SATELLITE MEETING

"Applications of Electron Accelerators: Prospects and Challenges"

to be held within the framework of the IAEA "International Topical Meeting on Nuclear Research Applications and Utilization of Accelerators", Vienna, 4 – 8May 2009

ANNOUNCEMENT AND CALL FOR PAPERS

Electron beam (EB) accelerators are used in diverse industries to enhance the physical and chemical properties of materials and to reduce undesirable contaminants, such as pathogens or toxic by-products. Electron beam accelerators are reliable and durable equipments that produce ionizing radiation without relying upon radioactive isotopes. EB equipment can be turned on and off as any other industrial electrical equipment. These electron accelerators can be used as tools in basic and applied research, but also in pilot plants for demonstration of the feasibility of a certain radiation processing technology, as well as in industrial-scale facilities. Different end-use areas need accelerators with different energies as well as different under-beam handling systems. For example, wire and cable insulations, heat-shrinkable tubing, and the emerging use of EB cross linked polyethylene tubing for water distribution rely upon a multiple-pass system referred to as a "race-track" system, while EB units for surface curing are installed on printing presses and coatings lines. Service centers often rely upon cart-type conveyor systems that handle diverse product forms and items. Most of the heat-shrinkable films used for food packaging are cross linked before the film is blown into its finished dimensions. Some heat-shrinkable films and tire components are irradiated as sheets. Market surveys indicate that there are more than 1400 high-current EB units in commercial use providing an estimated added value to numerous products of more than 85 billion USD.

The main objective of the **Satellite Meeting** is to promote exchange of information among the IAEA Member States representatives/delegates and to discuss the expansion of industrial applications using electron beam accelerators in developing countries focusing on the technology transfer, the availability of low cost, reliable electron accelerators, energy saving and environmental protection by using electron accelerators ant the role of the IAEA for promotion of electron accelerator applications.

The focus of this **Satellite meeting** is on the development of reliable electron beam accelerators for industrial processes and preservation of the environment, as well as on the development of new processes and applications.

The main topics to be addressed at the **Satellite Meeting** are:

- Accelerator Development for Industrial Applications: low, medium and high energy, X-ray Accelerators
- Application of Electron Accelerators in Industry, Food and Agriculture Sector
- Electron Accelerators for tackling environmental pollutants (gases, liquids and solids)
- Advanced Materials produced by Electron Accelerators
- Clean and Energy Saving Surface Coating and Printing Technique by Electron Accelerator

SATELLITE MEETING IMPORTANT INFORMATION

- The **Satellite meeting** will be held in parallel with the main conference programme.
- Participants in the **Satellite Meeting** will be required to register as participants of the main conference. For instructions please refer to the Announcement and Call for Papers for the main conference.

- The proceedings of the **Satellite Meeting** will be published together with the main conference proceedings in the IAEA Proceedings Series.
- The submission of abstracts and papers to the **Satellite Meeting** will follow the same process (including deadlines) as the submission of papers to the main conference. For instructions please refer to the Announcement and Call for Papers for the main conference.
- Scientific Committee:
    - Mr. Sueo Machi – Japan
    - Mr. Anthony Berejka – USA
    - Mr. Andrzej Chmielewski – Poland
    - Mr. Mohammad Haji-Saeid – IAEA
    - Ms. Agnes Safrany – IAEA
    - Ms. Maria Helena de O. Sampa - IAEA
- Deadlines:
    - Submission of abstract (400 words): (LISA System) — 6 October – 3 November 2008
    - Notification of paper/poster acceptance: — 20 December 2008
    - Submission of full papers: — 30 March – 27 April 2009