

## Programme

### DAY 1

**28 March, Tuesday - Afternoon (13:30 – 18:00)**

<b>Day 1 – Opening plenary (Manhattan-Madison halls)</b>		
<b>Opening session – 13:30 – 15:30</b> Chair: M. Maschi (NUGENIA president)		
Welcome by <b>J.-P. Glatz (EC JRC)</b>		
Welcome by <b>M. Maschi (NUGENIA President)</b>		
<b>R. Schram (NRG)</b>	NRG nuclear research & Pallas reactor	<b>Keynotes</b>
<b>D. Iracane (NEA/OECD)</b>	OECD/NEA global vision on nuclear R&D needs	
<b>F. Carré (CEA)</b>	Challenges at stake for better integrating nuclear in a sustainable low-carbon future	
<b>Q&amp;A session</b>		
<b>Break 15:30 – 16:00</b>		
<b>NUGENIA and innovation in nuclear field – 16:00 – 18:00</b> Chair: Steve Napier (NUGENIA ExCom Chair)		
<b>J. Hämäläinen (VTT)</b>	SAFIR 2018 - Finnish Nuclear Research Programme	
<b>P. Morilhat (EDF)</b>	Digitalisation of NPPs	
<b>A. Wasylyk (WNA)</b>	Harmony initiative and CORDEL Working Group outcomes: convergence of regulatory and technical requirements	
<b>B. de Boeck (BELV)</b>	ETSON and NUGENIA activities	
<b>M. Garcia (ANDRA)</b>	Towards a European Joint Programme on Radioactive Waste Management and Disposal	
<b>Q&amp;A session</b>		
<i>NUGENIA Secretariat</i>	<i>Planning and expectations for Day 2</i>	
<b>End of Day 1</b>		
<b>20:00 Gala Dinner at Rosarium restaurant</b> <i>(see access map in the end of the programme)</i>		

## Technical sessions

### Day 2

**29 March, Wednesday (9:00 – 17:30)<sup>1</sup>**

<b>Technical session 1 - Improved safety and economics of plant operation</b>	
<i>Manhattan hall</i>	
<b>Moderator: P. Kral      Secretariat: B. Autrusson</b>	
<b>Session 1.1 Advanced modelling tools and optimisation of safety margins</b>	<b>9.00 - 10.45</b>
System sketches modelling: simulations to orient design	G. Simonini
McSAFE – High-Performance Monte Carlo Methods of Safety Demonstration	L. Mercatali
CORTEX – CORE monitoring Techniques and Experimental validation and demonstration	Ch. Demaziere
Validation of the TRIPOLI-4® Monte Carlo code for 3D Calculations of the Vessel Neutron Fluence	P. Mosca
Effects of noncondensable gases on Reactor Coolant System – development of NONCOND project idea	P. Kral
<b>Session 1.2 PSA role in safer and more economic operation of NPP's</b>	<b>11.15 - 13.00</b>
NARSIS - New Approach to Reactor Safety Improvements	E. Foerster
Risk informed safety margins characterization for improved plant safety and economics	V. Rychkov
Risk monitoring in Czech NPPs	J. Holy
HRA-in-RDM – Development, evaluation and application of methods for Human Reliability Analysis in the process of risk informed decision making	G. Johanson
<b>Lunch break 13:00 14:00</b>	
<b>Session 1.3 Major trends of severe accident research after Fukushima</b>	<b>14.00 - 15.30</b>
In Vessel Melt Retention Strategy –Status of work for VVER 1000 Units	J. Zdarek
IPRESCA – Integration of Pool scrubbing Research to Enhance Source-term Calculations	S. Gupta
USTA – Uncertainties of Source Term Assessments	L.E. Herranz Puebla
Verification and application of CET method to minimizing the radioactive leakage through fuel claddings of PWR/VVER	S. Pelykh
Needs of research for the design and implementation of improved instrumentation for severe accident management	J.P. van Dorsseleere
<b>Session 1.4 Innovative LWR design and technology</b>	<b>16.00 - 17.30</b>
Results from the OECD/PKL3-Experimental Program and Overview of the Current OECD/PKL4 Program	M. Pöhlmann
Current generation. To service the needs of existing plant, in regard to core physics design, fuel performance and safety analysis modelling requirements.	J. Lillington
Improvement of the PWR safety-efficiency balance by means of controlling the evolution of claddings microstructure influencing their hermeticity	S. Pelykh
TREND-SMR – Technical and Market Requirements for European Deployment of SMR	V. Tulkki
APASS - Improved safety and economics of plant operation	M. Pöhlmann
INSPIRE – Ideas for developing European technology on LWR-SMRs	P. Meloni

<sup>1</sup> The **coffee breaks** are envisaged flexibly from 10.30 – 11.30 in the morning and 15.30 – 16.30 in the afternoon and are joint for all technical sessions

<b>Technical session 2 - Long term safe operation and innovative materials</b> <i>Madison hall</i>	
<b>Moderators: E. Keim, J. Sharples                      Secretariat: O. Martin</b>	
<b>Session 2.1 Ageing of metallic and non-metallic components</b>	<b>9.00 - 10.30</b>
INCEFA-PLUS - INcreasing Safety in NUCLEAR POWER PLANTS by Covering gaps in Environmental Fatigue Assessment)	K. Mottershead
SOTERIA – Safe long-term operation of light water reactors	M. Berveiller
STRUMAT - Investigation of highly irradiated Reactor Pressure Vessel steels for safe Long Term Operation of LWRs	M. Kolluri
TeaM-CABLES: - European Tools and Methodologies for an efficient ageing management of nuclear power plant cables	G. Marque
<b>Session 2.2 Structural integrity evaluation methods, including NDE</b>	<b>11.00 – 13.00</b>
ATLAS+ - Advanced Structural Integrity Assessment Tools for Safe Long Term Operation	K. Wallin
ADVISE – Advanced Inspection of Complex Structures	A. Schumm
MAPAID - Modelling of Phased Array Ultrasonic Inspection of a Steam Generator Dissimilar Metal Weld	S. Szávai
NOMAD – NDE System for the inspection of operation-induced material degradation	M. Rabung
MEACTOS – Mitigation EAC Through Optimisation of Surface conditions	F. Perosanz
SCAP – Study of Concrete Ageing Processes during long term service in NPPs and GENUIN – Innovative geopolymers for nuclear and other industries	M. Ruscak
<b>Lunch break 13:00 14:00</b>	
<b>Session 2.3 Advanced fuels and materials, joint session with EERA-JPNM</b>	<b>14.00 – 17.00</b>
EERA-JPNM - coordinating research on materials for Gen IV systems: vision, challenges, roadmap, projects	L. Malerba
Assessment procedures for reactor components and materials: Basic R&D to Design Rules	K.F. Nilsson
Innovative cladding materials for generation IV reactors, commonalities with accident tolerant fuel cladding materials	M. Serrano
Research on nuclear fuels in the Joint Programme on Nuclear Materials	M. Bertolus
Emerging manufacturing techniques for high reliability NPP components: Opportunities, limitations and proposals	M. D'Souza-Mathew
IL TROVATORE – Innovative cladding materials for advanced accident-tolerant energy systems	K. Lambrinou
Introduction of TA6 project ideas	O. Martin

<b>Technical session 3: Nuclear Infrastructures &amp; Knowledge management &amp; Communication</b>	
<i>Minnesota hall</i>	
<b>Moderators: B. Chaumont      Secretariat: A. Al-Mazouzi</b>	
<b>Session 3.1 Nuclear public communication and engagement</b>	<b>9.00 - 10.30</b>
The IRSN Barometer on Risk Perception	B. Autrusson
Public Engagement in the Nuclear Sector : A UK and EU Perspective	C. Grundy
Developing an EU Toolkit for Public Engagement with Nuclear Issues	R. Holmes
ANNETTE project progress	L. Cizelj
<b>Session 3.2 Knowledge management &amp; databases</b>	<b>11.00 - 13.00</b>
ANSWERS software to lead the way in radiation transport modelling capabilities. Resources management, adopted approach in succession planning.	J. Lillington
European Commission JRC materials data management services in support of LTO	K.F. Nilsson
AGE60+ project activities on database needs	M. Serrano
How to enhance the safety and efficiency of the daily work through knowledge management processes?	D. Couvreur
<b>Lunch break 13:00 14:00</b>	
<b>Session 3.3 Optimisation of and existing and future requirements for experimental facilities</b>	<b>14.00 - 15.30</b>
Key-Role of European Material Testing Reactors in support to GEN2&3 LWR for qualification of innovative Fuel and Material: example of R&D program proposal within NUGENIA framework	G. Bignan
Modular test loop – the Next Generation Thermal Hydraulics Facility at LUT	J. Hyvärinen
The IRSN experimental platforms in support of the assessment of Nuclear Safety	F. Barré
<b>Session 3.4 Education &amp; training</b>	<b>16.00 - 17.30</b>
ENEN+ project introduction	L. Cizelj
Education and training activities of the Belgian SCK•CEN Academy for Nuclear Science and Technology	N. Kesteloot
Education and Training for the NPP Personnel Using Virtual and Augmented Reality Technology	R. Beleznai
The Severe Accident Phenomenology Short Course (SAP): 12 years of excellence for dissemination of Severe Accident knowledge at international level	J.P. van Dorsselaere

**DAY 3**  
**30 March, Thursday**  
**Morning session (9:00 – 12:30)**

<b>Day 3 – Closing plenary (Manhattan-Madison halls)</b>	
<b>NUGENIA in broader context - 9.00 – 10.30</b> Chair: S. Helynen (NUGENIA Vice President)	
Innovation and R&D for new reactor concepts	<b>L. Amice (EDF)</b>
New build – analysis capability to core physics design, fuel performance and safety analysis modelling requirements	<b>J. Lillington (AMECFW)</b>
Opportunities enabled by the SUSEN project for the nuclear safety and development community	<b>M. Ruscak (CVR)</b>
EC RTD EURATOM Programme	<b>R. Lecbychova (EC RTD)</b>
<b>Q&amp;A session</b>	
<b>Break 10.30 – 11.00</b>	
<b>Feedback from technical session - 11.00 – 12.00</b>	
Technical session 1 - Improved safety and economics of plant operation	P. Kral (UJV)
Technical session 2 - Long term safe operation	E. Keim (AREVA-G)
Technical session 3 - Infrastructures & Knowledge management & Nuclear communication	B. Chaumont (IRSN)
<b>NUGENIA activities - 12.00 – 12.30</b>	
NUGENIA services	A. Al-Mazouzi (NUGENIA)
<b>Q&amp;A session</b> Closing remarks	
<b>NUGENIA Forum Conclusion</b>	
<b>End of Day 3</b> <b>Lunch 12:30 - 13:30</b>	
<i>Optional: New NUGENIA Executive Committee working lunch (reserved to ExCom members, TA leaders and Secretariat members)</i>	

**Afternoon optional open technical areas sessions (14:00 – 17:00)**

**TA5 (Fuel Development, Spent Fuel Management, Waste Management and Decommissioning) meeting programme – *Columbus/Livingstone***

Topics for discussion	Moderator/Speakers
<b>Welcome &amp; Introduction</b>	S. Napier
<b>TA organisational issues</b> - Election of TA and Sub Area leaders	S. Napier
<b>Review of running projects and new project ideas linked to TA5 and discussion on their way forward</b> - Fuels and Cladding - Waste Management - Spent fuel storage and management	All
<b>International Activities, Conferences &amp; Workshops with TA5 relevance</b>	All
<b>Interaction with EERA-JPNM – possible joint session with TA6</b>	TA5 +TA6
<b>AOB and next meeting</b>	All

**TA6 (Innovative LWR Design & Technology) meeting programme – *Minnesota hall***

Topics for discussion	Moderator/Speakers
<b>Welcome &amp; Introduction</b>	O. Martin
<b>TA organisational issues</b> - Election of TA and confirmation of Sub Area leaders (SA6.5)	O. Martin
<b>Review of project proposals and new project ideas linked to TA6 and discussion on their way forward</b> - TREND-SMR & others on SMRs, - E-SMART, - PREMANU & others on nuclear materials, - ACCEPT & public acceptance	All
<b>International Activities, Conferences &amp; Workshops with TA5 relevance (ISSCWR-8, etc.)</b>	All
<b>Interaction with EERA-JPNM – possible joint session with TA5</b>	TA6 + TA5
<b>AOB and next meeting</b>	All

**TA1 (Plant Safety and Risk Assessment) meeting programme – Montana hall**

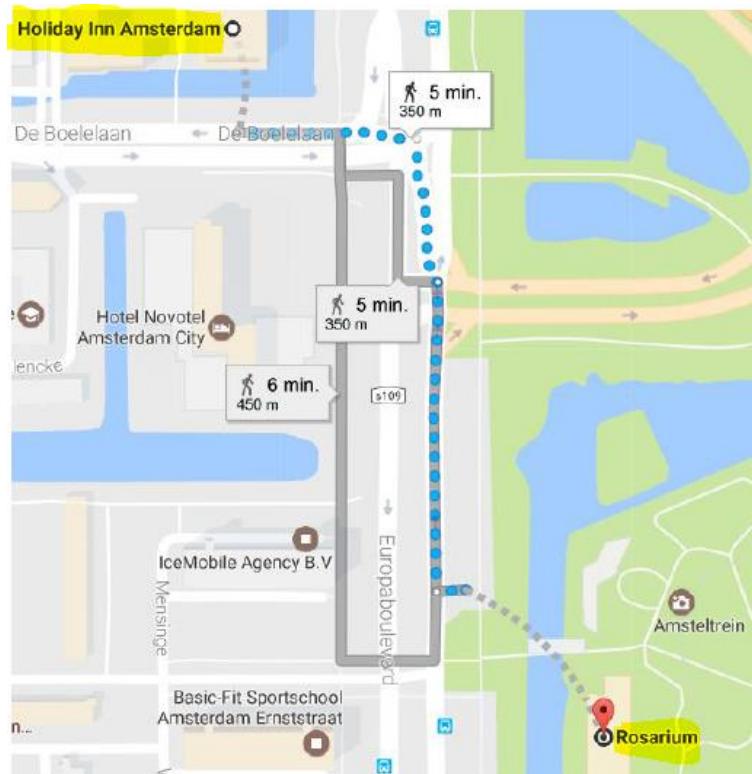
Topics for discussion	Moderator / Speakers
<b>Welcome &amp; Introduction</b>	P. Kral
<b>TA organisational issues (teleconference meetings, SA leaders, etc.)</b>	P. Kral
<b>Review of running projects and new project ideas linked to TA1 and discussion on their way forward</b> <ul style="list-style-type: none"> <li>- H2020 Euratom Call (APASS, NARSIS, SOCRATES, NONCOND, HRA-in-RDM, AMENOFIS, ENES, McSAFE)</li> <li>- NUGENIA+ pilot call (DEFI-PROSAFE, INTEGRID, SPH-2PHASEFLOW)</li> <li>- FP7 Euratom (MOTHER, NURESAFE, ASAMPSA-E)</li> <li>- NOIP project ideas (NONCOND, NEW(HAM), INTEGRID, ENES, IDPSA, BEPILOT, SAMAN, COUPH, VR_PLATFORM)</li> </ul>	All
<b>Dissemination activities, Conferences &amp; Workshops with TA1 relevance</b> Conference papers, publications, position papers, etc.	All
<b>NUGENIA general context</b> Interactions with IAEA, OECD, EPRI, national stakeholders (via dedicated ExCom sessions), SNETP	All
<b>International projects, standards and guidelines</b> OECD/NEA PKL4 projects, PREMIUM project and its follow-up, Proposed changes in regulations for LOCA and RIA in USA (\$50.46), Preparation of update of IAEA SSR-2/1	All
<b>Preparatory work for the NUGENIA Roadmap revision (2017-2018)</b>	All
<b>AOB and next meeting</b>	All

**Technical meeting of the Jules Horowitz Reactor – restricted to JHR Material Working Group Members – Lincoln meeting room**

Topics for discussion	Moderator/Speakers
<b>Welcome &amp; Introduction</b>	G. Bignan
<b>Investigation of HFR capabilities to perform experiments answering scientific needs on material damages expressed by the JHR Material Working Group</b>	All

## **Gala Dinner**

### **ROSARIUM Restaurant**



*Walking itinerary (5 minutes)*

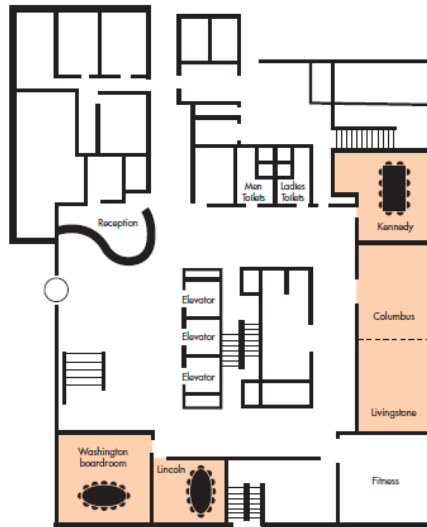




## Meeting rooms plan

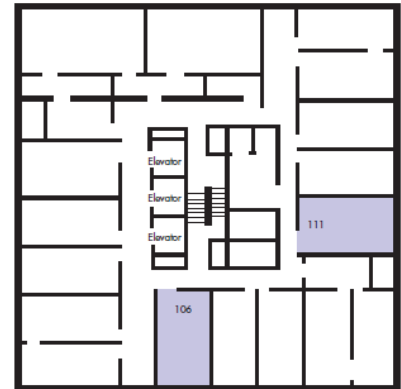
### Ground Floor

Kennedy  
Columbus  
Livingstone  
Washington  
Lincoln



### First Floor

Syndicate  
Rooms  
106 & 111



### Mezzanine Floor

Montana  
Minnesota  
Madison  
Manhattan



Emergency Exit =