



# INTERNATIONAL CONFERENCE "ADVANCES IN RENEWABLE AND CLEAN ENERGY TECHNOLOGIES" - ARCT

JUNE 7 - 10, 2022

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Online event - APP ikone Digital

Organization:



## PAPERS CALL

ARCT- "Advances in Renewable and Clean Energy Technologies" is the most important scientific-technical event in Brazil in the area of renewable and clean technologies in 2022. This event is organized by the Federal University of Itajubá (UNIFEI) and Northumbria University (NU) with funding from FAPEMIG and support from the British Council (UK). ARCT presents an opportunity for academics, researchers and industry to present their innovative work activities. The Conference offers the following three forms of dissemination of R & D results:

- / Invited lectures in plenary sessions
- / Selected papers presentation
- / Posters presentation

### o Important dates:

FULL PAPERS SUBMISSION / May 01, 2022

RESULTS: ORAL OR POSTER PRESENTATION / May 15, 2022

### o Organizing Committee

Electo Eduardo Silva Lora (UNIFEI) / **Coordinator**  
Khamid Makhamov (Northumbria University) / **Coordinator**  
Diego M. Yepes Maya (UNIFEI) / **Vice-coordinator**

### o Communication

Diego Yepes Maya / IEM- UNIFEI  
Cleber Gonçalves Júnior / SECOM-UNIFEI  
Micheline Camarço (IKONE)

### o SCIENTIFIC COMMITTEE

Oswaldo Jose Venturini / UNIFEI, Brazil  
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Christian Jeremi Coronado Rodriguez / UNIFEI, Brazil  
Vladimir Melian Cobas / UNIFEI, Brazil  
Viatcheslav Kafarov / UIS, Colombia  
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Silvina Magdalena Manrique / UNISALTA, Argentina  
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Shu Zhang / NFU, China  
Marcelo Risso Errera / UFPR, Brazil  
Albert Ratner / UNIOWA, USA  
Khamid Makhamov / NU, UK

### o ARCT TOPIC AREAS AND SUB-AREAS:

#### 1. Energy Transition

- 1.1. Renewable Energy penetration in energy systems.
- 1.2. Technical, economic and policy aspects of the energy transition.

1.3. Energy transition in developing countries.

1.4. War, pandemia, environment and energy transition.

#### 2. Hydrogen

- 2.1. Hydrogen production routes, costs and sustainability.
- 2.2. Hydrogen in engines.
- 2.3. P2X.
- 2.4. Hydrogen storage

#### 3. Solid Biomass, Biofuels and Biorefineries

- 3.1. Biomass availability, logistics and pretreatment.
- 3.2. Advances in solid biomass thermochemical conversion.
- 3.3. Advances in solid biomass biochemical conversion.
- 3.4. Biofuels technologies, costs and sustainability.
- 3.5. Aviation fuels.
- 3.5. Biorefineries conception, thermodynamic performance, sustainability and costs.

#### 4. Solar Thermal and PV

- 4.1. Solar thermal technologies: state-of-the-art and prospective.
- 4.2. New materials for PV modules: performance and cost.
- 4.3. Technical aspects of installed photovoltaic systems.
- 4.4. Control monitoring and maintenance of PV plants.
- 4.7. PVT: technologies and Applications

#### 5. Wind, Marine Energy and OTHERS

- 5.1. Advances in wind turbine technologies.
- 5.2. Wind farms: design, operation and maintenance.
- 5.3. Marine Energy technologies.
- 5.4. Geothermal enhanced systems.
- 5.4. Advances in PCH: hydrokinetic turbines.
- 5.5. Hybrid systems and storage.

#### 6. Clean Energy: Market and Social Issues

- 6.1. Market issues of renewable deployment
- 6.2. Social issues of renewable deployment.
- 6.3. Land, food security and biofuels.

Soon the registration and submission of papers will be released by the official website of the event: [arctconference.com.br](http://arctconference.com.br)

Funding:



Support



Red Iberoamericana de Tecnologías de Biomasa y Bioenergía Rural



Event Support

