

Eni Award: winners named for 2024 edition

The Eni Award 2024 will be presented on October 15 in Rome, during an official ceremony to be held at the Quirinale Palace, in the presence of the President of the Italian Republic, Sergio Mattarella

Rome, 6 August 2024 - Eni is announcing the names of the winning researchers and scientists of the sixteenth edition of the Eni Award, a prize established in 2007 that has become an international benchmark for research in energy and environment.

The Eni Award aims to promote breakthrough solutions in the field of energy efficiency, sustainable production of energy, decarbonization and safeguarding the environment. The Eni Award honors well-known scientists in global scientific research as well as new generations of researchers in their work.

The Eni Award 2024 winners were selected by the award's Scientific Committee, composed of internationally renowned scientists, including two Nobel Laureates.

In addition, Eni is also announcing the winners of the special mention "Eni Joule for Entrepreneurship", established in 2021 with the aim of promoting innovative and sustainable entrepreneurship in the field of decarbonization of processes and products, the circular economy and the fight against climate change.

In the 2024 edition of the Eni Award:

The *Energy Transition Award*, one of the three main prizes, which praises the best innovations for decarbonizing the energy system, was given to **Marc FONTECAVE** (College de France, France).

Drawing inspiration from biological systems, Professor Fontecave's research focuses on the development of catalytic and electrocatalytic systems, significantly improving the processes of conversion of carbon dioxide and carbon monoxide to products of high interest, including ethylene and alcohols (ethanol, propanol).

The *Energy Frontiers Award* for research on renewable energy sources and energy storage has been given to Nam-Gyu PARK, Sungkyunkwan University (South Korea),

for his pioneering research in the field of perovskites, innovative materials used in thirdgeneration photovoltaics. Professor Park worked significantly to improve their stability and to increase their efficiency, which are a key factor for bringing this technology to market.

The *Advanced Environmental Solutions Award*, dedicated to research of the protection and sustainable use of natural resources, was awarded to **Holger BRAUNSCHWEIG**, **Julius-Maximilians-Universität Würzburg (Germany)**. Professor Braunschweig has developed new catalysts, which do not contain heavy metals, to produce nitrogen compounds (used, for example, in agriculture and pharmaceuticals) more sustainably and with less environmental impact, both in terms of energy consumption and waste management.

The **Young Researcher of the Year Award**, honors researchers who have completed their PhDs at Italian universities; the two prizes were awarded to Elvira **SPATOLISANO** and Stefano **TOSO**.

Elvira Spatolisano, from Politecnico di Milano, identified in her PhD thesis two innovative technologies for the valorisation of hydrogen sulfide, a chemical compound present in natural gas that must be removed to use the gas itself. The first technology is a process that produces a hydrophilic mixture of sulfur compounds that can be used as a fertilizer or soil conditioner for basic soils; the second is based on a thermocatalytic plasma process that converts hydrogen sulfide into hydrogen without associated carbon dioxide production.

Stefano Toso earned his Ph.D. at Università Cattolica del Sacro Cuore, studying an emerging class of semiconductor materials, developing a pioneering synthesis method for the preparation of nanocrystals that can be used, for example, in innovative solar cells.

The Young Talents from Africa category, established in 2017 on the 10th anniversary of the Eni Award and dedicated to young talent from the African Continent, awarded four prizes this year. The honorees are Favour AGBAJOR, Durban University of Technology (South Africa), Petra Kienyiy CHUI, Egerton University (Kenya), Lakhdar HAMIDATOU, Ecole Nationale Polytechnique de Constantine (Algeria), and Nomthandazo Precious SIBIYA, Durban University of Technology (South Africa). Winners receive a scholarship to take a three-year doctoral course at an Italian university to pursue their research.

Agbajor's research will seek to introduce a novel systems configuration that optimizes building energy efficiency, proposing an innovative model for Building Integrated Photovoltaic-Thermal Radiative Cooling systems.

Chui will investigate the viability of fuel production from plastic waste and its implications for the circular economy in Cameroon, in terms of reducing plastic pollution and preventing incineration and landfilling.

Hamidatou's research aims to implement a cooling kit for photovoltaic panels. Phase Change Materials (PCM) cooling offers significant advantages enhancing the efficiency of converting solar energy into electrical energy.

The purpose of Sibiya's research is to analyse agricultural waste as adsorbents for heavy metal removal from wastewaters, thanks to their high availability, low cost, and sustainability.

For the *Eni Innovation Award*, which selects the most innovative projects developed by Eni researchers and technical experts, prizes were awarded to:

- Cristina Bonanomi, Rino Bonetti, Silvia Pavoni (Eni), Davide Moscatelli, Edoardo Terreni (PoliMI) for patenting a process for the production of bio-oil from lignin;
- Riccardo Borgomaneri, Luigi Colombo, Francesca Galimberti, Samuele Gori,
 Alberto Landoni, Nicoletta Panariti, Rita Ponzo (Eni) for developing "BioSlurry",
 an innovative one-pot process to convert highly contaminated bio feedstocks into valuable products;
- Mirko Barbavara, Gabriele Bianchi, Stefano Cardamone, Lino Carnelli, Davide
 Deriu, Carla Lazzari, Nicola Mancini, Tamara Passera, Giuseppe Sabetta (Eni)
 for developing Eni TES, a solution for thermal energy storage.

The **special mention** "Eni Joule for Entrepreneurship" was awarded to the following startups:

- HBI Human Bio Innovation, which developed and patented a technology for the circular treatment of sewage sludge;
- SLY, which has developed cutting-edge AI technologies for ultra-early detection and classification of forest fires;
- **RarEarth**, which has developed an innovative chemical process to recycle rare earths (neodymium-iron-boron) from two-wheeler electric motors.

The award ceremony will be held on Oct. 15 at the Quirinal Palace. Calls for entries for the 2025 Eni Award are available on www.eni.com.

Company Contacts:

Press Office: Tel. +39.0252031875 - +39.0659822030 Freephone for shareholders (from Italy): 800940924

Freephone for shareholders (from abroad): +80011223456

Switchboard: +39-0659821

ufficio.stampa@eni.com segreteriasocietaria.azionisti@eni.com investor.relations@eni.com

Web site: www.eni.com

