



## Eni Award 2023

**“Debut in Research:  
Young Talents from Africa”**

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### Highlights

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# The “Debut in Research - Young Talents from Africa” Award



award




Development of a sustainable and resilient nature

Nature-based solutions

One Health – Planetary Health

Preservation and restoration of natural capital

Renewable energy & energy storage

CCUS

New H<sub>2</sub> production technologies

Energy efficiency

**Registration deadline: November 25<sup>th</sup>, 2022**

All information about the Prize can be found at the following link:  
<https://www.eni.com/en-IT/scientific-research/eni-award.html>

Info: [eniaward@feem.it](mailto:eniaward@feem.it)

- Since it began in 2008, the Eni Award has become much more than a company prize. It is now a globally significant event for applied research and technological innovation in energy
- The “**Debut in Research - Young Talents from Africa**” category was created in 2017 and is awarded to **African students holding a Master’s degree** (or any academic qualification granting access to a PhD course in an Italian University) **and having defended their theses at an African University** on the on the various scientific topics promoted by the Eni Award, i.e. decarbonization and energy transition, new energy frontiers and advanced environmental solutions
- **The Prize consists in a customized plaque and a fully funded scholarship for the attendance of a 3-year PhD course to be conducted at an Italian university or a Research Institute**
- The Award Ceremony takes place every year in Rome at Palazzo del Quirinale in the presence of the President of the Italian Republic

## 2. The 2017 Winners



### Onyeche Ugwoke Blessing

Nationality:  

Affiliation  
Country:  

African University of Science  
and Technology, Abuja

**Title of Thesis:** A Study on Energy Efficiency of Off-grid renewable energy systems in Nigeria

**Title of Research:** A Study on Energy Efficiency of Off-grid renewable energy systems in Nigeria

**Italian Host University:** Politecnico di Torino

**Link to video:** [Blessing Onyeche Ugwoke - Eni Award 2017 | Eni Video Channel - YouTube](#)



### Yemane Kelemework Equbamariam

Nationality: 

Affiliation  
Country: 

Addis Ababa University

**Title of Thesis:** Integrated geophysical investigations in the Main Ethiopian Rift: implication to geothermal resource prospecting and crustal studies

**Title of Research:** Integrated geophysical investigations in the Main Ethiopian Rift: implication to geothermal resource prospecting and crustal studies

**Italian Host University:** Università degli Studi di Napoli Federico II

**Link to video:** [Yemane Kelemework Equbamariam – Eni Award 2017 | Eni Video Channel - YouTube](#)

## 2. The 2018 Winners



**Emerance Jessica  
Claire D'Assise  
Goma-Tchimbakala**

**Nationality:** 

**Affiliation  
Country:** 

Marien NGouabi University of  
Brazzaville

**Title of Thesis:** Usage of bacteria with bioremediation potential and biosurfactants in the bioremediation of soils polluted with hydrocarbons

**Title of Research:** Usage of bacteria with bioremediation potential and biosurfactants in the bioremediation of soils polluted with hydrocarbons

**Italian Host University:** Politecnico di Torino

**Link to video:** [Emerance Jessica - Eni Award | Eni Video Channel - YouTube](#)



**Elvis Tinashe  
Ganda**

**Nationality:** 

**Affiliation  
Country:** 

Durban University of  
Technology

**Title of Thesis:** Catalytic conversion of alcohol-waste vegetable oil mixtures over aluminosilicate catalysts

**Title of Research:** Co-processing of liquid derived biomass feedstock with hydrogen donor molecules over metal modified aluminosilicate catalysts and carbon support

**Italian Host University:** Università degli Studi di Napoli Federico II

**Link to video:** [Elvis Tinashe - Eni Award 2018 | Eni Video Channel - YouTube](#)

## 2. The 2019 Winners



**Madina Mahmoud**

**Nationality:**   
**Affiliation Country:** 

American University in Cairo

**Title of Thesis:** Modification of Cellulose Acetate Membranes with Graphene Oxide Nano-fillers for Water Treatment

**Title of Research:** Polyamide Thin-film Nanocomposite Membranes with Oxidized Carbon Nanotubes and Graphene Oxide Nanosheets for Water Treatment in the Oil and Gas industry

**Italian Host University:** Politecnico di Torino



**Emmanuel Kweinor Tetteh**

**Nationality:**   
**Affiliation Country:** 

Durban University of Technology

**Title of Thesis:** Optimisation of dissolved air flotation (DAF) for separating industrial mineral oil from water

**Title of Research:** Evaluation of isomagnetic nanoparticles infused photoelectrocatalytic process to enhance biological wastewater treatment systems and conversion of CO<sub>2</sub> to fuels

**Italian Host University:** N/A. He was already attending a PhD when awarded

## 2. The 2020 Winners

1/2



*Due to the global emergency and related containment measures of the Covid19 pandemic, participation in the Ceremony in person was limited to the Italian winners only*



*All foreign participants followed the Ceremony via streaming*



**Alaa Abbas**

**Nationality:**



**Affiliation  
Country:**



American Univeristy in Cairo

**Title of Thesis:** Nanoporous Stainless Steel Anode for Enhanced Microbial Fuel Cells

**Title of Research:** Enhanced Wastewater Treatment/Power Production Using Carbon Nano Structures/Metal Oxide modified Anodes in Microbial Fuel Cells

**Italian Host University:** Università degli Studi di Napoli Federico II

## 2. The 2020 Winners

2/2



**Djalila Ben Bouchta**

**Nationality:**



**Affiliation  
Country:**



Cairo University

**Title of Thesis:** Gender and Energy for Sustainable Development in Egypt

**Title of Research:** A Multi-Disciplinary Approach to Energy Service Delivery to Enable Productive Use of Energy for Female Entrepreneurs in Sub-Saharan Africa

**Italian Host University:** Politecnico di Torino



**Mohamed Ahmed Ismail  
Tarek**

**Nationality:**



**Affiliation  
Country:**



American University in Cairo

**Title of Thesis:** Sustainability of E-waste Management: Egypt Case Study

**Title of Research:** Computational model for the improved management of e-waste

**Italian Host University:** Politecnico di Torino

## 2. The 2022 Winners\*

1/2



**Yousif Adam**

**Nationality:** 

**Affiliation Country:** 

American University in Cairo

**Title of Thesis:** Utilization of *Chlorella Vulgaris* for Biomass Production and Treatment of Wastewater From Greenhouse Farms

**Title of Research:** Circular Economy Approach for Sustainable Management of Wastewater Sector in Africa

**Italian Host University:** TbD



**Ibrahim Mohamed Ibrahim  
Moustafa Ibrahim**

**Nationality:** 

**Affiliation Country:** 

Arab Academy for Science,  
Technology and Maritime  
Transport

**Title of Thesis:** Real Time Monitoring and Power Prediction for Photovoltaic Farms Using Actual Field

**Title of Research:** Enhancement of Solar Energy Prediction Accuracy using New Approaches

**Italian Host University:** TbD

## 2. The 2022 Winners\*

2/2



**Andsera Adugna  
Mekonen**

**Nationality:** 

**Affiliation  
Country:** 

Addis Ababa University

**Title of Thesis:** Remote sensing and GIS-based landslide susceptibility mapping and its implication to the environment over complex landscapes: a case of Beshilo watershed, Northern Ethiopia

**Title of Research:** Sustainable agroforestry ecosystem using earth observation and environmental sensing in central part of Ethiopia

**Italian Host University:** TbD



**Andris Metumo  
Simeon**

**Nationality:** 

**Affiliation  
Country:** 

University of Cape Town

**Title of Thesis:** Protection Coordination of a Standalone Microgrid with Static and Rotational Generators

**Title of Research:** Intelligent Adaptive Protection Strategies for Grid Tied Hybrid Carbon Neutral Microgrids with Energy Storage

**Italian Host University:** TbD