### Special Issue

## Pathway Options for Pyrolysis and Gasification of Biomass

### Message from the Guest Editors

Biomass is a renewable resource that can be converted from gaseous, liquid, and solid feedstocks. Pyrolysis and gasification of biomass are two kinds of thermochemical conversion that deliver syngas and other light hydrocarbons, char, and bio-oil as major products that can be the feedstock for pathways for the production of thermal energy and a large scope of products as diverse as hydrogen, activated carbon, biochar, alkane, or vanillin.

In this context, this Special Issue of Applied Sciences will deliver a comprehensive inter-disciplinary approach to the use of agroforestry biomass involving topics such as the following: Technological analysis of specific modalities of biomass pyrolysis and gasification; Life cycle analysis of biomass pyrolysis and gasification processes; Upgrading processes of pyrolytic bio-oil; Biochar uses for energy production, amendment, and carbon sequestration;

### **Guest Editors**

Prof. Dr. Ana Paula Soares Dias

CERENA, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais, 1, 1049-001 Lisboa, Portugal

### Dr. Abel Rodrigues

- INIAV-Instituto de Investigação Agrária e Veterinária, Avenida da República, Quinta do Marquês, Oeiras, Portugal
- 2. IDMEC, Mechanical Engineering Department, Instituto Superior Técnico, Universidade de Lisboa, 1049-001 Lisboa, Portugal

### Deadline for manuscript submissions

closed (22 April 2022)



# Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



### mdpi.com/si/55553

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

mdpi.com/journal/applsci





## Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



### **About the Journal**

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, 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, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

