

Editorial Board

JOURNAL OF SUSTAINABLE ENERGY EDITOR IN CHIEF

Ioan FELEA

University of Oradea, Department of Energy Engineering, ifelea@uoradea.ro

EDITORS

- Cornel ANTAL
University of Oradea
cantal@uoradea.ro
- Constantin BARBULESCU
Politehnica University of Timisoara
constantin.barbulescu@upt.ro
- Gianfranco CHICCO
Politecnico de Torino , Italia
gianfranco.chicco@polito.it
- George DARIE
Politehnica University of Bucharest
george.darie@energy.pub.ro
- Fiodor ERCHAN
State Agricultural University, Moldova
terhan@mail.ru
- Mihai GAVRILAS
"Gheorghe Asachi" Technical University of Iasi
mgavril@tuiasi.ro
- Marcel ISTRATE
"Gheorghe Asachi" Technical University of Iasi
mistrate@tuiasi.ro
- Ferenc KALMÁR
University of Debrecen
fkalmar@mfk.unideb.hu
- Gheorghe LAZAROIU
Politehnica University of Bucharest
glazaroiu@yahoo.com
- Ion MIRCEA
University of Craiova
imircea@elth.ucv.ro
- Florin MUNTEANU
"Gheorghe Asachi" Technical University of Iasi
flmunt@tuiasi.ro
- Jacques PADET
Universite de Reims, France
jacques.padet@univ-reims.fr
- Laurentiu POPPER
Perfect Service SA
director@perfect-service.ro
- Paulo RIBEIRO
Grand Rapids, Michigan
pribeiro@calvin.edu
- Marcel ROSCA
University of Oradea
mrosca@uoradea.ro
- János TAKÁCS
Technical of University Bratislava
jan.takacs@stuba.sk
- György VARJU
Budapest University of Technology&Economics
varju.gyorgy@vet.bme.hu
- Nikolai VOROPAI
Energy Systems Institute, Russia
voropai@isem.sei.irk.ru
- Samantha WIJEWARDANE
University of South Florida
swijewar@mail.usf.edu
- Badea GABRIELA
University of Oradea
gbadea@uoradea.ro
- Gabriel BENDEA
University of Oradea
gbendea@uoradea.ro
- Roberto CIPOLLONE
University of L'Aquila
roberto.cipollone1@tin.it
- Simona DZIȚAC
University of Oradea,
simona.dzitac@gmail.com
- Mircea EREMIĂ
Politehnica University of Bucharest
eremia1@yahoo.com
- Cristina HORA
University of Oradea
chora@uoradea.ro
- Mihai JADANEANT
Politehnica University of Timisoara
mihai.jadaneant@upt.ro
- Stefan KILYENI
Politehnica University of Timisoara
stefan.kilyeni@et.upt.ro
- Carlo MAZETTI
University "La Sapienza" di Roma
mazzetti@elettrica.ing.uniroma1.it
- Calin MUNTEANU
Technical University of Cluj-Napoca
Calin.Munteanu@ethm.utcluj.ro
- Valentin NAVRAPESCU
Politehnica University of Bucharest
valentin.navrapescu@upb.ro
- Florin POPENTIU
University of Oradea
popentiu@imm.dtu.dk
- Victorita RADULESCU
Politehnica University of Bucharest
vradul7@yahoo.com
- David RIVKIN
Ohalo College, Katzrin Israel
david.rivkin@SustainableMethods.org
- John SAROUDIS
AECL, CANDU Services
saroudisj@b.astral.ro
- Victor VAIDA
University of Oradea
vaida@termodeva.ro
- Doru VATAU
Politehnica University of Timisoara
doru.vatau@upt.ro
- Irena WASIAK
Technical University of Lodz
irena.wasiak@p.lodz.pl
- Dan ZLATANOVICI
ICEMENERG Bucharest
danz@icemenerg.ro

EXECUTIVE STAFF

- Executive Editor**
Calin SECUI
University of Oradea
csecui@uoradea.ro
- Editorial secretary**
Daniel ALBUȚ-DANA
University of Oradea
dalbut@uoradea.ro
- Editorial Activities**
Eva BARLA
University of Oradea
ebarla@uoradea.ro
- IDB Responsible**
Nicolae RANCOV
University of Oradea
nrancov@uoradea.ro
- Technical Secretary**
Vasile MOLDOVAN
University of Oradea
moldovan@uoradea.ro

PUBLISHER & EDITORIAL OFFICE
University of Oradea Editing House,

Str. Universitatii Nr. 1, Oradea, jud. Bihor, România, Zip code: 410087, Tel.: 00-40-259-408 (232) / (171), Fax: 00-40-259-408406
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);

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

- Energy engineering education
- System reliability and power service quality
- Generation of electric and thermal power
- Energy policy and economics
- 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
- Waste management and environmental issues
- Energy infrastructure issues (power plant safety, security of infrastructure network)
- Energetic equipments

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, 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](#)
- [Engineering Village \(Pending\)](#)

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

TRAMWAY SYSTEM VULNERABILITIES CAUSED BY STORM. CASE STUDY: LIGHTNING IN ORADEA, 10-TH JUNE 2013 CSUZI I.....	80
STUDY OF SOME INSULATING OILS AGING BY THERMAL CYCLING LINGVAY I., OPRINA G., CUCOŞ A., RADU E., VOINA A.	85

RENEWABLE RESOURCES OF ENERGY. SUSTAINABLE ENERGY TECHNOLOGIES

A REVIEW ON COUNTER-ROTATING WIND TURBINES DEVELOPMENT OPRINA G., CHIHAIA R.A., EL-LEATHEY L.A., NICOLAIE S., BĂBUŢANU C.A., VOINA A.....	91
RESEARCH ON THE AERODYNAMICS OF BLADE PROFILES OF WIND TURBINES POP E. S., CAMPEAN E., DRAGAN T.....	99

EVOLUTION OF POWER SYSTEMS. PERFORMANT POWER SYSTEMS

VOLTAGE STABILITY ASSESSMENT FOR WIND FARMS INTEGRATION INTO ELECTRICITY GRIDS WITH AND WITHOUT CONSIDERATION OF VOLTAGE DEPENDENT LOADS TOMA R., MIHAI G.....	106
--	-----

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

SUBSTANTIATION TO IMPROVE ENERGY EFFICIENCY PLATFORM FOR A TOURISM COMPANY FELEA I., KUBOLA T.	112
---	-----