WOSMIP 2011 addressed the following topic areas:

Radionuclide monitoring technologies

- Stack monitoring technologies currently used
- Description of IMS noble gas measurement systems
- Description of IMS aerosol technologies and capabilities
- Possible technologies that could be used to increase the fidelity of stack monitoring to aid in understanding the IMS collected data

Measurement of background, background inventories

- Effect of gaseous background in the verification
    1. Understanding the detection and transport of radiological traces in the environment
    2. Considerations on atmospheric transport methods and modeling needs
    3. Efforts to define radioxenon background globally
- Effects of particulate background in the verification
    1. Understanding the detection and transport of radiological traces in the environment
    2. Considerations on atmospheric transport methods and modeling needs
    3. I-131, Tc-99m, and other relevant sources
- Other sources of environmental radioactivity

Correlation of gaseous and particulate releases with specific production processes

Identification of specific processes and operations that lead to emissions from production and use

Unintentional releases

Emission and background reduction

- Current abatement techniques
    1. Chemistry
    2. Engineering
- Possibilities to promote best practices to limit the emissions
- Considerations for background reduction based on isotopic ratios or transport modeling
- Experiments and results from developments in chemical processing improvements

Plans for the future in medical isotope production

- Plans for facilities/locations for future medical isotope production
- New/updated production processes for current of future facilities and the impact on environmental releases
- New abatement technologies

Atmospheric radioisotopes measured after the Fukushima accident

- Analysis of the isotopes at close distance and interpretation of the accident
- Analysis of the isotopes at long distances and dose rate implications
- Dilution and separation of isotopes after a long atmospheric travel
- Atmospheric transport model evaluation