The International Network on Soil Pollution (INSOP)

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INSOP coordinator

6th Meeting of the Global Soil Laboratory Network (GLOSOLAN)
Launched on April 22\textsuperscript{nd} 2022, the International Network on Soil Pollution focuses on minimizing soil pollution and achieving the global goal of Zero Pollution.

It aims to tackle point-source and diffuse pollution from multiple sources and affecting different land uses.

The mission is to support and facilitate joint efforts to reduce the risks of soil pollution and to share experience and knowledge to effectively remediate already polluted areas around the world.
INSOP members

- 650 members from 90 countries

INSOP members types of organizations

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INSOP areas of work

- INSOP focuses on six main areas of work under each of which various tasks will be carried out to achieve the overall goal.
- It will work on improving knowledge on the full cycle of soil pollution, from assessment to remediation, as well as on the effect on environmental and human health and the provision of soil ecosystem functions and services.
Assessment WG- preliminary tasks

1. List of contaminants of priority- list to created before GLOSOLAN meeting (Nov 21st)
2. Harmonizing laboratory methods (Standard Operating Procedures–SOPs) for the measurement of soil contaminants
3. Develop SOP for sampling soils
4. Build laboratory capacity and awareness raising on policy briefs for soil pollutants and reagent; separate nutrients from pollution
5. Compiling all existing threshold values for different contaminants and different land uses
6. Generation of standard threshold values for guidance at national level
7. Identification and development of soil pollution indicators
GLOSOLAN-INSOP SOP harmonization work plan

<table>
<thead>
<tr>
<th>Group of contaminants</th>
<th>Contaminants</th>
<th>Available GLOSOLAN SOP methods</th>
<th>Proposed INSOP-GLOSOLAN SOP methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxic metals</td>
<td>Cadmium - Cd</td>
<td>DTPA, Aqua regia</td>
<td>AAS, ICP/AES, ICP-MS other?</td>
</tr>
<tr>
<td></td>
<td>Lead- Pb</td>
<td>DTPA, Aqua regia</td>
<td>AAS ICP-MS, others?</td>
</tr>
<tr>
<td></td>
<td>Copper- Cu</td>
<td>DTPA</td>
<td>AAS ICP-MS, others?</td>
</tr>
<tr>
<td>Toxic metalloids</td>
<td>Arsenic- As</td>
<td>Not available</td>
<td>ICP-MS, others?</td>
</tr>
<tr>
<td>Pesticides</td>
<td>TBD later 2023</td>
<td>Not available</td>
<td>TBD</td>
</tr>
</tbody>
</table>
Waste disposal guidelines development

• Lab guideline on soil and reagent disposal

To know more on the good practices in order to properly dispose soil after the analysis

➢ **Health & Safety** manual guideline developed by GLOSOLAN working group: to identify the main reagents used in the laboratory, and describe the risk for human health

➢ **Environmental risk** guideline developed by INSOP working group: to identify environmental risks for each reagent and how to dispose the reagents and the treated soil samples
Waste disposal guidelines development

- To provide a scientific opinion on environmental risks of reagents disposed after the lab analyses
Other potential projects

• Joint webinar organizations on soil pollution lab analysis
• Guidelines development on soil sampling
• Existing gaps and awareness raising on laboratory analysis of soil contaminants
• Other proposals are welcome!!!
INSOP workplan 2022-2025

Many other relevant activities to come:
- Building global capacities on the full cycle of soil pollution
- Awareness on soil pollution
- Harmonization of SOPs for contaminants of major concern
- Soil health index
- Global soil pollution map(s)
- Sustainable remediation of polluted soils
- Creating a global database of soil contaminants threshold values


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Thank you!

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