

**RNDr. Jiří Zavadil, PhD** – born 1944

Completed his studies in theoretical physics at the Faculty of Mathematics and Physics, Charles University, Prague in 1967. Since 1968 he has been with the Institute of Radio Engineering and Electronics (IRE), ASCR, Prague. He obtained his PhD degree in physics in 1973. He has long experience in the calculation of electronic structure of solid surfaces and strongly localised defects in III-V semiconductors. Since 1995 he has been involved in the optical characterization of semiconductor and glass materials and structures for optoelectronics, by means of electro and photoluminescence spectroscopy. His major interest is the study of luminescent properties of InP based semiconductors and special glass materials doped with rare-earth elements and characterization of related nanostructures. He is also interested in luminescent properties of (RE) elements incorporated in glass host material. He is author or co-author of 119 (according to the WOS). Publications gained 734 citations (without self-citations) and h-index 14.

ResearcherID: G-1930-2014, ORCID: 0000-0002-1746-4747.

### **Employments:**

- since 2019 senior research worker in the IRSM, Academy of Sciences of the Czech Republic, Praha.
- since 2015 emeritus in IPE, Academy of Sciences of the Czech Republic, Chaberska 57, 182 51, Praha 8
- 2012 – 2015 senior research worker in the Institute of IPE, Academy of Sciences of the Czech Republic, Chaberska 57, 182 51, Praha 8
- 2007 – 2012 senior research worker and the deputy director for science in the Institute of Photonics and Electronics (IPE), Academy of Sciences of the Czech Republic, Chaberska 57, 182 51, Praha 8
- 1999 - 2007 senior research worker and the deputy director for science in the IRE, Academy of Sciences of the Czech Republic, Chaberska 57, 182 51, Praha 8
- 1989 - 1999 senior research worker in the IRE, Academy of Sciences of the Czech Republic, Praha
- 1973 - 1988 research worker in the Institute of IRE, Czechoslovak Academy of Sciences, Praha
- 1972 - 1973 research assistant in the Institute of IRE, Czechoslovak Academy of Sciences, Praha
- 1968 - 1972 PhD student in the Institute of Radio Engineering and Electronics (IRE), Czechoslovak Academy of Sciences, Praha

### **Principal investigator or the co-investigator of the projects.**

*Special glasses for optoelectronics*, Czech Science Foundation (104/02/0799), principal investigator Dimitrij Ležal (*IIC CAS*), co-investigator Jiří Zavadil (*IPE CAS*), duration of the project 2002 – 2004.

*Optical biopsy in diagnostics of colorectal carcinoma*, IGA Ministry of Health of the Czech Republic (IGA-7581-3), principal investigator Ladislav Horák (3. Faculty of Medicine of the Charles University), co-investigator Jiří Zavadil (IPE CAS), duration of the project 2003-2005.

*Special glasses and fibers for applications in the infrared*, Czech Science Foundation, (104/05/0878), principal investigator Dimitrij Ležal (IIC CAS), co-investigator Jiří Zavadil (IPE CAS), duration of the project 2005 – 2007.

*Investigation of the interface between metal nanoparticles and InP for monitoring of undesirable substances, gasses and radiation in the environment*, Czech Academy of Sciences (KAN 400670651), principal investigator J. Zavadil (IPE CAS), co-investigator A. Fojtík (Faculty of Nuclear Sciences and Physical Engineering of the Czech Technical University in Prague), duration of the project 2006 – 2008.

*Special glass materials for photonics applications*, Czech Science Foundation (GA104/08/0734), principal investigator P. Kostka (IIC CAS), co-investigator Jiří Zavadil (IPE CAS), duration of the project 2008 – 2010.

*Investigation of Lead Iodide for X-ray Detection*, Czech Science Foundation (GC104/08/J025), principal investigators A.N. Danilewsky (University of Freiburg, Germany), J. Maixner (University of Chemistry and Technology, Prague), co-investigator Jiří Zavadil (IPE CAS), duration of the project 2008 – 2010.

*Nanostructures of Controlled Size and Dimensions*, Czech Academy of Sciences (KAN401220801), principal investigator P. Fiala (Faculty of Nuclear Sciences and Physical Engineering of the Czech Technical University in Prague), co-investigator Jiří Zavadil (IPE CAS), duration of the project 2008 – 2012.

*Special glasses on the base of heavy metal oxides*, Czech Science Foundation (P106/12/2384), principal investigator P. Kostka (IRSM CAS), co-investigator Jiří Zavadil (IPE CAS), duration of the project 2012 – 2014.

#### **Membership in professional organizations:**

member of the Union of Czech mathematicians and physicists, and of the Czech physical society.

#### **Membership in boards and review panels:**

since 2002 Board of doctoral field of study 2612V015, *Electronics*, Faculty of Electrical Engineering, Czech Technical University in Prague  
2002 – 2015 Board of doctoral study programme 4F3 -. *Physics of condensed matter and material research*, Faculty of Mathematics and Physics, Charles University  
2009 – 2010 member of review panel of Czech Science Foundation – *P204 Physics of condensed matter and materials*