

**First name and surname of supervisor:
Katarzyna Matras-Postolek**



Academic degrees : PhD, DSc

Position : prof. of CUT

Engineering - technical field

Discipline Chemical engineering

Academic qualifications:

university lecturer, tutor of student research, supervisor of engineering, master's and doctoral dissertations, technology scout, project manager, since 01. 01. 2021 Vice-dean of Faculty of Chemical Engineering and Technology

Membership in professional and academic boards :

Member of the scientific committee of the AMPERE organization, member of the Scholarships Club of the Foundation for Polish Science (FNP), member of the TOP 500 Innovators organization

Academic merits :

Author of over 40 publications from the Philadelphia list, summary IF 130, Index Hirsch 12, manager of 6 projects, co-author of 10 patent applications, including 3 international.

The most important publications: (1) K. Matras-Postolek et al. „Formation and characterization of one-dimensional ZnS nanowires for ZnS/P3HT hybrid polymer solar cells with improved efficiency”, Applied Surface Science, 451, 2018, 180-190; (2) M. Oćwieja, K. Matras-Postolek et al. Formation and stability of manganese-doped ZnS quantum dot monolayers determined by QCM-D and streaming potential measurements Journal of Colloid and Interface Science, 503, 2017, 186-197; (3) M. Li, a X. Zhang, K. Matras-Postolek, H. S. Chend, P. Yang, „An anion-driven Sn²⁺ exchange reaction in CsPbBr₃ nanocrystals towards tunable and high photoluminescence”, Journal of Materials Chemistry C, 2018, 6, 5506-5513; (4) Y. Wei, X. Zhang, Z. Zhao, H.-S. Chen, K. Matras-Postolek, B. Wang, P. Yang, Controllable synthesis of P-doped MoS₂ nanopetals decorated N-doped hollow carbon spheres towards enhanced hydrogen evolution, Electrochimica Acta, 297, 2019, 553-563; (5) Y. Wei, X. Zhang, Z. Zhao, H.-S. Chen, K. Matras-Postolek, B. Wang, P. Yang, Controllable synthesis of P-doped MoS₂ nanopetals decorated N-doped hollow carbon spheres towards enhanced hydrogen evolution, Electrochimica Acta, 297, 2019, 553-563; (6) C. Jia, X. Zhang, K. Matras-Postolek, B. Huang, P. Yang, „Z-scheme reduced graphene oxide/TiO₂-Bronze/W₁₈O₄₉ ternary heterostructure towards efficient full solar-spectrum photocatalysis”, Carbon, 2018, 139, 415-426;

The most important awards and distinctions: Scholarship for Polish PhD students staying in Germany DAAD (2017); Laureate of the TOP 500 Innovators Program, Ministry of Science and Higher Education (2015); The title of honorary visiting professor at the University of Jinan since (2014); Scholarship of the Minister of Science and Higher Education for Outstanding Young Scientists (2016);

Professional qualifications/language skills

English and German

Research field :

material chemistry, nanotechnology, material science, functional nanomaterials for advanced applications, e.g. optoelectronics, biology

Address

Cracow University of Technology,
Faculty of Chemical Engineering and Technology
Address: Warszawska Str. 24
31-155 Krakow, Poland
phone . +48 628 30 59
e-mail : k.matras@pk.edu.pl

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