Eni Award 2013 - The Award Ceremony at the Quirinale

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Rome, – The award ceremony for the Eni Award 2013 will be held today at the Quirinale, and attended by the President of the Republic, Giorgio Napolitano, the Chairman of Eni, Giuseppe Recchi and the CEO of Eni, Paolo Scaroni. Over the years, the award, first introduced in 2007, has become internationally recognised for research in the fields of energy and environmental technology. The Eni Award aims to develop a better use of energy sources and to encourage new generations of researchers to engage in such fields, highlighting the emphasis Eni has placed on scientific research and sustainability issues.

The Scientific Award Committee this year has 25 members, including Nobel Prize winner Sir Harold Kroto, as well as university deans, researchers and scientists from the most respected universities and research centres in the world. Past awards have been presented to researchers from 10 different countries: France, Germany, Italy, Norway, Netherlands, Spain, United States, Canada, India and Australia.

Thousands of researchers from around the world have been involved and presented their research work, and thousands more have given their assistance or been members of various assessment committees. The participating researchers have included 23 Nobel Prize winners. For the 2013 edition, 1155 applications were received.

This year’s award winners are from the new frontiers of hydrocarbon, renewable and non-conventional energy, as well as environmental protection research, making their debut in research.

The “New Frontiers of Hydrocarbons” award in the Downstream category was awarded to Rajamani Krishna, a professor at Amsterdam University’s Van’t Hoff Institute for Molecular Sciences. Professor Krishna’s research improves the processes of gas-purification and separation through the understanding of fundamental physical and chemical phenomena at molecular and microscopic level.

The award in the Upstream category goes to Philip G. Jessop, professor of Inorganic Chemistry and Canada Research Chair in Green Chemistry in the Chemistry Department at Queen’s University in Kingston (Ontario). Professor Jessop discovered a way to engineer on-demand intelligent solvents’ properties, using chemical compounds as switches. In this way it is possible to separate oil and water, thus filtering water contaminated with hydrocarbons, without using organic solvents and allowing for a more environmentally friendly process.

The “Renewable and Non-conventional Energy” award was presented ex aequo to Frances Arnold, Professor of Chemical Engineering, Biochemistry and Bioengineering at the California Institute of Technology, and James Liao, Parson Foundation Professor and head of the Chemical and Biomolecular Engineering Department at the University of California. Professor Arnold has been recognised, together with her research team, for the creation of breakthrough methods for engineering biocatalysts for high
selectivity production of fuels and chemicals from biomasses. Professor Liao has selected microorganisms for converting wood cellulose biomass, waste proteins and carbon dioxide into useful chemical compounds and fuels using modified forms of E. coli bacteria, achieving high conversion and energy efficiency.

Roberto Danovaro, professor of Biology and Marine Ecology at the Polytechnic University of the Marches, was presented with the “Protection of the Environment” award. Professor Danovaro’s research investigates the crucial role played by viruses in maintaining the balance of the marine ecosystem and controlling the capacity to absorb CO2. His team’s ground-breaking studies on the changes taking place in the environment today, suggest that marine viruses can reduce carbon dioxide accumulation in marine ecosystems and have the potential to reduce the impact of climate change through complex feedback mechanisms.

The two “Debut in Research” awards for researchers under 30 in Italian universities were presented to Matteo Cargnello, a graduate of Trieste University who is currently a visiting student at the University of Pennsylvania, and Damiano Genovese, a postdoctoral researcher with the Photochemical Nanosciences Group at Bologna University. Dr. Cargnello’s research focuses on the synthesis of precise nanostructures, providing active and stable catalysts for the sustainable production of hydrogen by photo-catalysis, for fuel cells electricity generation and methane emission control. Dr. Genovese analyzed the supra-molecular approach for the creation of fluorescent nano-structures to be applied in various sectors of great economic and social relevance, such as medical diagnosis, molecular biology and solar energy conversion.

Yesterday, the winners of the Eni Award started a series of Lectio Magistralis in major Italian universities. After Phillip G. Jessop, James C. Liao and Damian Genovese presented at the University of Naples, Federico II, Rajamani Krishna and Matteo Cargnello at the University of Bologna and Roberto Danovaro at the Marche University Campus of Ravenna, while tomorrow will see Frances H. Arnold speak at the La Sapienza University in Rome.