



INTERNATIONAL ATOMIC ENERGY AGENCY

**TECHNICAL MEETING
“ADVANCED FUEL PELLET MATERIALS AND FUEL ROD
DESIGNS FOR WATER COOLED REACTORS”**

**23-26 November 2009
PSI, Villigen, Switzerland**

AGENDA

Monday November 23, 2009		
Opening Session Meeting Chair: Mr. Tony Williams, Axpo, Switzerland		
09:00 – 09:10	Opening	Mr. V. Inozemtsev IAEA
09:10 – 09:30	Welcome Addresses	Mr. T. Williams, Axpo and Mr. J. M. Cavedon, PSI
09:30 – 10:00	IAEA Presentation “Overview of IAEA Activities in the Area of Advanced Fuels for Water Cooled Reactors”	Mr. V. Inozemtsev IAEA
Fabrication and Design Session Session Chair: Mr. Hubert Bairiot, FEX, Belgium		
10:00 – 10:45	FD1: “Innovative Process Techniques to Optimize Quality and Microstructure of UO ₂ Fuel for PHWRs in India”	Mr. D. Pramanik NFC, India
10:45 – 11:15	<i>Coffee Break</i>	
11:15 – 12:00	FD2: “Studies on the Sintering Behaviour of UO ₂ - Gd ₂ O ₃ Fuel Pellets”	Mr. M. Durazzo IPEN/CNEN-SP, Brazil
12:00 – 12:45	FD3: “Evolutionary Design Studies of PHWR Fuel Rods”	Mr. S. Castañiza CNEA, Argentina
12:45 – 14:00	<i>Lunch</i>	
14:00 – 14:45	FD4: “Application of Probabilistic Methods to Fuel Rod Design Evaluation”	Mr. A. Wensauer AREVA, Germany
14:45 – 15:30	FD5: “Fuel Assembly Designs for Achieving High Burnups in 220 MWe Indian PHWRs”	Mr. P. N. Prasad NPCIL, India
15:30 – 16:00	<i>Coffee Break</i>	
16:00 – 16:30	FD6: “Research on Welding Defects of Pressure Resistance Welding for Heavy Water Reactor Fuel Element”	Mr. E. Wang CNNFC, China
16:30 – 17:00	FD7: “Current Status of R&D of Nuclear Fuel Elements for PWR in Indonesia”	Mr. B. Briyatmoko BATAN, Indonesia
Tuesday November 24, 2009		
Advanced Fuels Session Session Chair: Mr. Patrick Blanpain, AREVA, France		

09:00 – 09:45	ADV1: "High Burnup UO ₂ Fuel Pellets with Dopants for WWER"	Mr. A. Lysikov TVEL, Russia
09:45 – 10:30	ADV2: "Westinghouse Advanced Doped Pellet – Characteristics and Irradiation Behaviour"	Ms. K. Backman Westinghouse, Sweden
10:30 – 11:00	<i>Coffee Break</i>	
11:00 – 11:45	ADV3: "Washout Behaviour of Cr-doped UO ₂ and Gd Fuels in LWR Environments"	Ms. C. Delafoy AREVA, France
11:45 – 12:30	ADV4: "Development of Burnable Neutron Absorber BNA Pellets"	Mr. H. Hamilton AECL, Canada
12:30 – 14:00	<i>Lunch</i>	
Innovative Fuel Designs Session Session Chair: Mr. Radu Pomirleanu, Westinghouse, USA		
14:00 – 14:45	INN1: "Zirconia Inert Matrix Fuels for Plutonium and Minor Actinides Burning in Reactors"	Mr. C. Degueldre PSI, Switzerland
14:45 – 15:30	INN2: "Designing a Thorium Fuel Irradiation Experiment"	Mr. J. F. Kelly Norway
15:30 – 16:00	<i>Coffee Break</i>	
16:00 – 17:00	Round-table Discussion on "Regulatory Aspects of Fuel Quality and Reliability Assurance"	
18:00 – 20:00	<i>Dinner on behalf of PSI and IAEA</i>	

Wednesday November 25, 2009

Innovative Fuel Designs Session, cont'd Session Chair: Mr. Radu Pomirleanu, Westinghouse, USA		
09:00 – 09:45	INN3: "Current Status of a Development Project on Erbium Credit Super High Burnup Fuel"	Mr. M. Yamasaki NFI, Japan
09:45 – 10:30	INN4: "Minimization of Inner Diametric Tolerance of Annular Pellet for Dual Cooled Fuel"	Mr. Y.W. Rhee KAERI, Korea
10:30 – 11:00	<i>Coffee Break</i>	
11:00 – 11:45	INN5: "A New Uncertainty Reduction Method for Fuel Fabrication Process and PWR Cores with Erbium-bearing Fuel"	Mr. T. Sano Kyoto University, Japan
11:45 – 12:30	INN6: "Investigation of Liquid-metal-bonded Hydride Fuels for LWRs"	Mr. K. A. Terrani Berkeley, USA
12:30 – 14:00	<i>Lunch</i>	
Closing Session Meeting Chair: Mr. Tony Williams, Axpo, Switzerland		
14:00 – 15:30	Session Chairs Summaries	
15:30 – 16:00	<i>Coffee Break</i>	
16:00 – 17:00	General Discussion, Conclusions and Recommendations	

Thursday November 26, 2009

Technical Tour to the Swiss Light Source Synchrotron and Hot Laboratory	
09:00 – 10:00	Tour Introduction and Logistics
12:30	Technical Meeting Adjourn