

Special Issue

Catalytic Epoxidation Reaction

Message from the Guest Editors

Epoxidation of unsaturated groups is considered to be a well-known process. There are different oxidizing agents (molecular oxygen, hydrogen peroxide, or percarboxylic acids), different phases (homogeneous vapor or liquid phase or liquid–liquid, gas–liquid–liquid, etc.), and essentially different substrates (from small gas molecules to triglycerides). Studies have shown that the production of epoxide compounds can present some risk because of the exothermic process. Hence, one should design a suitable catalyst in an adequate reactor to be able to work under safe operating conditions. In this Special Issue, we wish to showcase the diversity of this research area and focus on the research efforts in catalyst and process intensification. Topics include but are not limited to the following:

- Epoxidation of gaseous molecules;
- Epoxidation of molecules in multiphase;
- Epoxidation of triglycerides;
- Enzymation catalysis;
- Catalyst preparation and characterization;
- Benefits of process intensification for epoxidation reaction;
- Kinetic modeling.

Contributions in the form of full-length articles, short communications, and reviews are welcome.

Guest Editors

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Deadline for manuscript submissions

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