"For nuclear power to be sustainable as a global source of emissions-free energy, it is essential that the nuclear fuel cycle also remains sustainable. To achieve this goal would require continued innovation in both technology and policy."

M. ElBaradei, Director General, IAEA

For further information and on-line registration please see the IAEA website: http://www-pub.iaea.org/MTCD/Meetings/Meetings.asp

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#### **Scientific Forum**

during the 48th Regular Session of the IAEA General Conference Conference Room C, Austria Center, Vienna 21-22 September 2004

# Nuclear Fuel Cycle Issues and Challenges

Chairman: B. Bigot



Session 1: Advanced Fuel Cycles and Reactor Concepts Tuesday, 21 September 2004, 10:00 a.m.

Session 2: Waste and Spent Fuel Management Issues Tuesday, 21 September 2004, 3:00 p.m.

Session 3: Research Reactor Fuel Cycle and Related Issues Wednesday, 22 September 2004, 10:00 a.m.

More information available at: http://www-pub.iaea.org/MTCD/Meetings/Meetings.asp

#### Session 1:

Advanced Fuel Cycles and Reactor Concepts

Tuesday, 21 September 2004, 10:00 a.m.

Moderator: A. Kakodkar

Keynote Speakers:
R.T.H. Mayson; Key Issues in Fuel Cycle Options
R. Cirimello; Achievements and Prospects for Advanced Reactor Design and Fuel Cycle
Y. Akimoto; Holistic Consideration of Fuel Cycle Systems for Sustainable Development
A. Kakodkar; Key Issues requiring Research and Development Programmes

Panellists: above mentioned participants, R. Bennett, I. S. Chang

## Session 2:

Waste and Spent Fuel Management Issues

Tuesday, 21 September 2004, 3:00 p.m.

Moderator: L. Shephard

Keynote Speakers:
P. Bernard; Advances in Treatment of Wastes from Reprocessing of Spent Fuel: Transmutation, Solidification
A. Majorshin; Advances in Reprocessing of Spent Fuel: Partitioning
L. Shephard; Spent Nuclear Fuel Management

Panellists: above mentioned participants, E. Dowdeswell, V. Ryhanen, C. Zhu, J. Maiorino

### **Session 3:**

Research Reactor Fuel Cycle and Related Issues

Wednesday, 22 September 2004, 10:00 a.m.

Moderator: S.K. Sharma

Keynote Speakers: • A. Travelli; Fuel Issues: Replacement of HEU (Conversion of Research Reactors, High Density Fuel Developement, Repatriation of Fuel) • C. Piani: Research Reactor

- Utilization: A Justification for Existence?
- S. Tőzsér; Spent Fuel Management: Semi-dry Storage
- R. Lockwood; Research Reactor
   Decommissioning

Panellists: above mentioned participants, N. Arkhangelski, H. Boeck, I. Smith











