



## Environmental Stratigraphy—Chemical Markers of Historic Contamination in Soils and Sediments

Guest Editors:

**Dr. Bruno Lemière**

Bureau de Recherches  
Géologiques et Minières, 45060  
Orléans, France

**Prof. Dr. Karen Hudson-  
Edwards**

Environment & Sustainability  
Institute and Camborne School  
of Mines, University of Exeter,  
Penryn Cornwall TR10 9DF, UK

Deadline for manuscript  
submissions:

**closed (31 October 2022)**

### Message from the Guest Editors

‘Environmental Stratigraphy is a discipline in which the chemical markers of contamination can be fingerprinted, using field, forensic, statistical and chemometric approaches. The basis of Environmental Stratigraphy is the Source – Pathway – Receptor model, in which the contaminants that originate in the source move through pathways to accumulate in receptors, chiefly sediments and soils. A natural analogue is the record by soil and sediments of volcanic events. Contaminant accumulation in the receptors is spatially controlled by sedimentary or soil-forming processes, and temporally controlled by the timing of the contaminating activity. Chemical analysis, combined with sedimentary logging and dating, enables detailed pictures to be developed of contamination histories that can be linked to their possible sources. A contaminant signature is rarely based on a single substance. It often comprises several substances emitted by the source industry or activity. Contamination events are recorded by the soil or sediments that will combine them. In some cases, the observed signature is unique to an activity and may help to identify it.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## 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.

## 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), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

## Contact Us

---

*Applied Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](#)