

## Special Issue

# Polymer Electrolyte Membrane Fuel Cells: Technology and Applications

### Message from the Guest Editor

Fuel cell technology is an efficient means of converting chemical energy into electricity with exceptionally high performance. There is significant anticipation surrounding this technology due to its promising applications across a wide range of fields, from hydrogen fuel cell-powered cars to naval applications. Numerous research groups are dedicated to developing critical components of fuel cells, such as:

- Enhanced proton electrolyte membranes;
- Improved and cost-effective catalysts;
- Innovative techniques for catalyst deposition;
- New gas diffusion layers that boost durability and performance;
- Advanced materials for manufacturing bipolar plates, which enhance the performance of these electrochemical devices;
- Novel designs for the plates used in fuel cells.

In this context, this Special Issue is devoted to showcasing the most significant developments in these critical components of fuel cells. It will highlight the most optimized designs, new algorithms for enhancing performance in varying environments, new applications, and infrastructure development for integrating this technology into our society as an alternative to standard batteries.

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### Guest Editor

Prof. Dr. José Javier López Cascales

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### Deadline for manuscript submissions

closed (31 July 2025)



## Polymers

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Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

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### Editor-in-Chief

Prof. Dr. Alexander Böker

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