

Editorial Board

JOURNAL OF SUSTAINABLE ENERGY EDITOR IN CHIEF

Felea Ioan – Member of I.E.E.E.
University of Oradea, Department of Energy Engineering, ifelea@uoradea.ro

EDITORS

Gleb Drăgan
Member of Romanian Academy

Cornel Antal
University of Oradea,
cantal@uoradea.ro

Gianfranco Chicco
Politecnico de Torino , Italia
gianfranco.chicco@polito.it

Fiodor Erchan
State Agricultural University, Moldova
terhan@mail.ru

Ștefan Kilyeni
Politehnica University of Timisoara
stefan.kilyeni@et.upt.ro

Carlo Mazzetti
La Sapienza di Roma
mazzetti@elettrica.ing.uniroma1.it

Florin Popențiu
University of Oradea
popentiu@imm.dtu.dk

Paulo F. Ribeiro (details)
Grand Rapids, Michigan
pribeiro@calvin.edu

Saroudis J.
AECL, CANDU Services
saroudisj@b.astral.ro

Victor Vaida
University of Oradea
vaida@termodeva.ro

Kalmar Ferenc
University of Debrecen
fkalmar@mfk.unideb.hu

Alexandru Vasilevici
Politehnica University of Timisoara
sandi.vasilevici@et.utt.ro

Nikolai Voropai
Energy Systems Institute, Russia
voropai@isem.sei.irk.ru

Dan Zlatanovici
ICEMENERG
danz@icemenerg.ro

Nicolae Coroiu
University of Oradea
nicolae_coroiu@yahoo.com

Călin Secui
University of Oradea
csecui@uoradea.ro

Florin Gheorghe Filip
Member of Romanian Academy
ffilip@acad.ro

Anaotlie Carabulea
Politehnica University of Bucharest

Roberto Cipollone(details)
University of L’quila
roberto.cipollone1@tin.it

Mihai Jădăneanț
Politehnica University of Timisoara
mihai.jadaneant@mec.upt.ro

Gheorghe Lăzăroiu
Politehnica University of Bucharest
glazaroiu@yahoo.com

Victorița Rădulescu
Politehnica University of Bucharest
vradul7@yahoo.com

Jacques Padet
Universite de Reims, France
jacques.padet@univ-reims.fr

Marcel Roșca
University of Oradea
mrosca@uoradea.ro

Takács János (details)
Technical of University Bratislava
jan.takacs@stuba.sk

Varju György (details)
Budapest University of Technology&Economics
varju.gyorgy@vet.bme.hu

Mircea Vereș
University of Oradea
mveres@uoradea.ro

Badea Gabriela
University of Oradea,
gbadea@uoradea.ro

Irena Wasiak (details)
Technical University of Lodz
irena.wasiak@p.lodz.pl

Gabriel Bendea
University of Oradea
gbendea@uoradea.ro

Laurențiu Popper
University of Oradea
director@perfectservice.ro

Zétényi Zsigmond
University of Oradea
zetenyi@rdslink.ro

EXECUTIVE STAFF

Executive Editor:
Dzițac Simona
University of Oradea, simona.dzitac@gmail.com

Editorial secretary
Albuț-Dana Daniel
University of Oradea, dalbut@uoradea.ro

Technical Secretary
Vasile Moldovan
University of Oradea, moldovan@uoradea.ro

Editorial Activities
Barla Eva
University of Oradea, ebarla@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);

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:

- [Index Copernicus](#)
- [Ulrich's Update - Periodicals Directory](#)
- [DOAJ - Directory of Open Access Journals](#)
- [EBSCO Publishing - EBSCOhost Online Research Databases](#)
- Engineering village (Pending)

The JSE may be purchased based on annual subscription (4 issues) at the following prices: paper – 50 € , electronic – 20 €, or individually (each number) at the following prices: paper - 20 €, electronic – 8 €. To purchase the complete “control” standard (www.energy-cie.ro) and submitted electronically or by fax. In order to generate the invoice (www.energy-cie.ro) is transmitted to the applicant. After payment of the amount stated in the bill the applicant receives and invoice numbers ordered JSE.

Publishing House name/address:

University of Oradea Editing House

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

- ISSN: 2067-5534
- Tel.: 00-40-259-408171 (231, 288)
- Fax: 00-40-259-408404
- 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

RELIABILITY MODELING AND SIMULATION OF THE HYBRID POWER SYSTEMS BUNDA Ș. , FELEA I.	41
--	----

UNDERGROUND POWER CABLES MAINTAINABILITY– THE BIODETERIORATION OF EXTERNAL POLYMERIC JACKETS AND ITS INFLUENCE ON INSULATION AGEING LINGVAY I., SZATMÁRI I., LINGVAY M., MARIN D.....	41
---	----

RENEWABLE RESOURCES OF ENERGY. SUSTAINABLE ENERGY TECHNOLOGIES

POSSIBLE USES OF GEOTHERMAL ENERGY IN THE SACUIENI AREA SETEL A., ANTAL C., SEBESAN M.	47
---	----

SUSTAINABLE SOLUTION TO EXPLOIT THE GEOTHERMAL ENERGY POTENTIAL FOR POWER AND HEAT GENERATION COROIU M., CHINDRIS M.....	50
--	----

ISSUES REGARDING THE FURNACE OPERATION OF THE STEAM GENERATOR IN DYNAMIC REGIME DUINEA. A.M., MIRCEA P.M.	31
--	----

EVOLUTION OF POWER SYSTEMS. PERFORMANT POWER SYSTEMS

DISTRIBUTION FACTORS TRANSMISSION COST ALLOCATION IN CASE OF INDIRECT POWER TRANSFERS POP O., KILYENI ST., BARBULESCU C., SURIANU F.D., DEACU A., SCHIOPU R.....	56
--	----

TRANSMISSION NETWORK EXPANSION PLANNING BASED ON ARTIFICIAL INTELLIGENCE METHOD KILYENI ST., BARBULESCU C., CRISTIAN P.D., SOLOMONESC F., OROS C.....	63
---	----

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

ENERGY MARKET AND POWER EXCHANGE IN ROMANIA DÂRZAN M.	69
--	----