



Innovative Animal Manure Management for Environmental Protection, Improved Soil Fertility and Crop Production

Guest Editors:

Dr. Kyoung S. Ro

USDA ARS Coastal Plains Soil,
Water & Plant Research Center,
2611 W. Lucas St., Florence, SC
29501, USA

Dr. Ariel A. Szogi

USDA Agricultural Research
Service, Coastal Plains Soil,
Water & Plant Research Center,
Florence, SC, USA

Dr. Gilbert C. Sigua

USDA Agricultural Research
Service, Coastal Plains Soil,
Water & Plant Research Center,
Florence, SC, USA

Deadline for manuscript
submissions:

closed (30 July 2019)

Message from the Guest Editors

Traditionally, livestock manure has been used to provide nutrients for plant growth and to improve soil conditions. However, the increase in concentrated animal feeding operations (CAFOs) results in high levels of nutrients in the proximal crop and pasturelands as a result of producing more manure than what is required to meet the local plant nutrient demand. Soil runoff and leaching of land applied manure nutrients can enrich surface and ground water with nitrogen and phosphorus compounds, leading to eutrophication and hypoxia. In addition, overapplication of animal manure can spread pathogens, release hormones and other pharmaceutically active compounds, and emit ammonia, greenhouse gases, and odorous compounds. In this Special Issue, we are seeking contributions on various state-of-art technologies in treating/converting animal manures into renewable energy and utilization of byproducts to reduce environmental pollution risks while closing the nutrient loop in production agriculture.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Sergio Ulgiati

1. Department of Science and
Technology, Parthenope
University of Naples, Centro
Direzionale, Isola C4, 80143
Napoli, Italy
2. State Key Joint Laboratory of
Environment Simulation and
Pollution Control, School of
Environment, Beijing Normal
University, No. 19 Xijiekouwai
Street, Beijing 100875, China

Message from the Editor-in-Chief

Environmental issues are quickly becoming central political, economic and academic topics of the twenty-first century. A large number of modern challenges are directly or indirectly caused by complex interactions between environmental issues. Such issues require interdisciplinary research, knowledge and insights to understand and, ultimately, for solutions to be found. Through the journal *Environments*, we strive to create a platform for meaningful discourse by accepting contributions from a wide range of fields. We sincerely hope you will consider publishing your distinguished work in this highly-accessible, peer-reviewed journal.

Author Benefits

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

High Visibility: indexed within **Scopus, ESCI (Web of Science), PubAg, AGRIS, GeoRef, and other databases.**

Journal Rank: JCR - Q2 (*Environmental Sciences*) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)

Contact Us

Environments Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/environments
environments@mdpi.com
X@Environ_MDPI