 2007-2013 z OPVaV*
- 2. Centre of excellence for advanced materials with nano and sub-micron microstructure, ŠF 26220120019, 2009-2011 a ŠF 26220120035, 2010-2013 coordinator, *projekt podporený* v programovom období ŠF EÚ 2007-2013 z OPVaV
- 3. 7RP Early Recognition, Monitoring and Integrated Management of Emerging New Technology Related Risks iNTEG-Risk CP-IP-213345-1, 2008-2011 coordinator for partner Institute 4. 6RP EÚ Network for Nanostructured Materials of ACC (NENAMAT) od 2004 do 2006 coordinator
- 5. Centrum Excellentnosti SAV, NANOSMART-2002-2006, 2006-2010 coordinator.

Five representative publications:

Researcher ID (in SCOPUS): 56284624300

- 1. . **DUSZA, Ján** BLUGAN, Gurdial MORGIEL, Jerzy KUEBLER, Jakob INAM, Fawad PEIJS, Ton REECE, Michael J. PUCHÝ, Viktor. Hot pressed and spark plasma sintered zirconia/carbon nanofiber composites. In Journal of the European Ceramic Society, 2009, vol. 29, p. 3177-3184.
- 2. **DUSZA, Ján** MORGIEL, Jerzy DUSZOVÁ, Annamária KVETKOVÁ, Lenka NOSKO, Martin KUN, Péter BALÁZSI, Csaba. Microstructure and fracture toughness of Si3N4+graphene platelet composites. In Journal of the European Ceramic Society, 2012, vol. 32, p. 3389-3397.
- 3. CSANÁDI, Tamás KOVALČÍKOVÁ, Alexandra **DUSZA, Ján** FAHRENHOLTZ, William G. HILMAS, Gregory E. Slip activation controlled nanohardness anisotropy of ZrB2 ceramic grains. In Acta Materialia, 2017, vol. 140, p. 452-464
- 4. CSANÁDI, Tamás NAUGHTON-DUSZOVÁ, Annamária **DUSZA, Ján**. Anisotropic slip activation via homogeneous dislocation nucleation in ZrB2 ceramic grains during nanoindentation, In Scripta Materialia, 2018, vol. 152, p. 89-93
- 5. **DUSZA, Ján** ŠVEC, Peter GIRMAN, Vladimír SEDLÁK, Richard CASTLE, Elinor G. CSANÁDI, Tamás KOVALČÍKOVÁ, Alexandra REECE, Michael J. Microstructure of (Hf-Ta-Zr-Nb)C high-entropy carbide at micro and nano/atomic level. In Journal of the European Ceramic Society, 2018, vol. 38, no. 12, p. 4303-4307

Patents:

- 1. FERDINANDY, M. **DUSZA, J**. LOFAJ, F. KOTTFER, D. HEGEDUSOVÁ, L. : Patent č. 288155. Banská Bystrica : ÚPV SR 2013
- 2. KOTTFER, D. FERDINANDY, M. **DUSZA, J**. LOFAJ, F.: Patent č. 288254. Banská Bystrica : ÚPV SR 2014
- 3. KOTTFER, D. FERDINANDY, M. **DUSZA, J**. LOFAJ, F.: Patentový spis č. SK 288278 B6. Bratislava: Úrad priemyselného vlastníctva SR 2015

Fellowships / Awards / Memberships of Scientific Societes:

2018 –	Inducted in to the "Hall of the Fame" during the Kosice Citizen
	of the City Awards 2017

2016 – Adjunct professor, NWPU, XI´AN, China

2016 – Jedlik Anyos Award, Slovakia

2015 – Fellow of the European Ceramic Society

2014 – 2017 president (2014 - 2017) and vice-president (2017-) of the Hungarian Academic Board in Slovakia, Slovakia

2014 –	Dennis Gabor Award, Budapest, Hungary
2012 -	Academician of the World Academy of Ceramics
2012 –	Award of the Slovak Academy of Sciences – For infrastructure building
2010 -	member of the Slovak Learn Society, Slovakia
2009 –	Award of the Slovak Academy of Sciences-For excellent research activities
2008 –	member of the Hungarian Academy of Sciences, Hungary
2003 –	member of the European Structural Integrity Society (ESIS)
2001 - 2005	member of the Governing Board of EUROSCIENCE