

Alexandr Dejneka

Basic Data:

Born: 1974

Marital status: married, 2 children

Citizenship: Czech Republic

Education:

- **1991—1997** Diploma in optical engineering and technology, ITMO University, St. Petersburg.
- **1999—2002** Ph.D., Technical University, Prague.
- **2001—2002** Practice at the Technical University in Dresden (Germany).

Professional Positions:

- **1997—2006** Researcher, Division of Optics, Institute of Physics of the Czech Academy of Sciences.
- **2006—present** Head of the Department of Optical and Biophysical Systems (former Department of Applied Optics), Institute of Physics of the Czech Academy of Sciences.
- **2007—present** Head of the Division of Optics, Institute of Physics of the Czech Academy of Sciences.

Awards:

- **2006** Josef Hlávka award for unique ellipsometric study of self-polarized ferroelectric films.

Other professional activities:

- **2011-2014** Member of the Scientific Board of the Regional Centre of Advanced Technologies and Materials (RCPTM).
- **2013-2017** Member of the Evaluation Panel 205 (Biophysics, macromolecular physics, and optics) of Czech Science Foundation (GA CR).
- **2011-2020** Member of the Scientific Board of SAFMAT .
- **2015-present** Head of the committee for commercialization, Institute of Physics of the Czech Academy of Sciences.
- **2014-present** Member of the Academy Assembly of the Czech Academy of Sciences.
- **2015-present** Member of Council for Cooperation of the Czech Academy of Sciences with Business and Application Sphere.
- **2017-2022** Vice chairman of Council of the Institute of Physics of the Czech Academy of Sciences.
- **2022-present** Member of Council of the Institute of Physics Czech of the Academy of Sciences.
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- **2019-present** Council chairman of the National Centre of Competence for Materials, Advanced Technologies, Coatings and their Applications (MATCA).
- **2021 - present** Member of the Czech Committee of the International Commission for Optics

Publishing Activities:

Author of >200 original publications, 2 book chapters, 1 book, 10 patents and utility designs, > 3000 citations. h-index = 29 (Google Scholar), <https://scholar.google.cz/citations?user=s6CCZEEAAAAJ&hl>

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Scientific Interests:

- Advanced physical methods in modern industry and life sciences.
- Novel applications of spectroscopic ellipsometry and spectrophotometry.
- Optical study of phase transformations in solids, polymers and biomaterials.
- Low temperature plasma applications for industrial and biomedical applications.
- Magnetically controlled processes in living objects.
- Doping effects in thin films surfaces and interfaces.
- Tensile strain effect in ultra-thin perovskite films.

Pedagogical activities

- Main coordinator of the development center Radius (www.centrumradius.cz) focused on teaching and internships of university students.
- Supervisor of Ph.D. students at Czech Technical University, Faculty of Faculty of Nuclear Sciences and Physical Engineering.

Funding History:

- TN01000038 TA ČR. National Centre of Competence for Materials, Advanced Technologies, Coatings and their Applications MATCA (2019-2020)
- TK01020187 TA ČR Additively manufactured and plasmatically coated conformal heat exchangers (2018-2022)
- TH04030206 TA ČR Use of physical methods of egg sterilization for hatching (2018-2022)
- FV10081, MPO –TRIO, Low temperature plasma for human medicine (2016-2020)
- TA04010449 TA ČR, Low temperature plasma in medicine, (2014-2017)
- 15-13778S GA ČR, Epitaxial effects in ferroelectric nanofilms probed by spectroscopic ellipsometry (2015-2017)
- M100101219 Academy of Sciences of the Czech Republic, Advanced physical methods in life sciences (2012-2015)
- 202/09/J017 GA ČR, Low-temperature plasma deposition of perovskite thin films on metal and polymer substrates(2009-2011)

- AV0Z10100522-Institutional research plan - Wave and Corpuscular Light Propagation, Optical Materials and Technology (2005-2011)
- 202/08/1009, GA ČR, Characterization and technology of novel perovskite structures (2008-2010)