



an Open Access Journal by MDPI

# Epigenetic Control Mechanisms and Transcriptional Reprogramming in Plants

Guest Editor:

#### Prof. Dr. Klaus Humbeck

Director of the Institute of Biology/Plant Physiology, Martin-Luther-Universität Halle-Wittenberg, Weinbergweg 10, D-06120 Halle (Saale), Germany

Deadline for manuscript submissions: closed (31 March 2023)

#### Message from the Guest Editor

Reprogramming gene expression enables plants to undertake major developmental steps and to respond to environmental threats. The central motor of this process is a coordinated, fine-tuned reorientation of expression of genes, preparing the cells for new tasks. We know that the network-like structured action of transcription factors downstream of different signal pathways plays a central role in this process. Rather recently, it became obvious that upstream of transcription factors there is an epigenetic control level, regulating reprogramming of gene expression via histone modifications and DNA methylation.

This Special Issue of *Plants* will bring together work on epigenetic mechanisms, controlling major developmental steps or stress responses in plants, with interconnected regulatory levels of gene expression via trans-acting factors.

Prof. Dr. Klaus Humbeck *Guest Editor* 









an Open Access Journal by MDPI

## **Editor-in-Chief**

**Prof. Dr. Dilantha Fernando** Department of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2. Canada

#### Message from the Editor-in-Chief

*Plants* is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and community.

# **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), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)

### **Contact Us**

*Plants* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/plants plants@mdpi.com X@Plants\_MDPl