DOMINIKA JANKOWSKA

Affiliation
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Research areas: Spectroscopy, Organic and Inorganic Chemistry, Materials Chemistry
Research keywords: fluorescence, macrocyclic ligand and complexes, benzimidazole-based compounds, spectroscopic and microscopic methods, crystal structure analysis, functional materials, wet methods, spin coating, organic light emitting diodes (OLEDs), optical sensors
h-index: 4 (Scopus@ Aug 2025)
Citations: 40 total citations (Scopus@ Aug 2025)

Dominika Jankowska completed her doctoral studies at the Doctoral School of Exact and Natural Sciences, Faculty of Chemistry, Nicolaus Copernicus University in Toruń, Poland. Her thesis defense is scheduled for October 2025.
Her research focuses on the synthesis of compounds with luminescent properties, including: macrocyclic ligands (Schiff bases), benzimidazole-based ligands, and zinc(II) and copper(II) complexes. These compounds are subsequently applied in optical devices such as sensors and OLEDs (organic light-emitting diodes). Her work primarily involves the synthesis and purification of products through crystallization and column chromatography, along with structural and spectroscopic characterization using NMR, IR, UV-Vis, elemental analysis, thermal analysis, X-ray crystallography, and fluorescence spectroscopy. Additionally, her research includes the preparation of new materials (thin fluorescent films) using the wet spin-coating method. These materials are characterized using microscopic techniques (SEM/EDX, AFM, and TEM) and optical methods (fluorescence).
The conducted research is interdisciplinary, encompassing coordination chemistry, inorganic chemistry, spectroscopic analysis, materials chemistry, and investigations into the optical and magnetic properties of isolated compounds.
She has co-authored seven papers published in Scopus-indexed journals and has participated in numerous national and international conferences.

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