



1st French-Czech « Barrande» Nuclear Research Workshop

- *Advancing Science through Bilateral Collaborations* -

Organized by: Academy of Sciences, ČVUT, CENEN and the French Embassy in
Czech Republic

April 16th-17th, 2018

Liblice, Czech Republic

Main program

Sunday, April 15th, 2018

17:00 Transport from Prague to Liblice (chartered bus)
19:00 Buffet dinner in Liblice (chartered bus)

Monday, April 16th, 2018

09:00-12:00 Presentations by Czech and French researchers of their teams and “hot topics”
[15' each]
12:30-13:30 Lunch
13:30-17:00 Presentations by Czech and French researchers of their teams and “hot topics”
[15' each]
19:00 Wine degustation and dinner



Tuesday, April 17th, 2018

- 09:00-12:00 Presentations by Czech and French researchers of their teams and “hot topics”
[15' each]
12:00-12:30 Wrap-up session
12:30 Lunch
13:30 Transport from Liblice to Prague (chartered bus)

Detailed program

Monday, April 16th, 2018

9:00 Introduction

9:10 Tomáš Melichar (RC Řež): R&D Activities at Research centre Rez

9:30 Evžen Losa (FNSPE CTU): Nuclear engineering training using FNSPE CTU nuclear reactor.

Topic: Fundamental research (usage of lasers and accelerators)

9:50 Jaroslav Nejdil (ELI): Laser-driven X-ray and gamma ray sources at ELI Beamlines

10:10 Kim Ta Phuoc (PARITECH): X-ray sources from relativistic laser plasma interaction

10:30 **Coffee break**

10:50 Jaromír Mrázek (NPI CAS Řež): Project SPIRAL2-CZ and collaboration with GANIL/SPIRAL2

11:10 Marek Lewitowicz (GANIL): GANIL-SPIRAL2 and the Czech - French collaboration

Topic: Nuclear analytical methods for material science

11:30 Jean-Marc Greneche (IMMM): Mössbauer spectrometry: a nuclear resonant tool to investigate materials

11:50 Marcel Miglierini (FNSPE CTU): Materials research of alloys and steels by Mossbauer spectrometry

12:30 – 14:00 **Lunch**

14:00 Alena Zavadilová ((FNSPE CTU): Time resolved laser induced spectroscopy

Topic: Radioactivity, its biological effects and nuclear chemistry

14:20 Vincent Breton (IN2P3): The role of natural radioactivity in the evolution of life

14:40 Marie Davídková (NPI CAS Řež): Biological effects of low doses of ionizing radiation

15:00 Jan Uhlíř, Martin Mareček (RC Řež): Current status of development of Molten Salt Reactor technology and collaboration with French institutions.

15:20 **Coffee break**

Topic: Nuclear Instrumentation

15:50 Hana Burešová (NUVIA): Nuvia CZ – CEA List collaboration: from R&D to new, commercialized plastic scintillators for radiation detection

16:10 Matthieu Hamel (CEA): Nuvia CZ – CEA List collaboration: from R&D to new, commercialized plastic scintillators for radiation detection

16:30 Vincent Schoepff (CEA): Nanopix, a miniaturized gamma camera

16:50 Petr Burian, Vjačeslav Georgiev, Pavel Broulím (FEE UWB): Development of physics instrumentation at FEE, University of West Bohemia

17:10 Guillaume Amoyal (CEA): Development of an hybrid camera for nuclear industrial applications.

19:00 **Wine degustation and dinner**

Tuesday, April 17th, 2018

Topic: Fundamental research (laser and plasma physics)

9:00 Francois Amiranoff (ELI): Apollon: a multi-PW laser facility for fundamental research and applications

9:20 Stefan Weber (ELI): P3: an installation for high-energy density plasma physics & ultra-high intensity laser-plasma interaction at ELI-Beamlines

Topic: Nuclear technologies

9:40 Jan Škarohlíd (FME CTU): Energy Storage/Nuclear fuel cladding with enhanced accident tolerance

10:00 Martin Ševeček (FNSPE CTU): Nuclear fuel cladding with enhanced accident tolerance

10:20 **Coffee break**

10:50 Fabien Crouzet (EDF)

11:10 Jean-François Vidal (CEA): Scientific Challenges in Reactor Design and Physics for

the next Decade

11:30 Ladislav Bělovský (UJV): Project ALLEGRO V4G4

11:50 – 12:30 **Wrap-up session**

12:30 – 13:30 **Lunch**

13:30 **Transport from Liblice to Prague (chartered bus)**

