



Symposium D : Environmental remediation - science applied in the search for solutions to air, water and soil pollution

Scope of the Symposium

Sustainable development is certainly a concern all around the world, especially when 92% of the world population lives in polluted areas, according to the World Health Organization. As a consequence, managing pollution is certainly one of the world's greatest challenges. Whilst strategies towards waste minimization (including recycling) are now established in many countries, society continues to pollute the environment. For these reasons, this symposium intends to be a forum for discussions on new technologies for the mitigation of air, water and soil pollution.

Abstracts will be solicited in (but not limited to) the following areas

- *Waste Management by immobilization of residues not amenable to recycling (e.g. in cements, building materials and polymers);*
- *Waste management by processing/concentrating diffuse wastes in aqueous media by the use of clays/zeolites/other ion exchangers; precipitation/redox chemistry; advanced oxidative processes;*
- *Waste management by processing/concentrating diffuse wastes in gaseous media by the use of catalytic and photocatalytic processes;*
- *Assessing/monitoring effectiveness of technologies for environmental remediation by the use of biosensors for toxicity monitoring;*
- *Metal oxynitrides: synthesis, nitriding methods, characterization and theoretical calculations applied in the understanding of structural, vibrational and energetic aspects of oxynitride and related materials;*
- *Environmental remediation systems based on oxynitride and related materials, including oxynitride based photocatalysts.*

Tentative list of invited speakers (To be confirmed)

Sandro Marden Torres (Universidade Federal da Paraíba - UFPB) **Donald Macphee** (University of Aberdeen, Scotland - UK) **Rodolfo Roncolato** (CENPES - Petrobras) **Josy Osajima** (Universidade Federal do Piauí - UFPI) **Kazuhiko Maeda** (Dep. of Chemistry, School of Science, Japan) **Ulrich Aschauer** (University of Bern, Switzerland) **Amparo Fuertes** (Institut de Ciència de Materials de Barcelona, Spain) .

Symposium Organizers

Ieda Maria Garcia dos Santos (Universidade Federal da Paraíba - UFPB) **Ary da Silva Maia** (Universidade Federal da Paraíba - UFPB) **Donald Macphee** (University of Aberdeen, Scotland - UK) **Ingrid Tavora Weber** (Universidade de Brasília - UnB) **François Chvir** (University of Rennes 1, Rennes, France) **Carlos Alberto Paskocimas** (Universidade Federal do Rio Grande do Norte - UFRN) .

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XVIII Brazil MRS Meeting