



ACADEMIC Journal OF Science

CONTENTS

2015, VOLUME 04, NUMBER 02

Fuel Induction Techniques for a Hydrogen Fuelled Engine <i>Sarbjot Singh Sandhu and Akashdeep</i>	1–16
Mathematical Modeling For CTOD Based M-Criterion for the Determination of Triaxiality Under Mixed Mode (I/II) Fracture <i>B. V. S. Raghuvamsi, S.S. Bhadauria and Ruchin Kacker</i>	17–32
Adapting a Model for Student Support from a Chronic to an Acute Mental Health Setting <i>Elsie Janse van Rensburg</i>	33–41
The 21 Century Professoriate: Broadening the Perspective in Innovative Ways <i>Lynne M. Celli, Nicholas D. Young and Rick Roque</i>	43–52
Developing Geographical Information Systems of Mustafa Kemal University Tayfur Ata Sökmen Campus <i>Aysel Gurkan, Aylin Salici, M. Kutay Yildirim and Müşerref Yildirim</i>	53–60
Investigation of Sintering and Fracture Behavior of Nano-Tetragonal Zirconia Produced from Zircon <i>C. Betül Emrullahoglu Abi and Ö. Faruk Emrullahoglu</i>	61–69
Phytochemical Screening & Antimicrobial Activities of <i>Aspilia Africana</i> on Some Selected Pathogens <i>Ijeoma Iheukwumere, Friday Obinwa Uhegbu and Nkechi Chuks Nwachukwu</i>	71–78
Analysis of Solar Air Heater Assisted Chimney System for Single Sided Ventilated Room <i>Visagavel Kolandaivel and Srinivasan Pacham Sri Shanmugam</i>	79–87
Effects of Lake Uluabat and Gölyazi to Human Activities and Tourism <i>Muharrem Aydin and Yalçın Güngör</i>	89–99
Institutional Capacity Building for Climate Change and Sustainability in Nigeria: Reflections on the Responses of Built Environment Professionals <i>Evelyn L. A. Allu</i>	101–106
Fertility Assessment of Oil Polluted Soil for Maize (<i>Zea Mays L.</i>) Production in Ohaji/Egbema South-Eastern Nigeria <i>G. C. Onyishi, I. I. Ekpe, S. A. Okere and C. M. Ahukaemere</i>	107–114
Web 3.0 and its Reflections on the Future of E-Learning <i>Nidal Zaki Amarín</i>	115–121
Drinking Water Purification by Removal of Micropollutants from Natural Surface Water using Portable Water-Filtering System Designed for Rural Communities in Underdeveloped Countries <i>Seung Hwan Jeong and Youngsul Jeong</i>	123–132
Development of Thermal Insulation Materials for Packaging Made from Agricultural Wastes <i>Phairat Usubharatana and Harnpon Phungrassami</i>	133–141

Secondary Students' Conceptions after Teaching: The Case of the Physical Properties of the Non-Biased Diode <i>Abdeljalil Métioui and Louis Trudel</i>	143–153
Effects of Resistant Starch and Apricot Kernel Flour and Fiber-Rich Apricot and Apple Powders on the Quality of Low-Fat Wire-Cut Cookies <i>Özen Özboy Özbaş, Ibrahim Tuğkan Şeker and Incilay Gökbulut</i>	155–162
Chemical Migration in Food Technology <i>Mustafa Ardic, Halil Ibrahim Kahve and Ayhan Duran</i>	163–167
Kinetic Models of Thermogravimetric Analysis (Tg/Dtg) Data <i>Kazim Eşber ÖZBAŞ</i>	169–173
Use of Heavy Metal Pollution and Gross Morphometric Indices to Partially Explain Low Fish Abundance in the Kafue River <i>Phenny Mwaanga, Wizaso Munthali, Doreen Mulemba and Henry Shakumbila</i>	175–182
Morphological Analysis and Sustainability of Four Types of Herbal Plants Under Fix Solar PV Panel Structure in Malaysia <i>N. F. Othman, M. E. Ya'acob, A.S. Abdul-Rahim, Mohd. Shahwahid Othman, M.F. Ramlan and J. Stanslas</i>	183–190
Spectroscopic and Microscopic Studies of Organolead Halide Perovskites <i>Mitha Al-Jabri</i>	191–200
The Role of Creative Thinking in Science Education <i>Jindriska Svobodova and Jan Novotny</i>	201–205
Estimation of Ship Propeller Wash Induced Seabed Scour with VOF <i>Wan-Tian Yew, Roslan Hashim and Khai-Ching Ng</i>	207–216
Technological Mediations in using Ethnomathematics at High School Level in Mexico <i>Alberto Francisco Rosas Zepeda and César Correa Arias</i>	217–222
Novel Synthesis of Eu doped CaF ₂ Nanocrystals and Eudoped SrF ₂ Nanocrystals in Liquid Ammonia <i>Supitcha Rungrodmitchai, Ditpon Kotatha, Chittra Dokbua, Yasuchika Hasegawa, Takayuki Nakanishi, Yuichi Hirai and Tsuyohi Kawai</i>	223–231
A Roadmap for Sustainable Buildings: Integrated Design <i>Hande Düzgün and Hande Aladağ</i>	233–248
Virtual Reality: A New Approach for Virtual Office <i>Duc Minh Le Nguyen</i>	249–283
Spherical Granulation of Rh-Zeolite Nayusing Anionic Polysaccharide Astemplate <i>Jitlada Chumee</i>	285–288
A Structural Equation Model of Factors Affecting the Competitive Advantage of the Thai Automotive Industry Molding Sector <i>Sirorath Tiengtavaj, T. Phimonstathienand and Wannong Fongsuwan</i>	289–299
Evaluation of Antioxidant Activities of White Popinac <i>Rutanachai Thaipratum</i>	301–305
The Screening of Hydrolytic Enzyme from Terminalia Ivorensis C. and Legumes Seeds <i>Chariwat Pitsanuwong, Nalinee Yaisamlee and Laddawan Boonpun</i>	307–311
Synthesis Silver Nanoparticles: Carboxy Methyl Cellulose as Reducing Agent and Stabilizer <i>Natkamol Peungsamran</i>	313–317

Antioxidant Activity of Passion Fruit (<i>Passiflora Edulis</i>) Leaves Extract <i>Saowanee Kumpun and Sakarwrat Sedmanee</i>	319–322
Assessment of Some Nigeria Mineral Clays used for the Production of Floor Tiles. A Panacea for Economic Growth <i>Ekenyem Stan Chinweike</i>	323–328
Mathematical Modelling of Modulus of Rupture of Normal Concrete made with Washed Local Gravel from Eastern Nigeria Using the Second-Degree Polynomial <i>Umeonyiagu Ikechukwu Etienne</i>	329–336
Segregation of Bread Wheat Varieties Using Log Logistic Parametric Survival Function <i>Aniah-Betiag Elizabeth Ishagba</i>	337–348
Fashion Industry Specific 3D Garment Pattern Design CAD Augmented by Means of a 3D Digitizer <i>J. Yang, C.K. Chan and A. Luximon</i>	349–356
Composite Effect of Nickel and Copper on the Characteristics of Gray Cast Iron <i>Olasunkanmi O. Akinyemi, Taiwo B. Adeboje and Adebayo A. Aremu</i>	357–366
The Applied Music Lesson: Teaching Students with Special Needs Using Computer Technology <i>Tracy Lee Heavner</i>	367–371
Operational Green Space Analysis Incorporated at Narsinh Mehta Garden, Ahmedabad City - A Study Based on Rs and Gis Techniques <i>Nartan Rajpriya</i>	373–385
Productivity Enhancement in Flexible Manufacturing System by the Application of the Theory of Constraints <i>Boby K. George</i>	387–394
Grinding-Induced Thermal Influences on Hardness and Tensile Strength Properties of Steel <i>Shehret Tilvaldyev, Frida Alarcon Guerra, Abimael Jiménez Pérez, Alfredo Villanueva Montellano, Almeda Torres Cynthia and Delfino Cornejo Monroy</i>	395–403
The Influence of Environmental Conditions on Human Health - Study Case of Durres Coastal Area <i>Majlinda Muka and Indrit Kellici</i>	405–416
Aerodynamic Drag Mechanisms and Control in Micro-Scale of Fluid Flows <i>Shehret Tilvaldyev, Pedro Alonso Macías Vázquez, Paulina Spinoso Acosta, Brisa Selene Martínez Aparicio, Geovani Esau García Sánchez, José Antonio Mijares Bernal</i>	417–424
Issues and Challenges of Routing Protocols for Vehicular Delay Tolerant Network <i>Sanjay Kumar and Sudhakar Pandey</i>	425–429
Author Index	431–432

International Journal of Arts & Sciences is not responsible for the content of the individual manuscripts.

All correspondence should be mailed to the Associate Editor: Dr. Joseph Bonnici, Vance Hall, 4th Floor, Central Connecticut State University, 1615 Stanley Street, PO Box 4010, New Britain, CT 06050-4010, USA.

The manuscripts contained in this volume were double blind refereed.