

IL CCR INVITA 2005

Amphitheatre

9.30 - 10.00

The VOICE Project - for reducing the communication barriers

G. Pirelli

Talk and see on the screen the words just said? Game or science fiction for many, a dream and a need for others! Automatic subtitles of conferences and school or university lessons are a great help for people with hearing impairment. A higher diffusion of subtitles during television broadcasts and film would significantly contribute to reduction of linguistic barriers of all citizens of an ever growing Europe.

Seed the pavement with sensors, able to communicate with a mobile telephone's software of a blind user, in order to ensure following a safe path: an interesting idea, that may be extended to other useful information, for tourists and all users!

<http://voice.jrc.it>

10.00 - 10.30

VGAS: Lifestyles and Climate Change

A. Guimaraes Pereira - P. Cicceri

GAS is an interactive tool that relates lifestyles to emissions of three greenhouse gases, carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). It makes the connection between individual lifestyles and greenhouse gas emissions (those covered by the Kyoto Protocol), gauging personal contributions to global emissions. VGAS tries to help the user to answer the question "how does my lifestyle relate to the global problem?", as well as "what options are there to reduce my contribution to the global problem?" by playing with alternative lifestyles, exploring trade-offs of new choices, etc. Its highly interactive and intuitive user interface allow it to be used by ordinary citizens, NGOs and other stakeholders who wish to investigate their contributions to a global issue and explore alternative pathways to reduce their burden. The software is available freely upon request.

<http://alba.jrc.it/vgas>

10.30 - 11.00

The surveillance of radioactivity in the environment around the JRC Ispra

C. Osimani - F. D'Alberti

This presentation will introduce the reasons, organisation, instruments and results of the Service for the surveillance of radioactivity in the environment around the JRC Ispra Site. This Service has been in operation for more than forty years. The objective is to evaluate the radiological impact on the population and the environment from the maintenance and decommissioning activities of the Site research nuclear installations.

11.00-11.30

The heritage of Marie-Curie

Greet Maenhout

Ninety nine years ago Marie Curie gave her first physics lecture at the Sorbonne in Paris, discussing the new material property she discovered, radioactivity, which is the spontaneous emission of a stream of particles or electromagnetic rays from unstable atoms. In 1941 Enrico Fermi built the first nuclear fission reactor in 1941. Beside nuclear energy other civil applications exist in process industry and medicine. To explore all those, the European Commission founded under the Treaty of Rome the Joint Research Centre (JRC). Recently the park of 146 nuclear power plants in the European Community has been extended with another 27 power reactors from the candidate countries and with a new plant under construction in Finland. The JRC provides research and technical support in the field of nuclear safety and safeguards.

11.30 -12.00

Safety of food packaging and consumer goods

C. Simoneau

Ensuring the safety of food packaging and toys. Most food marketed in the western world are packaged. Various materials and ingredients can be used for food packaging as well as consumer goods such as toys as long as they do not pose health concerns to consumers. Important aspects of food safety and consumer protection related food packaging and toys will be presented.

12.00 - 12.30

Electronic identification of animals: IDEA project

G. Fiore

In light of recent food crises (BSE, Foot & Mouth, etc), the importance of being able to trace livestock, and indeed meat, has gained increased impetus. The JRC is helping to develop efficient and reliable identification systems that span an animal's entire life cycle, from birth to the final meat and carcass. So how do these 'new' identification systems work? A radio frequency based transponder (electronic identifier) is implanted in the animal and this enables one to read the animal's identity thereby providing a useful method for livestock recording and control. One system being developed was used for the electronic identification of 1,000,000 animals including sheep, goats, cattle and buffalos in six different EU Countries, i.e. the IDEA project. Based on the positive results from this project, a new Council regulation (No. 21/2004) was issued for the individual identification of sheep and goats.



Amphitheatre

14.00 - 14.30

How green is our planet?

A. Belward

From outer-space planet Earth appears as a blue orb. But is Earth green or blue? The oceans and seas cover more than two-thirds of the surface, yet the land is where most of us live, most of the time, it has a profound effect on climate and provides us with food, fuel and the fibre used for everything from paper to building the room you stand in now. But it is surprising how little we actually know about just what covers planet Earth. By the end of the 18th Century explorers had mapped the land masses, but not the interiors; Satellite images now allow us to fill this knowledge gap. This seminar explains why land cover is important, shows how satellites can help and provides a unique tour round planet Earth.

00.00 - 00.00

The satellite: an eye on forest fires

J-M Gregoire

The satellite systems currently available allow us to observe the Earth surface at any time and at any location. It's then possible to detect vegetation fires at any point on the globe and to assess their impact on our environment and resources. Fires affect each year some 4 to 5 millions km², reduce deeply air quality in many regions, contribute to the regular decrease of biological diversity and reduce both qualitatively and quantitatively the natural resources available for development. In spite of that, the large majority of fires are intentionally set by human beings.

15.00-15.30

Genetically Modified Food

G. Van den Eede

You cannot see, smell or taste, if food has been genetically modified or not. However, EU consumers demand the right to know if the food they eat has been modified - hence food and feed ingredients containing GMOs in excess of 0.9% must be labelled. Detecting and measuring genetic modification is not easy and the JRC plays a pivotal role by providing reference materials and evaluating reference measurements. The JRC chairs the European Network of GMO Laboratories (75 national control laboratories representing all 25 EU members) and in 2004 it has been appointed as Community Reference Laboratory for GM food and feed. The role of the JRC is to make sure that methods exist to verify if the labels on products are correct and that products can be traced from the farm to the table, and to provide expert advice in cases of litigation. A video on JRC's activities on GMOs is available and mock-up reference materials may also be provided.

Beginning times: 15.00, 15.30, 16.00, 16.30

Botanic Promenade

G. Seufert

The JRC invites the visitors to a botanic tour inside its perimeter, in which several tree species and the greenhouse laboratory will be shown in order to explain their environmental and research values. This event represents a first step to the botanic park the JRC intends to create (il "Percorso delle Querce") with more than 40 different oak species coming from all over the world.

Guided groups: 20 persons

Departure / arrival point: Conference Hall

15.30 - 16.00

Climate is changing: what do we do?

F. Raes

In the presentation we will show how climate works, how life depends on it, how we are changing it and what the technical and political options are to maintain the Earth's climate favourable for its future nine billion inhabitants. We will show how the JRC is contributing to this challenge.

16.00 - 16.30

Cybersecurity

N. Mitchison

The citizen who links a computer to the Internet and goes exploring in "cyber-space" has to face up to certain dangers. Some of these dangers, such as receiving viruses, are specific to computers; others are familiar from the offline world, such as meeting up with con-men, or being pestered by unwanted advertising; and some, while possible in the offline world, seem to be enormously facilitated by computer connectivity, such as having credit card numbers or sensitive personal information stolen. Moreover, there are no national boundaries in cyber-space, which means that protection of the citizen and the fight against cyber-crime have to be co-ordinated internationally - therefore involving the European Commission and the JRC. A member of the cybersecurity group will give a short presentation of the cyber-security activities of the JRC, explaining their importance for public policy

<http://biotech.jrc.it>