

IP-EUROTRANS Internal Training Course ITC5:

"FUELS AND STRUCTURAL REACTOR MATERIALS"

Date: 26th -29th November 2007

Organizer: Prof. Ing. Giuseppe Forasassi

Place: Department of Mechanical, Nuclear and Production Engineering
Engineering Faculty
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Preliminary programme:

- Day 1: Monday 26th November 2007

09:00 Welcome (Profs. G. Forasassi, E. Vitale Pisa Eng. Faculty Dean, and M. Giot, ENEN).

09:30 Course organization and program (Prof. G. Forasassi, Pisa Univ.).

09:50 ADS concept and IP-EUROTRANS (DM1-Design and DM3-AFTRA Tech. Domains) and ELSY introduction. Presentation of experimental ADS MYRRHA and European Facility for Industrial Transmuter (EFIT) (Dr. Didier De Bruyn, SCK•CEN).

10:40 Coffee break

11:00 ADS core layout, possible geometries, structures, matrices, solutions analysis (Dr. Didier De Bruyn, SCK•CEN).

12:30 Lunch

14:00 Introduction to physical problems and design of sub critical systems cores: open questions (Prof. P. Ravetto, Polit. Univ. of Torino).

15:30 Coffee break

16:00 Isotopic composition and design of ADS cores for minor actinides and long life radioactive wastes transmutation, studies and tests (Dr M. Carta, ENEA Casaccia Centre).

17.30 Day 1 lectures end.

18:00 Welcome reception.

- Day 2: Tuesday 27th November 2007

09:00 Innovative fuels for LMR and LWR Gen IV systems. (Dr Fortunato Vettrai, ENEA Bologna Centre)

10:30 Coffee break

11:00 Structural materials behaviour under fast n fluxes, in Pb & Pb-Bi environments: experience and open questions (Prof. S. Lanza, Pisa Univ.).

12:30 Lunch

14:00 Structural materials behaviour under fast n fluxes, in Pb & Pb-Bi environments: experience and open questions (Dr G. Benamati, ENEA Brasimone Centre).

15:30 Coffee break

16:00 T-Hydraulics and CFD codes analyses of complex systems in HLM flows. (Profs. F. Oriolo, W. Ambrosini, Pisa Univ.).

17.30 Day 2 lectures end.

- Day 3: Wednesday 28th November 2007

09:00 Student presentation 1

09:30 Student presentation 2

10:00 Student presentation 3

10:30 Coffee break

10:50 Student presentation 4

11:20 Student presentation 5

11:50 1st Seminar: ADS nuclear and materials test experience (Dr. M. Carta, ENEA Casaccia Centre).

12:50 Lunch

14:00 2nd Seminar: Coolant – structure interaction in HLM reactors in normal/accidental conditions (Prof. D. Aquaro, Pisa Univ.).

15:00 Student presentation 6

15:30 Student presentation 7

16:00 Coffee break

16:20 Student presentation 8

16:50 Student presentation 9

17:20 Student presentation 10

19.30 Workshop Dinner

- Day 4: Thursday 29th September

09:00 General discussion: Panel discussion with participation of Lectures and Experts

10:00 Course evaluation by students

10:30 Coffee break

11:00 Examination of students (whenever required)

12:30 Adjourn

WHO SHOULD ATTEND?

This course, the 5th of a series of ten courses organised over a period of 4 years, is primarily designed for PhD students and Postdocs involved in the IP EUROTRANS, and accessible as well to those involved in Research projects (EC and national) related to IV Gen Reactors. The number of participants is limited to about 20 participants (the Course will be held for a minimum student number of 10).

An active participation in general of the attendees is required. Therefore, when applying, the participants should submit a short abstract (15 to 20 lines) of a presentation related to their previous work and curriculum (at this stage). A small grant, distributed by the organization, will help the students whose presentation has been selected by the organizer, to finance their accommodation expenditures.

HOW TO APPLY?

Please fill in the attached application form and send it electronically to:

Mrs. Nadia NOWACKI
Seminar Organization Secretariat
The European Nuclear Education Network Association (ENEN)
Commissariat à l'Energie Atomique / Saclay
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DEADLINE FOR APPLICATION:

Application should be mailed before 1st November 2007.

Applicants will be informed of their acceptance on 12th November, the latest.

APPLICATION FORM

Name:

First Name:

Date and place of birth:

Institution:

Present status (PhD student, assistant...)

Link with IP-EUROTRANS, or another project:

Address for further contacts:

Arrival and departure dates:

Title of proposed presentation:

Annex: abstract of the proposed presentation