INSTITUTE NEWS

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Meeting of the International Independent Scientific Commission for investigation of Ru-106 case

Upon the initiative put forward by Academician Leonid Bolshov, Scientific Leader of the Nuclear Safety Institute of the Russian Academy of Sciences, and Corresponding Member of the Russian Academy of Sciences Viktor Ivanov, Head of the Russian Scientific Commission on Radiation Protection, an International Independent Scientific Commission for investigation of Ru-106 case in Europe in September-October 2017 (Ru-Commission) was established in December 2017.

The Commission represents an independent group of scientists and specialists from France, Finland, Sweden, Germany, Norway, Great Britain and Russia, whose members are professionals in the area of nuclear safety, transport modelling and emergency response.

The Federal Environmental, Industrial and Nuclear Supervision Service (Rostechnadzor) of Russia and the State Corporation "Rosatom" agreed to render an informational support for the Commission work.

The main objective of the Commission is to define the origin of the Ru-106 release and its possible effect on the population health.

The first meeting of the Commission was held on 31st of January, 2018, in Moscow, at IBRAE RAN premises.

In accordance with the agreed agenda, representatives of France (Mr. Jean-Luc Lachaume), Finland (Dr. Aleksi Mattila), Sweden (Ms. Katarina Danestig Sjögren and Ms. Anna Maria Blixt Buhr), Norway (Ms. Astrid Liland), Germany (Dr. Florian Gering), Russia (Mr. Alexey Kiselev, Dr. Konstantin Rubinstein and Dr. Viktor Ivanov) presented the results of measurements and findings related to the Ru-106 case in September- October 2017 to the Commission.

The Commission members discussed the presented information and agreed on the plans of the further Commission activity and communication of its results to the public.

The Commission members drew the following conclusions of the 1st Meeting:

1. Based on the measurements in different European countries and Russia, the entire activity of Ru-106 found in the air in between the end of September to the beginning of October, 2017, is estimated as ~ 100 TBq.
2. Based upon the available data, no health effects are expected for the population.
3. Modelling calculations performed in different countries are consistent with each other, though there are too many uncertainties to make conclusions about the location of the Ru source at the moment.
4. In some countries, measurements of Ru-103 were made. The ratio of Ru-106/Ru-103 was the same and corresponds to a fresh spent fuel.

5. The Commission needs to collect and verify all available data, to form a unified Database and assess the quality of the data. There is a need to request Roshydromet on the local weather conditions data and additional data on precipitation measurements.
6. There is a need in additional measurements upward the wind direction from localities where Ru-106 was found in the Chelyabinsk Region. The Commission considers helpful to get measurements from Romania on deposition of Ru-106 due to the highest values of Ru-106 activity detected.
7. The hypothesis on the "medical" origin of Ru-106 (as a source for medical therapy) can be excluded.
8. According to Roshydromet data, a specific atmospheric phenomenon of descending air flow circulation was observed in the Chelyabinsk Region around the end of September. These data shall be taken into account for further consideration.
9. The Commission noted that the Rostechnadzor inspections were conducted at the PO "Mayak" and NIIAR (Dimitrovgrad) facilities covering the operations during the period August – November 2017, and no deviations from normal technological processes were found.
10. The Commission agrees to work transparently and communicate the outcomes and conclusions to the public.
11. The next meeting of the Commission is scheduled for April 11, 2018 in Moscow.