# **Special Issue**

### Advances in Green Processes for Antioxidant and Antibacterial Polyphenol Extraction

### Message from the Guest Editors

Green extraction techniques prioritize environmentally responsible processes, often requiring less energy and fewer harmful chemicals compared to traditional methods. Techniques such as ultrasound-assisted, microwave, and supercritical fluid extraction are gaining popularity due to their efficiency in obtaining polyphenols while minimizing waste and energy use. For example, ultrasound-assisted extraction can accelerate the process and improve yields, making it an effective choice for retrieving antioxidants from various food byproducts. By focusing on these green methods, we maximize the use of food resources and reduce our ecological footprint. Extracting polyphenols from byproducts like fruit peels, vegetable scraps, and other plant materials not only helps decrease food waste but also harnesses the health benefits that these compounds provide. Polyphenols are known for their antioxidant and antimicrobial properties, which can enhance food quality and safety. Incorporating these compounds into food products improves nutritional value while extending shelf-life.

### **Guest Editors**

Dr. Nada El Darra Faculty of Health Sciences, Beirut Arab University, Beirut P.O. Box 115020, Lebanon

#### Dr. Ian Watson

Systems, Power and Energy Research Division, School of Engineering, University of Glasgow, James Watt (South) Building University Avenue, Glasgow, UK

### Deadline for manuscript submissions

30 May 2026



### Processes

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.5



mdpi.com/si/220473

Processes Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 processes@mdpi.com

mdpi.com/journal/

processes





## Processes

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.5



processes



## About the Journal

### Message from the Editor-in-Chief

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

Prof. Dr. Giancarlo Cravotto

Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

### **Author Benefits**

### **Open Access:**

free for readers, with article processing charges (APC) paid by authors or their institutions.

### **High Visibility:**

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, AGRIS, and other databases.

Journal Rank: CiteScore - Q2 (Chemical Engineering (miscellaneous))