

The Atom Unexplored”

Hidden Potential of the cutting-edge research on nuclear technology

May 4th, 2012

*Sala Consiglio di Facoltà, Politecnico di Torino
corso Duca degli Abruzzi, 24 -Torino (Italy)*

“The Atom Unexplored - Hidden Potentials of the cutting-edge research on nuclear technology” is a one day workshop promoted by the Cultural Association “Solidarietà e Sviluppo” and the INRiM (the Italian National Institute for Metrological Research), in collaboration with the Politecnico di Torino (Technical University of Turin) and Ansaldo Nucleare.

During the last year, many events radically changed the policy of power production. While the cost of energy keeps rising, the current challenges in this field seem quite far to be faced by the actual technologies. Moreover the accident of Fukushima has dramatically reduced the confidence in the sustainability of nuclear energy.

Recently, international scenario has seen a renewed interest for research on innovative technologies for nuclear energy generation. In addition, current activities aiming to the improvement of sustainability and safety of current reactors’ technology entered the development phase, making a significant step toward the accomplishment of the programmes.

This improved attention led to the conception of the International Conference “The Atom Unexplored”, aiming for three main goals: identify the most promising alternatives to fossil fuel and current nuclear reactors; inform the scientific, institutional and industrial community about the current advancements and future initiatives in the field of innovative nuclear technologies for energy production; foster the discussion about the relevant workshop topics among the interested stakeholders.

Two issues are addressed in two different sessions:

- o Session I – Low Energy Nuclear Reactions, focused on the new scientific results currently achieved in the novel field of Piezo-, Lattice Assisted Nuclear Reactions, and of Cold Fusion in general;
- o Session II – High Energy Nuclear Reactions, concerns the deployment and the critical elements of the promising technologies already developed, such as nuclear fusion and the new generation reactors.

The scientific contributions from the speakers will help the participants to understand if there is any unexploited potential in both technologies which could open up to new opportunities for the future of energy production, and if such technologies will be able to gain the “willingness to pay” required to be socially accepted.

The Organizing Committee, supported by a Scientific Committee including qualified members from the research and industry community, Has realized the conference by a specific selection of the panelists as well as the invited speakers among the most relevant representatives of the international academic world with a worldwide known experience in the session topics. The subject of each presentation has been proposed to and discussed with the speaker. After the speakers’ presentations, a selected “discussant” will conclude the session resuming the main results and showing their possible impacts on future scenarios.

The event will take place in the “Sala del Consiglio di Facoltà” of the Politecnico di Torino, corso Duca degli Abruzzi, 24 in Torino (Italy) on May 4th, 2012. A wide audience, coming from the institutional world, the industry and the scientific community is expected to participate. The initiative is supported by Regione Piemonte.

Solidarietà e Sviluppo is a non-profit cultural association, founded in Rome in 2002, made by a group of manager from public and private institutions aiming at creating a connection between politics and society. The association has realized many humanitarian initiatives and, in parallel, has realized cultural and scientific events concerning cutting-edge research on several Hi-Tech topics (see www.solidarieta-sviluppo.org).

Istituto Nazionale di Ricerca Metrologica (INRIM) is a public body under the jurisdiction of the Ministry of Education, Universities and Research. INRIM is devoted to the study of the science of measurements and to research into materials; furthermore it works on developing innovative technologies and devices (see www.inrim.it).