PROFILE OF THE PERSON AUTHORIZED TO SUPERVISE THE INDIVIDUAL SCIENTIFIC WORK

Title and name: **Irena Fryc, D.Sc., Ph.D.**

E-mail address: **i.fryc@pb.edu.pl**

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

Area of expertise:

- lighting technology;
- photometry;
- colorimetry;
- spectroradiometry;
- circadian metrology;
- LED lighting and luminaires;
- light pollution;
- non visual effect of light.

Subject of the doctoral thesis (examples):

- LED chromaticity shift prediction;
- circadian metrology;
- color rendering of light sources;
- LED reference spectrum for photometers/colorimeters calibration;
- outdoor lighting and light pollutions limitation.

Required knowledge:

- lighting technology – general;
- photometry / colorimetry;
- mathematics in university level.

Some scientific publications:

- Fryc I.; Brown S., Ohno Y.: A spectrally tunable LED sphere source enables accurate calibration of tristimulus colorimeters; Proc. of SPIE No. 6158, 2018.
- Fryc I.; Brown S., Eppeldauer G.; Ohno Y.: "LED-based spectrally tunable source for radiometric, photometric, and colorimetric applications"; Optical Engineering 44(11), DOI: 10.1117/1.2127952, 2018.
- Jakubowski P., Fryc I.:The Influence of Spectral Measurements Uncertainty of Fluorescent Lamps on Calculated Value of their Relative Melanopic Weighted Irradiance and Colour Quality Parameters; VII Lighting Conference of the Visegrad Countries LUMEN V4, 2018.
- Jakubowski P., Kowalska J., Supronowicz R., Fryc I.: Metrological requirements for measurements of circadian radiation; Optica Applicata in press.