

**PROFILE OF THE PERSON AUTHORIZED TO SUPERVISE
THE INDIVIDUAL SCIENTIFIC WORK**

Title and name: **Marcin Kochanowicz, D.Sc., Ph.D., Assoc. Prof.**

E-mail address: **m.kochanowicz@pb.edu.pl**

Department: **Department of Electrical Power Engineering, Photonics and Lighting Technology**

Area of expertise:

- photonics;
- spectroscopic properties of rare - earth doped silica and soft glasses and optical fibers;
- luminescence of photonics materials;
- technology of rare-earth doped glasses and optical fibers.

Subject of the doctoral thesis (examples):

- fabrication soft glass double-clad optical fibers and analysis of their luminescence properties;
- broadband emission in active optical fibers;
- fabrication of rare-earth co-doped silica fibers;
- technology of bioactive glasses and fibers.

Required knowledge:

- basic of photonics, spectroscopy, optical fibers.

Some scientific publications:

- J. Zmojda, M. Kochanowicz, P. Miluski, A., W. A. Pisarski, J. Pisarska, R. Jadach, M. Sitarz, D. Dorosz, Optical Characterization of Nano- and Microcrystals of EuPO₄ Created by One-Step Synthesis of Antimony-Germanate-Silicate Glass Modified by P₂O₅, *Materials* 10(9), (2017).
- M. Kochanowicz, J. Zmojda, P. Miluski, T. Ragiń, W.A. Pisarski, J. Pisarska, R. Jadach, M. Sitarz D. Dorosz, Structural and luminescent properties of germanate glasses and double-clad optical fiber co-doped with Yb³⁺/Ho³⁺, *Journal of Alloys and Compounds* 727, 1221-1226 (2017).
- J. Zmojda, M. Kochanowicz, P. Miluski, A. Baranowska, R. Jadach, W. A. Pisarski, J. Pisarska, M. Sitarz, D. Dorosz, Structural and optical properties of antimony- germanate-borate glass and glass fiber co-doped Eu³⁺ and Ag⁰ nanoparticles, *Spectrochimica Acta. Part A* 201, 1-7 (2018).
- W. A. Pisarski, J. Janek, J. Pisarska, M. Kochanowicz, J. Zmojda, J. Dorosz, M. Sitarz, and D. Dorosz, Green up-conversion luminescence of erbium-doped oxyfluoride germanate fiber under continuous-wave laser-diode excitation, *Materials Letters*, vol. 216, pp. 131-134 (2018).
- M. Kochanowicz, D. Dorosz, J. Zmojda, P. Miluski, J. Dorosz, J. Pisarska, W.A. Pisarski, Upconversion emission in antimony-germanate double-clad optical fiber co-doped with Yb³⁺/Tm³⁺ ions, *Optical Materials* Vol. 41, 108-111 (2015).
- M. Kochanowicz, J. Zmojda, P. Miluski, J. Pisarska, W.A. Pisarski, D. Dorosz, NIR to visible upconversion in double - clad optical fiber co-doped with Yb³⁺/Ho³⁺, *Optical Materials Express* Vol. 5, nr 7 (2015).