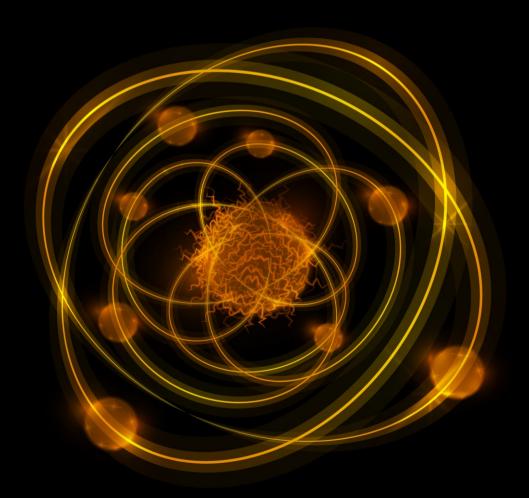




World Journal of Nuclear Science and Technology





Journal Editorial Board

ISSN 2161-6795 (Print) ISSN 2161-6809 (Online)

http://www.scirp.org/journal/wjnst

Editor-in-Chief

Prof. Andrzej Grzegorz Chmielewski Institute of Nuclear Chemistry and

Technology, Poland

Editorial Board

Dr. Abdullah Aydin Kirikkale University, Turkey

Prof. Jiejin Cai Sun Yat-sen University, China

Prof. Ahmet CengizUluda University, Turkey

Prof. Abdelmajid Choukri University of Ibn Tofail, Morocco

Prof. Snežana Dragovic University of Belgrade, Serbia

Prof. Hardy Christian Ekberg Chalmers University of Technology, Sweden

Prof. Juan-Luis François National Autonomous University of Mexico, Mexico

Prof. Shilun Guo China Institute of Atomic Energy, China

Prof. Shaban Ramadan Mohamed Harb South Valley University, Egypt

Prof. Xiaolin Hou Technical University of Denmark, Denmark

Prof. Ning Liu Sichuan University, China

Prof. Man Gyun Na Chosun University, South Korea

Prof. Dragoslav NikezicUniversity of Kragujevac, Serbia

Dr. Rafael Rodríguez Pérez University of Las Palmas de Gran Canaria, Spain

Prof. K. Indira Priyadarsini Bhabha Atomic Research Centre, India

Prof. Massimo Rogante Studio d'Ingegneria Rogante, Italy

Prof. Vitalii D. RusovOdessa National Polytechnic University, Ukraine

Dr. Chhanda Samanta Virginia Military Institute, USA

Prof. Kune Y. Suh Seoul National University, South Korea

Prof. Wenxi Tian Xi'an Jiaotong University, China

Dr. Heiko TimmersThe University of New South Wales, Australia

Prof. Marco Túllio Menna Barreto de Vilhena Federal University of Rio Grande do Sul, Brazil

Dr. Leopoldo A. Pando Zayas University of Michigan, USA



ISSN Online: 2161-6809 ISSN Print: 2161-6795

Table of Contents

volume / Number 4	October 2017
Transient Studies of Ghana Research Reactor-1 after Nineteen (19) Years of Operation Using PARET/ANL Code	
B. M. Mweetwa, E. Ampomah-Amoako, E. H. K. Akaho	223
Electrostatic Theory of Elementary Particles	
A. Ivanchin	
Analysis of Residence Time in the Measurement of Radon Act Passive Diffusion in an Open Volume: A Micro-Statistical App	• •
M. P. Silverman	
Activation Energy of Modified Peak Shape Equations	
H. A. Borbón-Nuñez, C. Furetta.	
Effect of Kinetic Parameters on I-129 Activity from Fuel to Co	oolant in PWRs
R. Nasir	
Development of Diagnostics for High-Temperature High-Pressure Liquid Pb-16Li Applications	
A. Saraswat, S. Sahu, T. S. Rao, A. Prajapati, S. Verma, S. Gupta, M. K	Cumar, R. Bhattacharyay, P. Das292
An Integrated Process for Recycling of ThO ₂ Based Mixed Oxi	de Rejected Nuclear Fuel Pellets
G. Singh, P. M. Khot, P. Kumar, C. Baghra, R. B. Bhatt, P. G. Behere	e309

World Journal of Nuclear Science and Technology (WJNST) Journal Information

SUBSCRIPTIONS

The World Journal of Nuclear Science and Technology (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$79 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:

Copyright © 2017 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

http://creativecommons.org/licenses/by/4.0/

Copyright for individual papers of the journal:

Copyright © 2017 by author(s) and Scientific Research Publishing Inc.

Reuse rights for individual papers:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

Disclaimer of liability

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: wjnst@scirp.org



World Journal of Nuclear Science and Technology (WJNST)

ISSN 2161-6795 (Print) ISSN 2161-6809 (Online) http://www.scirp.org/journal/wjnst

World Journal of Nuclear Science and Technology (WJNST) is an international peer-reviewed, open access journal publishing in English original research studies, reviews in all aspects of nuclear science and technology and its applications. Symposia or workshop papers may be published as supplements.

Editor-in-Chief

Prof. Andrzej Grzegorz Chmielewski

Editorial Board

Dr. Abdullah Aydin Prof. Jiejin Cai Prof. Ahmet Cengiz Prof. Abdelma Drogovia

Prof. Snežana Dragovic Prof. Hardy Christian Ekberg Prof. Juan-Luis François

Prof. Shilun Guo

Prof. Shaban Ramadan Mohamed Harb

Prof. Xiaolin Hou Prof. Ning Liu Prof. Man Gyun Na Prof. Dragoslav Nikezic Dr. Rafael Rodríguez Pérez Prof. K. Indira Priyadarsini

Prof. Massimo Rogante

Prof. Vitalii D. Rusov Dr. Chhanda Samanta Prof. Kune Y. Suh Prof. Wenxi Tian Dr. Heiko Timmers

Prof. Marco Túllio Menna Barreto de Vilhena

Dr. Leopoldo A. Pando Zayas

Subject Coverage

This journal invites original research and review papers that address the following issues. Topics of interest include, but are not limited to:

- Fuel Cycle and Isotopes
- Global Nuclear Security Technology
- Nonreactor Nuclear Facilities
- Nuclear and Chemical Waste Management
- Nuclear and Particle Physics
- Nuclear Cardiology
- Nuclear Energy
- Nuclear Engineering and Design
- Nuclear Fusion

- Nuclear Instruments and Methods
- Nuclear Magnetic Resonance Spectroscopy
- Nuclear Materials
- Nuclear Medicine and Biology
- Nuclear Medicine and Molecular Imaging
- Nuclear Physics
- Nuclear Science and Techniques
- Nuclear Structural Engineering

- Nuclear Track Detection
- Nuclear Tracks and Radiation Measurements
- Radiation Applications and Instrumentation
- Radioanalytical and Nuclear Chemistry
- Reactor and Nuclear Systems
- Reactor Science and Technology

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the WJNST.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-mail

What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science with its publication.

What is Open Access?

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, worldwide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

- High visibility for maximum global exposure with open access publishing model
- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience





Website: http://www.scirp.org Subscription: sub@scirp.org Advertisement: service@scirp.org