

## INTERNAL INFORMATION BULLETIN OF THE CHERNE NETWORK



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## **NEXT ACTIVITY :**

## **13TH CHERNE WORKSHOP (COVILHA)**

The Annual Workshop is **open to non-members** interested in CHERNE network and who want present their own activities and proposals.

The subjects of interest to the Workshop encompass education and research in all areas of Nuclear and Radiological Engineering, including but not limited to:

- Radiological Protection
- Radiation and Radioisotope Applications to Industry, Medicine and Research
- Environmental Radioactivity
- Radiation Measurements
- Radiation transport and Monte Carlo methods
- Nuclear Chemistry
- Reactor Physics: Neutronics, Nuclear Reactors
- Nuclear Safety
- Nuclear Fuel Cycle and Materials
- Risk Analysis applied to Nuclear Engineering

Particularly meaningful to the scope of CHERNE are issues relating to the organization, in the framework of the Bologna declaration, of the career of students majoring in nuclear/radiological engineering and/or physics.

### Deadline reminder :

Abstract submission - April 21st 2017 Regular registration - May 3rd 2017 Late registration - Anytime after May 3rd

### **PREVIOUS ACTIVITIES :**

### **MERIBEL (BRUXELLES)**

# MEASUREMENT OF ENVIRONMENTAL RADIOACTIVITY IN BELGIUM

This training course was organized in the frame of the "Blended learning in radiation protection and radioecology" European program. It was held from 19th to 26th of April 2017 in Brussels and was organized by Uhasselt and ISIB. Sixteen students from seven universities of the CHERNE network participated in this course.

#### MERiBel is focusing on the environmental radioactivity.

The first evening, we had lectures at FANC (Federal Agency for Nuclear Control)and a nice welcome drink. We begun the course with a fieldtrip organized at Demerbroeken, a place known as being contaminated by phosphate industry. We searched for hotspot, performed dose rate measurements and collected soil samples to be measured in the lab. We also attempted to collect What do the students think about our CHERNE courses ?

« These intensive courses are an amazing opportunity for future engineers to learn how to work in an international environment, both on the technical and human aspects. This allows you to meet people from all over Europe, and learn their lifestyle, to discover common points and differences between countries.

In a time where companies are looking actively for international experience when recruiting young engineers, this gives you a unique background and must be supported actively »

soil gas samples to measure Radon. Back in the laboratory, the students prepared the samples of soil to perform gamma spectrometry and each group worked on his own task.



Different issues were proposed: measurement of Radon in soil air with Lucas cells, gamma spectrometry on Demerbroeken soil samples and comparison with non contaminated soil, in situ gamma spectrometry allowing to compare the situation in Demerbroeken and Brussels, assessment of Radon in dwelling air after trapping it with charcoal canister. We were also interested in the measurement of natural radioactivity

in building material and we compared the radioactivity of different pavements, in front of the Royal Palace and next to ISIB building.

The aim was to illustrate the variability of the activity in different types of granite.

The students had to report on their work and each group had to present their results at the end of the course. This evaluation allowed to acquire 2 ECTS.

We had a delicious dinner at "Chez Léon", a typical restaurant in Brussels. There was a nice atmosphere along the week and the cooperation between the students was great and efficient.

## **TRA (VALENCIA)**

### **TRAINING ON RISK ASSESSMENT**

This course was organised at UPV in february 2017. During five days, students had lectures on

### Probabilistic Safety Analysis – Levels 1 & 2

and applied the theory to some examples and a final exercise : a large break loss of coolant accident. This exercise was presented by each group of students and great jobs were performed.



"The TRA course in Valencia is completely different from all you can learn in usual lectures. It allows you to understand all the work behind safety analysis and how complex it can be, by a whole-week unique practical exercise. The fact that it is organized in an huge international university is a big plus "



Final rush before the students' presentations (and after the famous paella)

### CONTEST

### Where was this picture taken ?

(A clue is included somewhere in the picture...)



Any suggestion ?

Please, send your answer to your favorite editors...

A future evolution of the CHERNE logo?

## This newsletter is yours !

Do not hesitate to send short communications, related to the CHERNE objectives, which you believe interesting for the other members.

Please, send your text to both Agnès and Caroline.

## **CONTACT US**

Any suggestion, comment or communication ? Join us by mail or e-mail...

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