

Special Issue

New Approaches in the Synthesis of Organophosphorus Compounds

Message from the Guest Editors

The "green transformation" we are witnessing impacts every aspect of life and poses increasingly difficult challenges in the field of chemical synthesis, including organophosphorus compound preparation. New solutions and ideas are desirable that are characterized not only by greater efficiency but, above all, by care for environmental protection and the principles of sustainable development. In this context, optimization of synthesis conditions (e.g., reducing energy costs and reagent consumption, etc.), using eco-friendly solvents (e.g., ILs, NADES, and DES), and reusable reagents (e.g., solid-supported catalysts, and smart reagents) are crucial. Microwave or ultrasound assistance and organic electrosynthesis, as well as synthesis under high-pressure conditions or mechanochemistry, became powerful tools for conducting reactions in a modern and environmentally friendly way.

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