

**Candidate supervisor's information summary form**  
maximum 2 pages – it should be a summary of most important achievements

Name and surname, degree, title: <b>Michał Szymański</b> , D.Sc.	
Discipline/ disciplines of science	Information and communication technology Automation, electronics and electrical engineering
Professional development (degrees and titles) in chronological order	<b>MSc</b> – electronics (Warsaw University of Technology), <b>1993</b> . <b>Ph.D.</b> - technical sciences (Institute of Electron Technology, Warsaw), <b>2000</b> . <b>D.Sc.</b> - technical sciences, discipline: electronics (Institute of Electron Technology, Warsaw) - <b>2017</b> .
Most important publications/patens over the last 3 years (maximum 10)	<ol style="list-style-type: none"> <li>1. "From Two- to Three-Dimensional Model of Heat Flow in Edge-Emitting Laser: Theory, Experiment and Numerical Tools", <b>M. Szymański</b>, A. Kozłowska, J. Tomm, R. Huk, A. Małag, M. Rusek, <i>Energies</i>, vol. 14, 7006, str. 1-14, <b>2021</b>.</li> <li>2. "High-Power 1770 nm Emission of a Membrane External-Cavity Surface-Emitting Laser", A. Broda, B. Jeżewski, <b>M. Szymański</b>, J. Muszalski, <i>IEEE Journal of Quantum Electronics</i>, vol. 57, no. 1, pp. 1-6, <b>2021</b>.</li> <li>3. "Two-dimensional model of heat flow in edge-emitting laser revisited: A new and more versatile approach", <b>M. Szymański</b>, A. Kozłowska, A. Małag, P. Hoser, <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i>, e2745, pp. 1-10, <b>2020</b>.</li> <li>4. "Growth and characterization of InP-based 1750 nm emitting membrane external-cavity surface-emitting laser", A. Broda, B. Jeżewski, I. Sankowska, <b>M. Szymański</b>, P. Hoser, J. Muszalski, <i>Applied Physics B</i> 126, 192, <b>2020</b>.</li> <li>5. "Optimization of technology of diode laser mirror processing to maximize the threshold of catastrophic optical degradation", E. Dąbrowska, M. Teodorczyk, <b>M. Szymański</b>, A. Małag, <i>Optica Applicata</i>, Vol. L, No. 4, <b>2020</b>.</li> </ol>
Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order	
Project/grants achievements (from the last 10 years)	
Topic – research problem – for which the candidate supervisor	Mathematical modeling of semiconductor devices with particular emphasis on heat flow, waveguide effects and propagation of

seeks a doctoral student	radiation through multilayered structures. Application of global optimization methods.
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