SATELLITE MEETING

"European Fast Neutron Transmutation Reactor Projects (MYRRHA / XT-ADS)"

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

According to the projections published by the Intergovernmental Panel on Climate Change (IPCC), the median electricity increase till 2050 will be by a factor of almost 5. It is reasonable to assume that nuclear energy will play a role in meeting this demand growth. However, there are four major challenges facing the long-term development of nuclear energy as a part of the world's energy mix: improvement of the economic competitiveness, meeting increasingly stringent safety requirements, adhering to the criteria of sustainable development, and public acceptability. Issues linked to meeting the sustainability criteria define the scope of this Satellite Meeting.

While not involving the large quantities of gaseous products and toxic solid wastes associated with fossil fuels, radioactive waste disposal is today's dominant public acceptance issue. In fact, small waste quantities permit a rigorous confinement strategy, and mined geological disposal is the strategy followed by some countries. Nevertheless, public opposition arguing that this does not yet constitute a safe disposal technology has largely stalled these efforts. One of the primary reasons that are cited is the long life of many of the radioisotopes generated from fission. This concern has led to increased research and technology development efforts to establish a technology aimed at reducing the amount of long lived radioactive waste through transmutation in fission reactors or hybrid systems like the Accelerator Driven System (ADS).

The main focus of this **Satellite Meeting** is on the European projects implemented in the area of fast-fission reactor concepts and fuel cycles that offer the flexibility needed to contribute decisively towards solving the problem of growing "spent" fuel inventories by utilizing fissionable isotopes and greatly reducing the volume of high-level waste that ultimately must be disposed of in long-term repositories.

The **Satellite Meeting** will consist of a series of invited papers and a round table to facilitate the discussion and agreement on conclusions and recommendations.

The preliminary list of the topics addressed by the invited papers includes:

- From MYRRHA to XT-ADS: Lessons Learned
- The Design of the XT-ADS and EFIT Transmutation Reactors
- Accelerator Design for ADS Applications (MYRRHA / XT-ADS and EFIT)
- Industrial Realization of ADS with Cost Considerations
- Transmutation Reactors: Fuels R&D
- Transmutation Reactors: Materials R&D
- Transmutation Reactors: Safety Aspects
- GUINEVERE: Construction of a Zero-power, Lead Cooled Fast Spectrum ADS at Mol, Belgium

- ISOL@MYRRHA: Nuclear Physics Applications of the MYRRHA Accelerator
- MYRRHA / XT-ADS: The Road Ahead and Objectives of the Central Design Team (CDT)

SATELLITE MEETING: IMPORTANT INFORMATION

- The **Satellite Meeting** will be held in parallel with the main conference programme for a half day (5 hours), most probably one full afternoon

- Participants in the **Satellite Meeting** will be required to register for and participate in the main conference. For instructions please refer to the Announcement and Call for Papers for the main conference

- It is intended that the proceedings of the **Satellite Meeting** will be published together with the main conference proceedings in the IAEA Proceedings Series

- While no paper contributions are solicited, participants are encouraged to contribute to the general discussions following the invited papers and the Round Table, and in the formulation of recommendations

- Deadlines: Please see the Announcement and Call for Papers for the main conference

- Organization

  The Organizing Committee of the **Satellite Meeting** is composed of:

  - Hamid Aït Abderrahim, SCK-CEN, Belgium
  - Alexander Stanculescu, IAEA Vienna

For any question concerning participation, please contact the Organizers.

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