

# PROGRAMME

Sunday 4 May 2008	
17.00 – 19.30	Pre-registration
	The Registration Desk will be located at the 'Mezzanine Floor of the Novotel Budapest
18.30 – 20.00	NESTet Welcome Reception The Welcome Reception will take place at the 'Mezzanine Floor of the Novotel Budapest
	The Welcome Reception is sponsored by AREVA
	Monday 5 May 2008
8.30 – 10.10	OPENING SESSION
	Chair: S. San Antonio (Secretary General ENS )
Zsolnay hall - Mezzanine	Welcome Addresses - D. Bonser (President ENS) - T. Pázmándi (Chairman Hungarian Nuclear Society)
	<ul> <li>Keynote Speech         <ul> <li>A. Hurtado (TU Dresden): Cooperation between academia and industry: a case study from Germany</li> </ul> </li> </ul>
	Keynote Speech - J. Safieh (ENEN)
	Ceremony of European Master of Science in Nuclear Engineering (EMSNE) 2007
10.10 – 10.40	Coffee Break
10.40 - 12.20	Training Programmes for Industry – Part I
	Chair: M. Coeck (SCK•CEN)
Zsolnay hall - Mezzanine	THE NFI TOKAI SD SYSTEM – MANAGEMENT OF THE CAPABILITIES OF OPERATIONS IN FUEL FABRICATION PLANTS T. Fukushima (Tokai Works, Nuclear Industries Ltd.) – Japan
	FINNISH SOLUTION TO INCREASED BASIC PROFESSIONAL TRAINING NEEDS IN NUCLEAR SAFETY R. Kyrki-Rajamäki (Lappeenranta University of Technology) – Finland
	EDUCATION FOR THE NUCLEAR POWER INDUSTY – A SWEDISH PERSPECTIVE J. Blomgren (Uppsala University) – Sweden
	THE ESSENTIAL ELEMENTS OF AN EFFECTIVE EDUCATION AND TRAINING PROGRAM FOR NUCLEAR POWER PLANT SOFTWARE ENGINEERS H.S. Dhillon, J.A. LeClair (Excelsior College) – USA
	FROM AN "OPERATORS TRAINING FACTORY" TO BECOMING THE SOURCE FOR NUCLEAR-POWER PROFESSIONAL J.L. Delgado, I. Loizaga (Tecnatom) - Spain



	↑Parallel Sessions↓	
10.40 - 12.20	Experimental Facilities for Education and Training – Part I	
	Chair: P. Beeley (HMS Sultan)	
RE	ESEARCH REACTOR COALITIONS – PROMOTING NUCLEAR EDUCATION AND	
Rákóczi hall –	<b>RAINING</b> N. Goldman, P. Adelfang, S. Paranjpe (IAEA) H. Böck (Atominstitute) – Austria; K. Ildred, N. Mote (International Nuclear Enterprise Group) – US	
R	UTURE OPERATION OF THE 37 YEAR OLD HUNGARIAN TRAINING EACTOR . Aszódi (Budapest University of Technology and Economics) – Hungary	
C/ FF	AN RADIOACTIVE WASTE UNDERGROUND RESEARCH LABORATORIES GAIN ROM CO-OPERATION WITH OTHER UNDERGROUND FACILITIES? Roberts (University of Sheffield) – UK	
	<b>HE CZECH NUCLEAR EDUCATION NETWORK ASSOCIATION</b> . Katovsky, D. Kobylka, K. Matějka (Czech Technical University) – Czech Republic	
PF	TILISATION OF RESEARCH REACTORS IN EDUCATION AND TRAINING ROGRAMS ORGANISED BY THE ATOMIC ENERGY COMMISSION . Foulon, B. Alvado (CEA, Saclay Research Center) - France	
12.20 – 13.20	Lunch Break	
13.20 – 14.10	Poster Session	
Foyer Zsolnay - Mezzanine		
14.10 – 15.30	Science, Engineering and Technology in Education – Part I	
	Chair: J. Safieh (CEA)	
Zsolnav hall - Al	IINA-2008: A RENEWED APPROACH TO MASTERING NUCLEAR ENGINEERING ND APPLICATIONS IN SPAIN .E. Herranz, J.C. García-Cuesta, S. Falcón, M. Marco (CIEMAT) – Spain	
G.	DUSTRY – UNIVERSITY COLLABORATION: THE AECL-CRSNG-POLYTECHNIQUE OLLABORATIVE RESEARCH AGREEMENT Marleau, A. Hébert, J. Koclas (Ecole Polytechnique de Montréal), W. Shen, P. Boczar AECL) – Canada	
_	NIVERSITY BASED NUCLEAR EDUCATION AND RESEARCH IN THE UK Billowes (Dalton Nuclear Institute, University of Manchester) – UK	
SC Ch	<b>HE KARLSRUHE NUCLIDE CHART: AN EDUCATIONAL TOOL FOR THE NUCLEAR</b> <b>CIENCE COMMUNITY</b> h. Normand, G. Pfennig, R. Dreher, J. Galy, J. Magill (Joint Research Centre, Institute for ransuranium Elements) – European Commission	



14.10 – 15.30	Experimental Facilities for Education and Training – Part II Chair: A. Aszódi (Budapest University of Technology and Economics)
Rákóczi hall – Ground floor	THE IAEA NETWORKS FACILITATING TRAINING AND DEMONSTRATION OF DISPOSAL AND DECOMMISSIONING TECHNOLOGIES S. Hossain, B. Neerdael, P. Dinner - IAEA
	<b>DEVELOPMENT OF PC-BASED NPP SIMULATION PROGRAMS FOR TRAINING AND</b> <b>EDUCATION</b> A. Aszódi, A. Csige, G. Csom, S. Fehér (Budapest University of Technology and Economics) – Hungary
	JOSEF UNDERGROUND EDUCATIONAL AND TRAINING FACILITY P. Salák, J. Jann (Czech Technical University of Prague) – Czech Republic
	TRAINING IN NUCLEAR TECHNOLOGY IN AN ANTI-NUCLEAR ENVIRONMENT H. Böck, M. Villa (Vienna University of Technology/Atominstitute) – Austria
15.30 - 16.00	Coffee Break
16.00 - 17.40	Training Programmes for Industry - Part II
	Chair: J. Sugimoto (JAEA)
Zsolnay hall - Mezzanine	VOCATIONAL TRAINING DESIGED AND IMPLEMENTED BY AREVA TA AND CORYS TESS FOR NUCLEAR INDUSTRY JC. Houplain, B. Gless (AREVA), C. Leo (CORYS TESS) – France
	USE OF REAL-TIME MODEL-DRIVEN 3D VIRTUAL REALITY SIMULATIONS FOR NUCLEAR PLANT OPERATOR TRAINING AND FAMILIARISATION S. O'Neill, D. Lewis, J. Stovell, R.Maxwell (L3-MAPPS) – UK
	THE CURRENT CONDITIONS FOR TRAINING OF NUCLEAR POWER PLANT PERSONNEL IN HUNGARY
	I. Kiss (Paks NPP Ltd.) - Hungary



16.00 - 17.40	NUCLEONICA Web Portal	
10.00 11.40	Chair: I. Vukovic (FER)	
Rákóczi hall –	NUCLEONICA: A WEB PORTAL FOR THE NUCLEAR SCIENCES J. Magill (JRC Karlsruhe) – European Commission	
Ground floor	AN INTERACTIVE WEB ACCESSIBLE GAMMA-SPECTRUM SIMULATOR A. Berlizov, J. Magill (JRC Karlsruhe) – European Commission	
	WEB-BASED DOSIMETRY AND SHIELDING CALCULATIONS WITH NUCLEONICA J. Galy, R. Dreher, J. Magill (JRC Karlsruhe) – European Commission	
	RANGE AND STOPPING POWER CALCULATIONS IN NUCLEONICA M.C. Tufan (Ondokuz Mayis University) – Turkey; J. Magill, J. Galy (JRC Karlsruhe) – European Commission	
	NUCLEONICA – SOFTWARE DESIGN PATTERNS C. Grammes (DOKUMENTA S.A.) - Luxembourg	
	Tuesday 6 May 2008	
8.30 - 10.10	PLENARY SESSION:	
	International Developments in Nuclear Education and Training	
	Chair: T. Pázmándi (Chairman Hungarian Nuclear Society)	
Zsolnay hall - Mezzanine	<ul> <li>Keynote Speeches</li> <li>G. Van Goethem (European Commission): Challenges for Euratom Research and Training in the frame of the European 'Higher Education' and 'Research' Areas</li> </ul>	
	- Y. Yanev (IAEA): Managing Nuclear Knowledge and the IAEA	
	<ul> <li>J. Van der Steen (NRG): The EUTREP Platform – A tool for consensus about requirements for Radiaton Protection experts and officers and Radiaton workers</li> </ul>	
	<ul> <li>J. Gutteridge (U.S. Nuclear Regulatory Commission) and G. Brown (University of Massachusetts Lowell): Nuclear Education Programs in the US</li> </ul>	
10.10 - 10.40	Coffee Break	
10.40 - 12.20	Science, Engineering and Technology in Education - Part II	
	Chair: C. Sükösd (Budapest University of Technology and Economics)	
	A NETWORK TO ENHANCE COOPERATION FOR HIGHER EDUCATION ON	
Zsolnay hall - Mezzanine	NUCLEAR ENGINEERNG J. Rodenas (Universidad Politécnica de Valencia, CHERNE) – Spain	
	THE BELGIAN NUCLEAR HIGHER EDUCATION NETWORK – A GROWING INTERNATIONAL ENGINEERING PROGRAMME M. Coeck (SCK•CEN) – Belgium	
	<b>LEADING THE RENAISSANCE – TEACHING NUCLEAR ENGINEERING TO UNDERGRADUATES IN THE UK</b> M. Joyce, C. Squire (Lancaster University) – UK	

E AV	<b>GROWING FUSION EDUCATION PROGRAM IN PLASMA PHYSICS IN HUNGARY</b> G. Pór (BME), G. Veres (KFKE-RMKI)) – Hungary <b>NUCLEAR ENGINEERING EDUCATION PROGRAM AT UPC-BARCELONA: NUCLEAR</b> <b>POWER PLANT CONCEPTUAL SIMULATOR AND MULTIMEDIA NUCLEAR</b>
	REACTORS J. Dies, C. Tapia, F. Puig, D. Villar, F. Ramirez, J. Abal, D. Perelló (Universitat Politècnica de Catalunya) – Spain
	↑Parallel Sessions↓
10.40 - 12.20	The Role of Education in Knowledge Management – Part I
	Chair: K. Hanamitsu (IAEA)
Rákóczi hall – Ground floor	TRAINING AS A TOOL FOR IMPROVING MOTIVATION AND EFFICIENCY IN NUCLEAR SAFEGUARDS M. Olsson, R. Clarke - Euratom
	DEFINING QUALIFICATIONS AND COMPETENCE FOR PERSONNEL IN A SMALL WASTE MANAGEMENT ORGANISATION – THE CASE OF POSIVA P. Marjatta Palmu (Posiva Oy) – Finland HOW KNOWLEDGE MANAGEMENT CAN HELP NUCLEAR COMPANIES TO FIGHT THE AGING WORKFORCE ISSUE
	<ul> <li>A. Uj (Accenture Management Consulting) – Hungary</li> <li>THE CHALLENGE OF LEADERSHIP DEVELOPMENT WITHIN THE PUBLIC SECTOR ORGANISATION: A CASE STUDY OF NUCLEAR REGULATORY AUTHORITY IN PAKISTAN</li> <li>N. Afghan (Lahore University of Management Science), S. A. Mallick (Pakistan Nuclear Regulatory Authority) – Pakistan</li> </ul>
	A NATIONAL APPROACH TO UNDERSTANDING SKILLS REQUIREMENTS IN THE NUCLEAR DECOMMISSIONG INDUSTRY N. Couzens (Nuclear Decommissioning Authority) - UK
12.20 - 13.20	Lunch Break
13.20 – 14.10 Foyer Zsolnay - Mezzanine	Poster Session
14.10 – 15.30	Training Programmes for Industry – Part III Chair: R. Coe (Excelsior College)

E A	NEST <sup>et</sup>
Zsolnay hall - Mezzanine	NUCLEARGRADUATES. WORLD CLASS GRADUATES FOR A WORLD CLASS INDUSTRY K. Walkden (Magnox South), C. Dawson (Nuclear Decommissioning Authority) – UK
	ACTIVITIES OF THE MILAN COPIC NUCLEAR TRAINING CENTRE IN SLOVENIA I.Jencic (Jozef Stefan Institute) – Slovenia
	NUCLEAR INDUSTRY TRAINEE PROGRAM FOR NEW EMPLOYED ENGINEERS M Imhäuser, C. Schönfelder (AREVA NP GmbH) – Germany
	CHALLENGES OF EDUCATION AND TRAINING FOR A SLOVENIAN NUCLEAR SERVICE PROVIDER A. Androjna (NUIMP Ltd.), A. Lešnjak (QTECHNA Ltd.) – Slovenia
	↑Parallel Sessions↓
14.10 - 15.30	
14.10 - 15.50	The Role of Education in Knowledge Management – Part II Chair: H. Böck (TU Vienna, Atominstitute)
	ENSURING KNOWLEDGE AND SKILLS IN DEEP GEOLOGICAL DISPOSAL –
Rákóczi hall – Ground floor	PROGRESS OF THE ITC – SCHOOL INITIATIVE N. A. Chapman (ITC-School of Underground Waste Storage and Disposal) – Switzerland, P. Marjatta Palmu (Posiva Oy) – Finland
	NUCLEAR KNOWLEDGE PRESERVATION, CONSOLIDATION, VALIDATION, DISSEMINATION AND TECHNOLOGY TRANSFER ACTIVITIES AT THE JRC U. Von Estorff, L. Debarberis, S. Abousahl, G. Janssens-Maenhout, P. Daures, W. Mondelaers, A. Fernandez Carretero (JRC Karlsruhe) – European Commission
	ACTIVE LEARNING – A NEW METHODOLOGY? – APPLICATION TO EDUCATION ON NULCEAR ENGINEERIG J. Rodenas (Universidad Politécnica de Valencia) – Spain
	EDUCATIONAL KNOWLEDGE RETENTION IN NUCLEAR RESEARCH INSTITUTES IN JAPAN, THE U.S. AND EUROPE K. Yanagisawa (JAEA) - Japan
15.30 – 16.00	Coffee Break
16.00 – 17.40	IAEA SESSION on Nuclear Knowledge Management
Zsolnay hall - Mezzanine	FACILITATING SUSTAINABLE EDUCATION AND TRAINING IN EXPECTATION OF NUCLEAR RENAISSANCE Y. Yanev (IAEA)
	ASIAN NETWORK FOR NUCLEAR EDUCATION TO DEVELOP HUMAN RESOURCES K. Hanamitsu (IAEA)
	THE ROLE OF UNIVERSITIES IN SUPPORTING NUCLEAR KNOWLEDGE TRANSFER TO THE NEXT GENERATION P. V. Duan (Hanoi University of Technology) – Vietnam
	KNOWLEDGE MANAGEMENT ASSIST VISITS TO NUCLEAR POWER PLANTS IN MEMBER STATES Z. Pasztory (IAEA)

	NEST <sup>et</sup>
20.00	<b>NESTet Conference Dinner</b> The NESTet 2008 Conference Dinner will take place at the Baroque Hall of Budapest Historical Museum situated in the Royal Palace of Castle of Buda.

Wednesday 7 May 2008	
8.30 – 10.10	Education & Training Chair: A. Schäfer (Institute for Safety and Reliability, ISaR) - Germany
Zsolnay hall - Mezzanine	NUCLEAR EDUCATION, TRAINING AND QUALIFICATION OF PERSONNEL WITHIN THE UNITED KINGDOM NAVAL NUCLEAR PROPULSION PROGRAM (NNPP) RJS Lockwood, PA Beeley (HMS Sultan) – UK
	NUCLEAR EDUCATION IN ARGENTIA: PAST, PRESENT AND FUTURE M.M. Sbaffoni, S. Harriague (CNEA) – Argentina
	INSTN: CEA'S INSTITUTION DEVOTED TO NUCLEAR EDUCATION AND TRAINING E. Ceccarelli, R. Lamy-Peronnet, S. Safieh (CEA, Saclay Research Center) – France
	CAPACITY BUILDING INITIATIVES FOR THE NUCLEAR SECTOR IN SOUTH AFRICA G. Quvile (NECSA) – South Africa
	THE USE OF MOBILE LEARNING TECHNOLOGY IN THE NUCLEAR SCIENCE AND ENGINEERING PROGRAMS AT THE UNIVERSITY OF ONTARIO INSTITUTE OF TECHNOLOGY G. Bereznai, B. Muirhead (University of Ontario) - Canada
10.10 - 10.40	Coffee Break
10.40 – 12.20	Science, Engineering and Technology in Education - Part III Chair: J. Dies (Universitat Politècnica de Catalunya) - Spain
Zsolnay hall - Mezzanine	INTERNATIONAL AND POSTGRADUATE EDUCATION AND TRAINING IN BUDAPEST C. Sükösd (Budapest University of Technology and Economics) – Hungary
	DEVELOPMENT OF NEW NUCLEAR ENGINEERING STUDY PROGRAMS AT KAUNAS UNIVERSITY OF TECHNOLOGY

E A	NEST <sup>et</sup>
	J. Gylys, S. Ziedelis, P. Ziliukas, A. Adomavicius (Kaunas University of Technology) – Lithuania
	THE ROLE OF UNIVERSITIES FOR THE RENAISSANCE OF NUCLEAR ENERGY IN SPAIN E. Minguez (Universidad Politecnica de Madrid) – Spain
	THE IMMOBILISATION SCIENCE LABORATORY – BUILDING ON PAST SUCCESS AND DEVELOPING FOR THE FUTURE J. Roberts (University of Sheffield) – UK
	REUSING LEGACY SIMULATION CODES FOR EDUCATION IN DISTRIBUTED SIMULATION ENVIRONMENTS A. Piater, T. Ionescu, W. Scheuermann (University of Stuttgart) - Germany
	∱Parallel Sessions↓
10.40 - 12.20	Radiation Protection
	Chair: J. van der Steen (NRG)
	RESULTS OF THE EUROPEAN NETWORK ON EDUCATION AND TRAINING IN
Rákóczi hall – Ground floor	RADIATION PROTECTION (ENETRAP) M. Coeck, P. Livolsi, S. Möbius, A. Schmitt-Hannig, A. Luciani, J. van der Steen, M. Marco, J. Stewart (SCK•CEN) – Belgium
	LONG-TERM PROGAM ON EDUCATION AND TRAINING OF THE PROFESSIONALS INVOLVED IN NUCLEAR SAFETY AND RADIOLOGICAL PROTECTION IN POLAND WITHIN THE FRAME OF EU PROJECT ,TRANSITION FACILITY' P. Krajewski, S. Chwaszczewski (Central Laboratory for Radiological Protection), B. Laurikaine (Institute of Atomic Energy) – Poland
	IAEA EDUCATION AND TRAINING IN RADIATION PROTECTION, TRANSPORT AND WASTE SAFETY- STATUS AND NEW DEVELOPMENTS FOR SUSTAINABILITY G. Sadagopan , K. Mrabit, J.Wheatley - IAEA
	SUBJECTS AND COURSES RELATED TO RADIATION PROTECTION IN HUNGARIAN UNIVERSITIES P. Zagyvai (BUTE INT), B. Kanyár (Semmelweis University Budapest), Z. Homonnay
	(Eötvös Loránd University Budapest) – Hungary
	TRANSDISCIPLINARY ASPECTS OF EDUCATION AND TRAINING IN RADIOLOGICAL PROTECTION G.Meskens, M. Coeck, (SCK•CEN) - Belgium
12.20 - 13.20	Lunch Break
13.20 - 15.00	Training Programmes for Industry – Part IV
	Chair: L. Cizelj (Jozef Stefan Institute)
Zsolnay hall - Mezzanine	<b>Keynote speech</b> - J. Llewellyn (National Skills Academy): Skills Challenges and the UK Solution
	COMPREHENSIVE EDUCATION AND TRAINING ACTIVITIES OF NUCLEAR TECHNOLOGY AND EDUCATION CENTER AT JAEA J. Sugimoto (NuTEC, JAEA) – Japan

E AV	NEST <sup>et</sup>
	SKILL RENEWAL IN THE NUCLEAR INDUSTRY M. Bonnet (EDF) – France ASSESSMENT OF THE 2007 WNU SUMMER INSTITUTE Y. Nam, P. Hauw, BJ. Min (World Nuclear University) – International IMPROVING PLANT PERFORMANCE THROUGH IMPROVED HUMAN PERFORMANCE R.P. Coe (Excelsior College) – USA
15.00 – 16.00	Closing Session Chair: P. Beeley (HMS Sultan)
16.00 - 16.30	Round table – conclusions of the chairpersons Coffee



### Monday 5 - Wednesday 7 May 2008

#### **Poster Session**

#### SCIENCE; ENGINEERING AND TECHNOLOGY IN EDUCATION

#### EUROPEAN MASTER IN MOLECULAR IMAGING – EMMI

E. Ceccarelli, R. Lamy-Peronnet, B. Tavitian (CEA, Saclay Research Center) - France

#### TAMING THE CHERNOBYL AVALANCHE

F. Reisch (Nuclear Power Safety, KTH, Royal Institute of Technology Stockholm) – Sweden

#### THE NUCLEONICA SCRIPTING LANGUAGE

R. Dreher, J. Magill (European Commission, Joint Research Centre) – Germany

#### USING SPREADSHEETS FOR PROMOTING STUDENT UNDERSTANDING OF LIGHT WATER REACTOR OPERATION

M. Österlund (Uppsala University) – Sweden

THE INSTITUTE FOR NUCLEAR RESEARCH PITESTI- AN IMPORTANT FACTOR FOR EDUCATION AND TRAINING IN ROMANIAN NUCLEAR FIELD

V. Balaceanu, M. Constantin (Institute for Nuclear Research Pitesti) - Romania

#### EXPERIMENTAL FACILITIES FOR EDUCATION AND TRAINING

#### CALCULATION OF THE NEUTRON FLUX, FUEL AND MODERATOR TEMPERATURE TRANSIENTS FOR RESEARCH REACTORS

F. Reisch (Nuclear Power Safety, KTH, Royal Institute of Technology Stockholm) - Sweden

#### INNOVATIVE APPROACH TO SIMULATE A RADIOACTIVE PLUME FOR TRAINING

Y. Kadmon, A. Broide, M. Ghelman, D. Tirosh (Nuclear Research Center – Negev) – Israel

# NUCLEAR TRAINING OPPORTUNITIES AT THE NEUTRON DATA MEASUREMENT FACILITIES OF THE JRC

W. Mondelaers, G. Lövestam, P. Siegler, S. Kopecky, P. Schillebeeckx, P. Rullhusen (EC-JRC-IRMM)

**TRAINING COURSES ON ISIS REACTOR AT SACLAY RESEARCH CENTER** B. Alvado, F. Foulon (CEA, Saclay Research Center) – France

#### A CROSS-SECTION OF THE TRAINING INFRASTRUCTURE AT THE PAKS NPP I. Kiss (Paks NPP Ltd.) – Hungary

#### RADIATION PROTECTION

**TRAINING POSSIBILITIES AT THE BELGIAN NUCLEAR RESEARCH CENTRE SCK•CEN** M. Coeck (Belgian Nuclear Research Centre SCK•CEN) – Belgium

#### THE ROLE OF EDUCATION IN KNOWLEDGE MANAGEMENT

NUCLEAR HUMAN CAPACITY BUILDING IN JORDAN N. Xoubi (Jordan University of Science and Technology) – Jordan

**RAPHAEL EUROCOURSE: AN E-LEARNING APPROACH FOR TIMELY DISTRIBUTED COURSES** Nicolai Kaufmann, Walter Scheuermann, Andreas Piater (University of Stuttgart) – Germany

<b>NUCLEAR EDUCATION FOR A RESTART</b> Carla Notari (Instituto de Tecnología Nuclear Dan Beninson; CNEA-UNSAM) - Argentina		
	Thursday 8 May 2008	
	Technical Tours	
8.20 – 17.30	Technical Visit 1: Paks Nuclear Power Plant	
8.20 – 17.30	Technical Visit 2: <i>Technical Visit 2 is a combination of two half day visits:</i> Visit of the Budapest Research Reactor at the Central Research Institute of Physics	
	The Training Reactor of the Budapest University of Technology and Economics	





## **European Nuclear Society**

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