



Metal Oxide-Based Photocatalysts – from Synthesis to Application

Guest Editors:

Dr. Adam Kubiak

Faculty of Chemistry, Adam
Mickiewicz University in Poznan,
Uniwersytet Poznanski 8, PL-
61614 Poznan, Poland

**Dr. Katarzyna Siwińska-
Ciesielczyk**

Faculty of Chemical Technology,
Institute of Chemical Technology
and Engineering, Poznan
University of Technology,
Berdychowo 4, PL-60965 Poznan,
Poland

Deadline for manuscript
submissions:

closed (31 December 2022)

Message from the Guest Editors

Nowadays, as a result of globalization and the development of industry, more and more pollutants containing harmful substances are produced. Therefore, it is necessary to develop techniques for their removal or neutralization. It is well known that the removal of environmental pollutions (e.g., sewage) by conventional, physicochemical, and biochemical methods, such as adsorption, oxidation, ozonation, etc., is expensive and ineffective. Hence, in recent years, an increased interest in new wastewater treatment technologies that are based on photo-oxidation processes using oxide-based materials has been observed.

The proposed scope of Special Issue includes:

- Synthesis of novel photocatalysts based on oxide materials;
- Surface treatment (modification/grafting/doping) to enhancement photocatalytic properties;
- Surface chemistry and functionality;
- Physicochemical characterization of photocatalysts;
- Degradation of harmful impurities (for example, metal ions, detergents, pesticides, pharmaceuticals, organic dyes, etc.) using novel, synthesized photocatalysts;
- Application and characteristics of novel light sources.





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Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University of Pisa, 56126 Pisa, Italy

Message from the Editor-in-Chief

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Crystals Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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