**1. Title**

Nanotechnologies in Environmental Soil Science

**2. Type**

Inter-Divisional Symposium

**3. Organizer(s) & Convener**

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**4. Rationale**

Many types of pollutants such as inorganic hazardous cations and anions and organic pesticides and herbicides enter soils through anthropogenic sources such as agriculture, mining, industry, transportation etc. These pollutants may enter the food chain as well as contaminate drinking water as well as water bodies used for recreational activities. Therefore, it is essential to prevent pollution of soils in the first place or to remediate the soils when they are polluted. Both remediation as well as prevention of pollution could be accomplished through the use of nanotechnologies.

**5. Objectives**

To bring together scientists from all over the world from a multitude of disciplines in science and engineering and from academia and industry to present and discuss the nanotechnologies applicable to environmental soil science for pollution prevention as well as remediation.

**6. Description**

This symposium will explore the use of nanotechnologies in the design and development of slow-release fertilizers, herbicides and pesticides using nanocomposite approaches. Design and development of nanophase materials for remediation of pollutants of all types will also be discussed.