IAEA
International Atomic Energy Agency

2015 Scientific Forum

59th Regular Session of the IAEA General Conference

Atoms in Industry -

Radiation technology for development

15-16 September 2015

IAEA Headquarters, Vienna, Austria Board Room D, C-Building, 4th Floor

PROGRAMME

Opening: Mr Yukiya Amano, Director General, IAEA

Moderator: Ms Melinda Crane, Chief Political Correspondent, Deutsche Welle-TV

Organization: Mr Serge Gas, Director, Office of Public Information and Communication, IAEA

Scientific Secretary: Ms Meera Venkatesh, Director, Division of Physical and Chemical Sciences, Department of Nuclear Sciences and Applications, IAEA

Administration: Ms Martina Khaelss, Conference Services Section, IAEA

Tuesday, 15 September 2015

10:00–11:00 **Introduction/Opening**

In the opening session leading experts will give a brief overview of the benefits radiation technology has brought to various industries.

Opening Statement by Mr Yukiya Amano, Director General, IAEA
Mr Sergey Kirienko, Chief Executive Officer, ROSATOM, RUSSIAN FEDERATION
Mr Ratan Kumar Sinha, Chairman, Atomic Energy Commission; Secretary, Department of Atomic Energy, Government of India, INDIA
Mr Taylor Wilson, Nuclear Physicist, UNITED STATES

11:00–12:00 **Session 1: Battling the Bugs**

Radiation can kill disease-causing germs and neutralize other harmful organisms, being often used to clean, sterilize and sanitize materials. This session will discuss how nuclear applications and radiation technology benefit human health and improve healthcare.

Mr Josef Mittendorfer, Consultant, High Tech Consulting, AUSTRIA
Ms Celina Ines Horak, Head, Department of Radiation Processing Application, Comisión Nacional de Energía Atómica (CNEA), ARGENTINA
Mr Justin Davies, Leader, Radiation Technology, Australian Nuclear Science and Technology Organization (ANSTO), AUSTRALIA

12:00–13:00 **Session 2: Linking the Chains**

Radiation processing of polymers such as rubber is cost-effective and allows mass production of high quality products. Once set up, radiation processing techniques can make large-scale production economical and environment-friendly. This session will highlight the wide reach of radiation technologies used for cross-linking processes in materials, which benefit a variety of industries and ultimately consumers.

Ms Yuwei Zhang, Vice President, Wuxi El Pont Radiation Technology Company, CHINA
Mr Wilson Calvo, Administrative and Infrastructure Director, Nuclear and Energy Research Institute, National Nuclear Energy Commission (IPEN), BRAZIL
Mr Masao Tamada, Director General, Takasaki Advanced Radiation Research Institute, Sector of Nuclear Science Research, Japan Atomic Energy Agency (JAEA), JAPAN

13:00–14:30 Lunch Break

14:30–15:30 Session 3: Solutions for Pollution

Radiation technologies have been successfully deployed to identify contaminating pathways and treat and neutralize persistent industrial pollutants. This session will focus on nuclear applications for the treatment of waste waters, flue gases and the preservation of coastlines.

Mr Bumsoo Han, CEO and President, EB-Tech. Co., Ltd., REPUBLIC OF KOREA
Mr Andrzej Chmielewski, Director General, Institute of Nuclear Chemistry and Technology (INCT), POLAND
Ms Catherine Hughes, Senior Research Scientist, Isotope Hydrology and Radiotracing, Australian Nuclear Science and Technology Organisation (ANSTO), AUSTRALIA

15:30–16:00 Coffee Break

16:00–17:30 Session 4: Tracing the Pathways

Radiotracers and nucleonic gauges play an important role in enhancing productivity and in ensuring quality and reliability of industrial processes and production systems. Such techniques also help to trace pathways of unseen phenomena in nature. This session will discuss how these technologies benefit industries and help to identify the potential negative impact of human activities.

Mr Tor Bjørnstad, Chief Scientist, Institute for Energy Technology (IFE); Professor, University of Oslo, NORWAY
Ms Haifa Ben Abdelouahed, Assistant Professor, Centre National des Sciences et Technologies Nucléaires (CNSTN), TUNISIA
Mr Jean Louis Boutaine, Former Head, Research Department of the Centre for Research and Restoration of the Museums of France, FRANCE
Mr Bernard Malherbe, Director Project Development, Jan De Nul Group**,** BELGIUM
Mr Martin Jech, Leader, Research Area Friction Surface Phenomena and Tribodiagnistics, AC2T, AUSTRIA

17:30-20:00 Reception and IAEA Exhibition (C04 Coffee Area)

Wednesday, 16 September 2015

09:00–10:00 **Session 5: Bolstering Safety and Quality**

Safety is of utmost importance in industries. Radiation-based, Non-Destructive Testing (NDT) techniques are indispensable tools for all manufacturing industries and civil engineering activities. NDT helps assess, control and periodically examine the quality of components, machinery and structures, which in turn ensure safety of operation and the protection of human lives. This session will focus on NDT, the key technology to improve and guarantee the quality of industrial goods and services.

Mr Winfried Petry, Scientific Director, Research Reactor Heinz Maier-Leibnitz (FRMII); Professor, Technical University of Munich, GERMANY
Mr Abdul Nassir Bin Ibrahim, President, Malaysian Society for NDT; Managing Director, Madani NDT Training Centre, MALAYSIA
Ms Loveetah Chummun Bhujohory, Acting Head, Engineering Unit, Mauritius Standards Bureau (MSB), MAURITIUS

10:00-11:00 **Panel Discussion: Non-Destructive Testing for development, training and qualification of personnel**

Mr Mike Farley, Chairman, International Committee for Non-Destructive Testing (ICNDT), UNITED KINGDOM
Mr Sean Blake, Executive Director, Southern African Institute of Welding (SAIW), SOUTH AFRICA
Mr Sigit Budi Santoso, Senior Researcher, Center for Isotopes and Radiation Application, National Nuclear Energy Agency (PAIR-BATAN), INDONESIA
Mr Rachad Alami, Head, Division of Industrial Applications, Centre National de l'Energie des Sciences & des Techniques Nucléaires (CNESTEN), MOROCCO

11:00–11:30 **Coffee Break**

11:30–13:00 **Session 6: Rays of Hope**

This session will look at a range of new developments and innovative applications of radiation technology, including in the areas of health, food and agriculture, as well as cultural heritage.

Ms Clelia Dispenza, Professor, University of Palermo, ITALY
Mr Khairul Zaman Bin Haji Mohd Dahlan, Technical Director, Polycomposite Sdn Bhd; Former Director, Radiation Processing Technology Division, Malaysian Nuclear

Agency, MALAYSIA

Mr Corneliu Catalin Ponta, Senior Researcher, Horia Hulubei National Institute for Physics and Nuclear Engineering (IFIN-HH), ROMANIA

Mr Arthur Gareyev, Head, Polymer Composite Materials Department, ROSATOM, RUSSIAN FEDERATION

Mr Umesh Kumar, Head, Industrial Tomography and Instrumentation Section, Bhabha Atomic Research Centre (BARC), INDIA

13:00–14:30 **Lunch Break**

14:30–15:30 **Panel Discussion: The Path Ahead**

This panel session will discuss the relevance and added value of radiation technology in a wide range of industries to support countries' development efforts.

Ms Alumanda M. Dela Rosa, Director, Philippine Nuclear Research Institute(PNRI) PHILIPPINES

Mr Paul Gray, Vice President, External Relationships and Global Logistics, Nordion Inc., CANADA

Mr Benoit Mullier, Vice President, Facility and Process Engineering, Industrial and Sterilization Solutions (IBA), BELGIUM

Mr Iqbal Hussein Khan, Director, Pakistan Institute of Nuclear Science and Technology (PINSTECH), PAKISTAN

15:30–16:30 **Open Forum for Member States**

Summary of the Scientific Forum

Member States could make statements on their experience

Questions and Answers Session

16:30-17:00 **Conclusion/Closing**

Mr Yukiya Amano, Director General, IAEA

Mr Mahama Ayariga, Minister, Ministry of Environment, Science, Technology and Innovation, GHANA

Mr Jose Fidel Santana Nuñez, Vice Minister, Ministry of Science, Technology and Environment (CITMA), CUBA

Ms Lydia Parades Gutierrez, Director General, Instituto Nacional de Investigaciones Nucleares (ININ), MEXICO