Special Issue

Advances in Plasma Technology for Environmental and Energy Process Engineering

Message from the Guest Editors

Plasma technology is a versatile and powerful approach to addressing contemporary challenges in environmental protection and energy generation. As a dynamic and highly reactive medium, plasma has been increasingly explored for its potential in environmental remediation, pollutant degradation, renewable energy production, and sustainable industrial processes. This field integrates fundamental plasma physics, chemistry, and engineering to develop sustainable solutions, offering advantages such as high efficiency, low environmental impact, and adaptability to renewable energy sources. This Special Issue includes topics, but is not limited to, the following:

- Plasma-based air and water purification;
- Plasma-assisted waste treatment and recycling;
- Plasma-activated liquids for environmental applications;
- Plasma technologies in renewable energy production;
- Plasma processes for CO2 conversion and greenhouse gas mitigation;
- Plasma-enhanced catalytic processes;
- Novel plasma reactor designs and scale-up strategies;
- Fundamental studies on plasma chemistry relevant to environmental processes;
- Techno-economic and life-cycle analyses of plasma technologies.

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You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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