

## Editorial Board

### JOURNAL OF SUSTAINABLE ENERGY EDITOR IN CHIEF

Ioan FELEA

University of Oradea, Department of Energy Engineering, [ifelea@uoradea.ro](mailto:ifelea@uoradea.ro)

### EDITORS

Cornel ANTAL  
University of Oradea  
[cantal@uoradea.ro](mailto:cantal@uoradea.ro)

Gabriel BENDEA  
University of Oradea  
[gbendea@uoradea.ro](mailto:gbendea@uoradea.ro)

Roberto CIPOLLONE  
University of L'Aquila  
[roberto.cipollone1@tin.it](mailto:roberto.cipollone1@tin.it)

Simona DZIȚAC  
University of Oradea,  
[simona.dzitac@gmail.com](mailto:simona.dzitac@gmail.com)

Mircea EREMA  
Politehnica University of Bucharest  
[eremia1@yahoo.com](mailto:eremia1@yahoo.com)

Cristina HORA  
University of Oradea  
[chora@uoradea.ro](mailto:chora@uoradea.ro)

Mihai JADANEANT  
Politehnica University of Timisoara  
[mihai.jadaneant@upt.ro](mailto:mihai.jadaneant@upt.ro)

Stefan KILYENI  
Politehnica University of Timisoara  
[stefan.kilyeni@et.upt.ro](mailto:stefan.kilyeni@et.upt.ro)

Ion MIRCEA  
University of Craiova  
[imircea@elth.ucv.ro](mailto:imircea@elth.ucv.ro)

Florin MUNTEANU  
"Gheorghe Asachi" Technical University of Iasi  
[flmunt@tuiasi.ro](mailto:flmunt@tuiasi.ro)

Florin POPENTIU  
University of Oradea  
[popentiu@imm.dtu.dk](mailto:popentiu@imm.dtu.dk)

Victorita RADULESCU  
Politehnica University of Bucharest  
[vradu17@yahoo.com](mailto:vradu17@yahoo.com)

Marcel ROSCA  
University of Oradea  
[mrosca@uoradea.ro](mailto:mrosca@uoradea.ro)

Doru VATAU  
Politehnica University of Timisoara  
[doru.vatau@upt.ro](mailto:doru.vatau@upt.ro)

Constantin BARBULESCU  
Politehnica University of Timisoara  
[constantin.barbulescu@upt.ro](mailto:constantin.barbulescu@upt.ro)

Gianfranco CHICCO  
Politecnico de Torino, Italia  
[gianfranco.chicco@polito.it](mailto:gianfranco.chicco@polito.it)

George DARIE  
Politehnica University of Bucharest  
[george.darie@energy.pub.ro](mailto:george.darie@energy.pub.ro)

Fiodor ERCHAN  
State Agricultural University, Moldova  
[terhan@mail.ru](mailto:terhan@mail.ru)

Mihai GAVRILAS  
"Gheorghe Asachi" Technical University of Iasi  
[mgavril@tuiasi.ro](mailto:mgavril@tuiasi.ro)

Marcel ISTRATE  
"Gheorghe Asachi" Technical University of Iasi  
[mistrate@tuiasi.ro](mailto:mistrate@tuiasi.ro)

Ferenc KALMÁR  
University of Debrecen  
[fkalmar@mfk.unideb.hu](mailto:fkalmar@mfk.unideb.hu)

Paul Mihai MIRCEA  
University of Craiova  
[mmircea@elth.ucv.ro](mailto:mmircea@elth.ucv.ro)

Călin MUNTEANU  
Technical University of Cluj-Napoca  
[Calin.Munteanu@ethm.utcluj.ro](mailto:Calin.Munteanu@ethm.utcluj.ro)

Valentin NAVRAPESCU  
Politehnica University of Bucharest  
[valentin.navrapescu@upb.ro](mailto:valentin.navrapescu@upb.ro)

Laurentiu POPPER  
Perfect Service SA  
[director@perfect-service.ro](mailto:director@perfect-service.ro)

David RIVKIN  
Ohalo College, Katzrin Israel  
[david.rivkin@SustainableMethods.org](mailto:david.rivkin@SustainableMethods.org)

Calin SECUI  
University of Oradea  
[csecui@uoradea.ro](mailto:csecui@uoradea.ro)

### EXECUTIVE STAFF

#### Executive Editors

Vasile MOLDOVAN  
University of Oradea  
[moldovan@uoradea.ro](mailto:moldovan@uoradea.ro)

Daniel ALBUT-DANA  
University of Oradea  
[dalbut@uoradea.ro](mailto:dalbut@uoradea.ro)

Șerban BUNDA  
University of Oradea  
[sbunda@uoradea.ro](mailto:sbunda@uoradea.ro)

#### PUBLISHER & EDITORIAL OFFICE

University of Oradea Editing House,  
Str. Universitatii Nr. 1, Oradea, jud. Bihor, România, Zip code: 410087, Tel.: 00-40-259-408171, Fax: 00-40-259-408404  
ISSN: 2067-5534 (print version)

The Journal of Sustainable Energy (JSE) had its first appearance under this name in 2010. The history of JSE is the following: is formed in 2010 by transforming of 1993-2009 Analele Universitatii din Oradea. Fascicula de Energetica, 1224-1261. Which superseded in part (1991-1992): Analele Universitatii din Oradea. Fascicula Electrotehnica si Energetica (1221-1311); Which superseded in part (1976-1990): Lucrari Stiintifice - Institutul de Invatamant Superior Oradea. Seria A, Stiinte Tehnice, Matematica, Fizica, Chimie, Geografie (0254-8593); Both of which superseded in part (1969-1970): Lucrari Stiintifice - Institutul Pedagogic Oradea. Seria A (1220-2916); Which superseded in part (1967-1968): Lucrari Stiintifice - Institutul Pedagogic Oradea (1220-2266).

The Journal of Sustainable Energy (JSE) publishes original contributions in the field of the following topics:

- System reliability and power service quality
- Generation of electric power
- Energy policy and economics (financial and customer markets, regulatory and financial issues)
- Energy development (solar power, renewable energy, waste-to-energy systems)
- Energy systems operation
- Energy efficiency, reducing consumption for conservation of energy
- Energy sustainability as related to energy and power production, distribution and usage
- Energy infrastructure issues (power plant safety, security of infrastructure network)
- Waste management and environmental issues
- Buildings and transportations energetic
- Urban community energy
- Management and engineering economics in energy

The articles quality increases with every issue. Apart from its improved technical contents, a special care is given to its structure. The guidelines for preparing and submitting an article were modified and developed in order to meet high quality standards requirements. With every passing issue the peer-review process was developed too, being now a double-blinded [peer-review process](#).

Authors who wish to submit a manuscript to the Journal of Sustainable Energy (JSE) are kindly asked to send their manuscripts as DOC and PDF format to [jseoradea@yahoo.com](mailto:jseoradea@yahoo.com), according to the formatting instructions. Once the manuscript is submitted, the authors will shortly receive a feedback regarding the status of their submission. As the review process is completed, the author will be informed about the reviewers' comments and the changes the paper should suffer in order to satisfy the journal quality requirements.

Journal of Sustainable Energy JSE is covered/indexed/abstracted in:

- [DOAJ - Directory of Open Access Journals](#)
- [EBSCO Publishing - EBSCOhost Online Research Databases](#)
- [Google Scholar](#)
- [Index Copernicus](#)
- [BASE - Bielefeld Academic Search Engine](#)
- [Higher Education Journals in Engineering](#)
- [Open Academic Journals Index](#)
- [ResearchBib](#)
- [Cosmos Impact Factor](#)
- Engineering village (Pending)
- DRJI (Pending)
- CiteFactor (Pending)
- Science Library Index (Pending)

Publishing House name/address:

University of Oradea Editing House

Universitatea din Oradea, Universitatii Str., No. 1, 410087, Oradea, Bihor, Romania

- ISSN: 2067-5534 (print)
- Tel.: 00-40-259-408 (232) / (171)
- Fax: 00-40-259-408406
- Place of publishing: Oradea, Romania
- Year of the foundation of publication in domain of power engineering: 1976
- Releasing frequency: 4 / year
- Language: English

## CONTENTS

### ***SYSTEMS RELIABILITY AND QUALITY OF ENERGY SERVICES***

<b>PASSENGER SAFETY, RELIABILITY IMPACTS ON COST EFFICIENCY OF VEHICLE MAINTENANCE</b> CSUZI I., STOJANOVIC Z.....	6
---	---

### ***RENEWABLE RESOURCES OF ENERGY. SUSTAINABLE ENERGY TECHNOLOGIES***

<b>ALKALI METAL DOPED FULLERENE AS HYDROGEN STORAGE: A DFT STUDY</b> SUJAN KUMAR DAS, MD. RAKIB HOSSAIN, MD. KAMAL HOSSAIN, JAHIRUL ISLAM KHANDAKER, FARID AHMED... 19	
<b>ASSESSING THE PERFORMANCES OF A PV- HYBRID SYSTEM USING COMBINED DISPATCH STRATEGY</b> BUNDA S.....	28

### ***EVOLUTION OF POWER SYSTEMS. PERFORMANT POWER SYSTEMS***

<b>TECHNICAL-ECONOMIC ANALYSIS OF THE SOLUTION FOR MODERNIZING LOW VOLTAGE DISTRIBUTION ELECTRICAL NETWORKS</b> DUINEA A.M., STAN IVAN F.E.....	34
--	----

### ***MARKET AND STOCK-MARKET OF POWER. MANAGEMENT OF POWER SYSTEMS***

<b>ENERGY PERFORMANCE LEVEL ANALYSIS OF A BRICK MANUFACTURING PROCESS</b> FELEA. I., BENDEA G., RANCOV N., ALBUȚ-DANA D., MOLDOVAN V., MEIANU D.....	40
---	----