



# Eni Award 2023

"Debut in Research: Young Talents from Africa"

# **Highlights**

# The "Debut in Research - Young Talents from Africa" Award



- 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

## 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: <u>Blessing Onyeche Ugwoke - Eni Award 2017 | Eni</u> <u>Video Channel - YouTube</u>



### 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: <u>Yemane Kelemework Equbamariam – Eni Award</u> 2017 | Eni Video Channel - YouTube

## 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: <u>Emerance Jessica - Eni Award | Eni Video Channel</u> - <u>YouTube</u>



#### 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: <u>Elvis Tinashe - Eni Award 2018 | Eni Video Channel</u> - <u>YouTube</u>

### The 2019 Winners



#### Madina Mahmoud

Nationality:

**Country:** 



American University in Cairo

#### **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 CO2 to fuels

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

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

### The 2020 Winners



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





**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

All foreign participants followed the Ceremony via streaming



## The 2020 Winners



#### Djalila Ben Bouchta

Nationality:

Affiliation <u>k</u>

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:



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Affiliation Country:



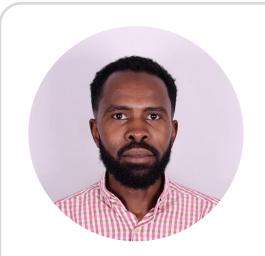
American University in Cairo

**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

### The 2022 Winners\*



#### 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



## The 2022 Winners\*



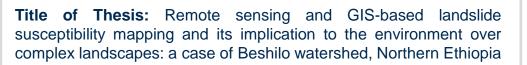
### Andsera Adugna Mekonen

Nationality:



Affiliation Country:

Addis Ababa University



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

Italian Host University: TbD





of Thesis: Protection Coordination of a Standalone Microgrid

**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

