



Krzysztof Pielichowski

Academic degrees: prof. dr hab. inż.

Position: professor

Engineering - technical field

Discipline Chemical engineering

Academic qualifications:

Head of the Department of Polymer Chemistry and Technology at the Faculty of Chemical Engineering and Technology; director of the Interdisciplinary Center for Circular Economy at the Cracow University of Technology; chairman of the Polish Society of Calorimetry and Thermal Analysis; Chairman of the Scientific Committee of the journal "Polimery"; member of: the Committee of Chemistry of the Polish Academy of Sciences, the Committee of Chemical and Process Engineering of the Polish Academy of Sciences, the Commission of Technical Sciences of the Polish Academy of Sciences and Arts, Council for Scientific Excellence, the Permanent Committee of the Congress of Chemical Technology, and the International Advisory Board of "Springer Series on Polymer and Composite Materials".

Membership in professional and academic boards :

Polish Society of Calorimetry and Thermal Analysis; Polish Association of Chemical Engineers SITPChem.

Academic merits :

(Co-)author or editor of 10 monographs (including S. Kalia and K. Pielichowski (Eds.), Polymer/POSS Nanocomposites and Hybrid Materials, Springer Series on Polymer and Composite Materials, Springer 2018, and K. Pielichowski, T.M. Majka (Eds.), Polymer composites with functionalized nanoparticles. Synthesis, properties and applications, Elsevier 2019; 12 chapters and over 180 articles from JCR list.

Hirsch index = 40, number of citations (without self-citations) 8700.

Professional qualifications/language skills

Fluent knowledge of English and German

Research field :

The research area covers issues related to the production and characterization of **polymeric composite materials**, in particular analysis of thermooxidative degradation and pyrolysis processes, as well as flammability of macromolecular compounds. The research being carried out concerns (i) preparation of and characterization of physicochemical properties of new **(bio) and (nano)polymeric systems** with improved properties, and (ii) recycling processes. One performs works to obtain and determine dependencies of structure-properties type of new **nanocomposites** and **polymer biocomposites**, including especially those containing POSS or natural fillers. The purpose of the work performed is explaining the nature of the thermal transitions taking place in terms of basic research and applications in the technology of **modern environmentally friendly polymer materials, taking into account the requirements of the Circular Economy**.

Address

Cracow University of Technology, Faculty of Chemical Engineering and Technology
Address: ul. Warszawska 24
31-155 Kraków, Poland
phone. +48-12-628 2727
e-mail: kpielich@pk.edu.pl

Useful links :

<https://suw.biblos.pk.edu.pl/userHomepage&uld=458&rel=BPP-author>
<https://www.researchgate.net/profile/Krzysztof-Pielichowski>