



The 4th ENEN PhD Event 2010
European Nuclear Conference 2010
in Barcelona, Spain, 2 June 2010 at 8h30-12h10

Programme

- 8:30 - 8:35 **OPENING**
Prof. Emilio MINGUEZ, Universidad Politecnica de Madrid (Spain), *Chair of the Jury*
- 25 min for each = 20min presentation + 5min Q&A
- 8:35 - 10:15 **SESSION 1** Chair: Dr. Bernard BONIN, European Nuclear Society High Scientific Council, CEA (France)
- 8:35 Nicolas CASTIN, SCK•CEN (Belgium): Modelling radiation effects at the atomic scale with an artificial neural network based kinetic Monte Carlo algorithm
- 9:00 Tibor REISS, Budapest University of Technology and Economics (Hungary): Coupled neutronics – thermal-hydraulics programs for SCWRs
- 9:25 Javier JIMENEZ ESCALANTE, Universidad Politecnica de Madrid (Spain): A domain decomposition methodology through alternate dissections for coupled neutronic and thermal-hydraulic analyses in COBAY A3
- 9:50 Antonio LAFUENTE MAZUECOS, Universidad Politecnica de Madrid (Spain): Exploring new coolants for nuclear breeder reactors
- 10:15-10:30 *Coffee break*
- 10:30-12:10 **SESSION 2** Chair: Prof. em. Michel GIOT, SCK•CEN (Belgium)
- 10:30 Matteo BUCCI, University of Pisa (Italy): Experimental and Computational Analysis of Steam Condensation in the Presence of Air and Helium
- 10:55 Aurelia CHENU, Paul Scherrer Institut (Switzerland): Modelling of sodium boiling for coupled neutronic/thermal-hydraulic transient analysis of the Gen-IV SFR
- 11:20 Alexey AYRAPETOV, National Research Nuclear University MEPhI (Russia): Deuterium trapping in Carbon Fiber Composites under high fluence
- 11:45 Caroline BISOR-MELLOUL, CEA (France): Understanding of hydriding mechanisms of Zircaloy-4 alloy during corrosion in PWR simulated conditions and influence of zirconium hydrides on Zircaloy-4 corrosion
- 12:10 **CLOSING and AWARD OF CERTIFICATE**
Prof. Emilio MINGUEZ, Universidad Politecnica de Madrid (Spain), *Chair of the Jury*
- 13:00-14:00 Deliberation of the Jury on the ENEN Prize