

6: Harvesting Results from Intensified Cooperation Between the Nuclear Explosion Monitoring and Isotope Production Communities

The sixth workshop on the signatures of man-made isotope production (WOSMIP) was held November 28 through December 2nd in Bariloche, Argentina. CTBTO, PNNL and INVAP jointly organized the event, where 81 participants representing 27 countries took part. More than 60 contributions, among oral presentations and posters were submitted. This workshop continued the tradition of bringing together the nuclear explosion monitoring and the isotope production communities, respectively. Over the years, these communities have developed common understanding and intensive cooperation and gathered again to discuss latest developments of technical solutions to minimizing the effect radioxenon emissions from fission based ^{99}Mo production has on the IMS. This workshop had sessions on alternative radioxenon sources, current and future ^{99}Mo production overviews, R&D on emission reduction, stack data availability and atmospheric transport modeling. This presentation will highlight the outcomes of this workshop, and focus on some novel solutions discussed during the WOSMIP workshop. It provides a thorough overview over the scientific and technical aspects needed to facilitate methods for calculating event characterization parameters and screening criteria for radioxenon detections based on thorough understanding of the radioxenon background in the atmosphere taking account of all known sources and regional variations. Oral/poster: preferring oral presentation.

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Track Classification: 2. Events and Nuclear Test Sites