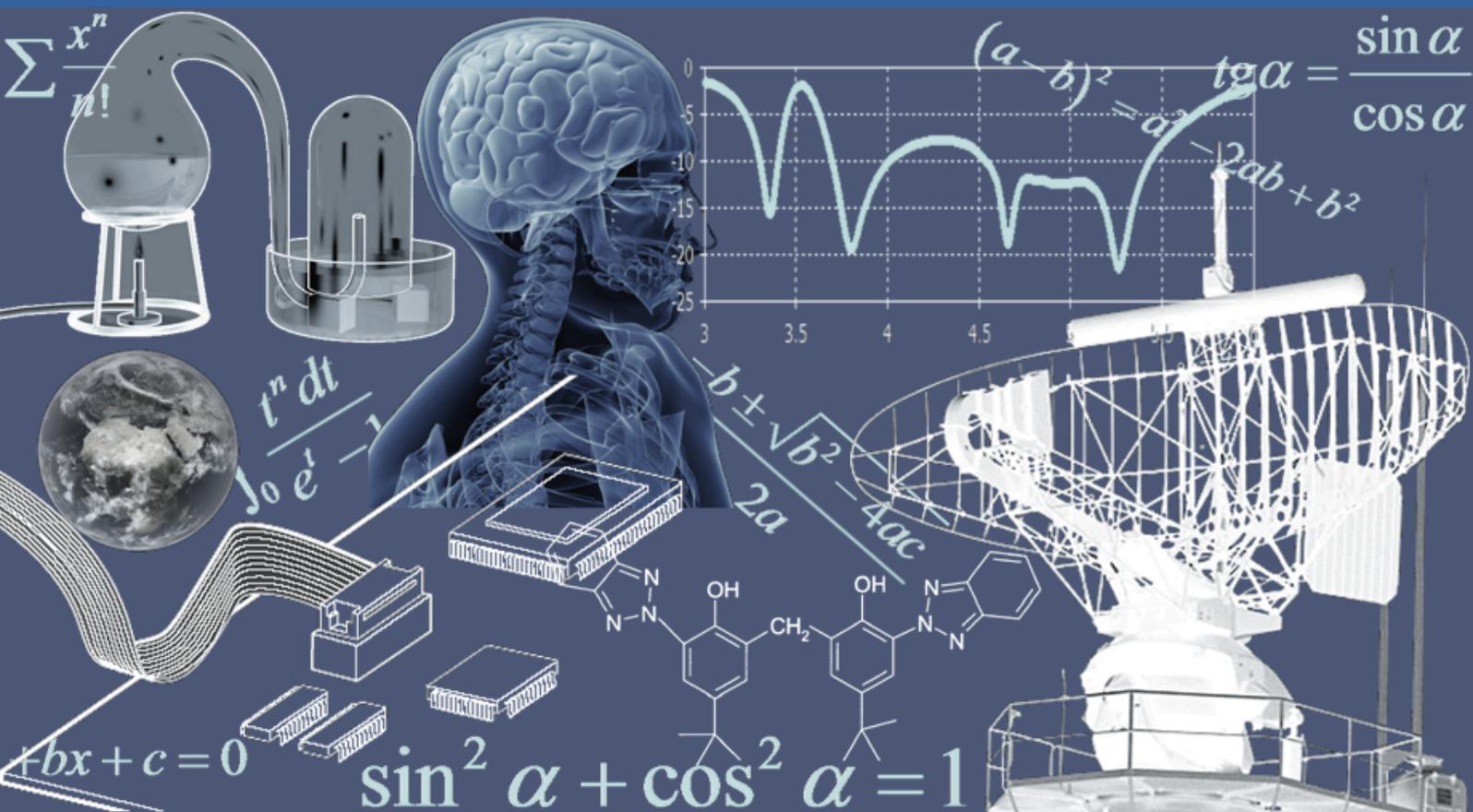


# INTERNATIONAL JOURNAL OF INNOVATION AND APPLIED STUDIES

Vol. 31 N. 3 December 2020



International Peer Reviewed Monthly Journal



## ***International Journal of Innovation and Applied Studies***

International Journal of Innovation and Applied Studies (ISSN: 2028-9324) is a peer reviewed multidisciplinary international journal publishing original and high-quality articles covering a wide range of topics in engineering, science and technology. IJIAS is an open access journal that publishes papers submitted in English, French and Spanish. The journal aims to give its contribution for enhancement of research studies and be a recognized forum attracting authors and audiences from both the academic and industrial communities interested in state-of-the art research activities in innovation and applied science areas, which cover topics including (but not limited to):

Agricultural and Biological Sciences, Arts and Humanities, Biochemistry, Genetics and Molecular Biology, Business, Management and Accounting, Chemical Engineering, Chemistry, Computer Science, Decision Sciences, Dentistry, Earth and Planetary Sciences, Economics, Econometrics and Finance, Energy, Engineering, Environmental Science, Health Professions, Immunology and Microbiology, Materials Science, Mathematics, Medicine, Neuroscience, Nursing, Pharmacology, Toxicology and Pharmaceuticals, Physics and Astronomy, Psychology, Social Sciences, Veterinary.

IJIAS hopes that Researchers, Graduate students, Developers, Professionals and others would make use of this journal publication for the development of innovation and scientific research. Contributions should not have been previously published nor be currently under consideration for publication elsewhere. All research articles, review articles, short communications and technical notes are pre-reviewed by the editor, and if appropriate, sent for blind peer review.

Accepted papers are available freely with online full-text content upon receiving the final versions, and will be indexed at major academic databases.

## ***Editorial Advisory Board***

**Amir Samimi**, Ph.D. of Science in Chemical engineering, Process Engineer & Risk Specialist of Oil and Gas Refinery Company, Iran  
**Mahsa Ja'fari**, Department of Chemical Engineering, Abadan Faculty of Petroleum, Petroleum University of Technology, Abadan, Iran  
**Alin Velea**, Paul Scherrer Institute, Switzerland  
**Kamyar Hasanzadeh**, Aalto University, Finland  
**Ogbonnaya N. Chidibere**, University of East Anglia, United Kingdom  
**Oumair Naseer**, University of Warwick, United Kingdom  
**Wei Zheng**, University of Texas Health Science Center at San Antonio, USA  
**Hu Zhao**, University of Southern California, USA  
**Haijian Shi**, Kal Krishnan Consulting Services, Inc, USA  
**Syed Ainul Abideen**, University of Bergen, Norway  
**Malika Maataoui**, Mohammed V University, Morocco  
**Fabio De Felice**, University of Cassino and Southern Lazio, Italy  
**Giovanni Leonardi**, Mediterranea University of Reggio Calabria, Italy  
**Siham El Gouzi**, Instituto Andaluz de Ciencias de la Tierra, Spain  
**Mohamed KOSSAÏ**, European Business School EBS Paris, France  
**Mustafa Batuhan AYHAN**, Marmara University, Turkey  
**Andrzej Klimczuk**, Warsaw School of Economics, Poland  
**Corinthias P. M. Sianipar**, Tokyo University of Science, Japan  
**Irfan Jamil**, Sinohydro Engineering, China  
**Sukumar Senthilkumar**, Chonbuk National University, South Korea  
**Bratu (Simionescu) Mihaela**, Bucharest University of Economic Studies, Romania  
**Mirela Maria Codescu**, National Institute for R&D in Electrical Engineering ICPE-CA, Romania  
**Milen Zamfirov**, St. Kliment Ohridski Sofia University, Bulgaria  
**Svetoslava Saeva**, Neofit Rilski South-West University, Bulgaria  
**Dimitris Kavroudakis**, University of the Aegean, Greece  
**Vaitsa Giannouli**, Aristotle University of Thessaloniki, Greece  
**Nataša Pomazalová**, Mendel University in Brno, Czech Republic  
**Hazem M. Shaheen**, Damanhour University, Egypt  
**Shalini Jain**, Manipal University Jaipur, India  
**Amin Jula**, National University of Malaysia, Malaysia  
**Mahdi Moharrampour**, Islamic Azad University, Buin zahra Branch, Iran  
**Ricardo Rodriguez**, Technological University of Ciudad Juarez, Mexico  
**Yuniel E. Proenza Arias**, Universidad de las Ciencias Informáticas, Cuba  
**Elizabeth Bissell Miller**, University of Missouri, Columbia  
**Bertin Désiré SOH FOTSING**, University of Dschang, Cameroon  
**Antonella Petrillo**, University of Cassino and Southern Lazio, Italy  
**Hong Zhao**, The Pennsylvania State University, USA  
**Jianjun Chen**, The University of Chicago, USA  
**Shaju George**, Royal University for Women, Kingdom of Bahrain  
**Chandrasekaran Subramaniam**, Kumaraguru College of Technology, India  
**Ilango Velchamy**, New Horizon College of Engineering, India  
**M. Kumaresan**, M.P.N.M.J. Engineering College, India  
**Mohammad Valipour**, University of Tehran, Iran  
**Mohameden Sidi El Vally**, King Khalid University, KSA  
**Mona Hedayat**, Boston Children's Hospital, Harvard Medical School, USA  
**Suresh Kumar Alla**, Advanced Medical Technologies, BD Technologies, USA  
**Ahmed Hashim Mohaisen Al-Yasari**, Babylon University, Iraq  
**Aziz Ibrahim Abdulla**, Tikrit University, Iraq  
**Khalid Mohammed Shaheen**, Technical College of Mosul, Iraq  
**Baskaran Kasi**, Kuala Lumpur Infrastructure University College, Malaysia  
**Nurul Fadly Habidin**, Universiti Pendidikan Sultan Idris, Malaysia  
**Adnan Riaz**, Allama Iqbal Open University, Pakistan  
**Syed Noor Ul Abideen**, KPK Agricultural University, Pakistan  
**Arab Karim**, M'Hammed Bougara University of Boumerdes, Algeria  
**Zoubir Dahmani**, UMAB University of Mostaganem, Algeria  
**Mohsen Brahmi**, Sfax University, Tunisia  
**Mongi Besbes**, University of Carthage, Tunisia  
**Mai S. Mabrouk**, Misr University for Science and Technology, Egypt  
**Olfat A Diab Kandil**, Misr University for Science and Technology, Egypt

**Munir Ahmed G. Timol**, Veer Narmad South Gujarat University, India  
**Saravanan Vasudevan**, Arunai Engineering College, India

## Table of Contents

Potentiel productif de la luzerne (Medicago Sativa L.) fourragère cultivée en saison pluvieuse au Niger <i>Ousseina Saidou Toure</i>	380-387
Suivi tensiométrique de l'évolution de réserve en eau du sol dans un site de culture maraichère de l'oignon <i>Aboubacar Kadri, Yahaya Abdou, Hayyo Halilou, and Adamou Moumouni Dan Mairo</i>	388-397
EPIDEMIOLOGICAL AND CLINICAL STUDY OF ROTAVIRUS DIARRHEAL CHILDREN UNDER 5 YEARS AT PANZI GENERAL REFERENCE HOSPITAL (DRC / SUD-KIVU / BUKAVU) <i>Mwindja N. Luhiriri, Opara J. Alworonga, Céline Kavira, Tudiakwile L. Kanku, Mwilo Mambo, Birindwa Bwihangane, and Théophile Kashosi</i>	398-403
Les écarts de prélèvements obligatoires entre le Maroc et la zone CDEAO <i>Rachid Bahloula</i>	404-417
La perception des éleveurs sur les causes et les conséquences de la régression de l'effectif du mouton Koundoum au Niger <i>Issa Hamadou, Seyni Sidjo, Mamman Mani, Moumouni Issa, and Marichatou Hamani</i>	418-427
Etude de la relation entre l'exposition à la pollution atmosphérique liée au trafic routier et l'incidence des pathologies respiratoires au niveau de la ville de Meknès, Maroc <i>Ibrahim El Ghazi, Imane Berni, Aziza Menouni, Mohammed Amane, Marie-Paule Kestemont, and Samir El Jaafari</i>	428-443
Effet de l'abstraction linguistique sur la désapprobation intragroupe du recours aux biais intergroupes linguistiques <i>Gustave Adolphe Messanga, Lionel Joël Dongmo Kengni, and Sylvestre Nzeuta Lontio</i>	444-451
Fictionner, construire et déconstruire pour un monde Allochronotope: A la recherche de la dimension perdue <i>Mohamed Ali Chtioui and Hafedh Djedidi</i>	452-457
Profil de l'offre des soins médicaux en milieu urbain africain: Cas de la ville de Goma à l'est de la RDC <i>Jean-Bosco Kahindo Mbeva, Mitangala Ndeba Prudence, Hermès Karemere, Edgar Tsongo Musubao, Ntabe Namegabe Edmond, and Celestin Kimanuka</i>	458-471
L'apprentissage du raisonnement clinique en prothèse dentaire (Partie I: évaluation du raisonnement clinique chez les internes en Médecine dentaire) <i>Imane Boujoual, B. Mbarki, R. Bahlioui, and Abderrahman Andoh</i>	472-483
L'apprentissage du raisonnement clinique en prothèse dentaire (Partie II: Enquête de satisfaction relative à l'introduction de l'ARC comme méthode de pédagogie active chez les internes en médecine dentaire) <i>Imane Boujoual, B. Mbarki, R. Bahlioui, and Abderrahman Andoh</i>	484-497
Comportement à la flottation du minerai oxydé cuprocobaltifère de Kimpe en RD Congo par sulfuration superficielle <i>P. Sony, O. Tshibangu, G. Kasongo, F. Manene, P. Kalenga, L. Zeka, and A. Ilunga</i>	498-508
Etude des taux élevés des césariennes associés aux déficits des diagnostics et aux décès maternels dans la division provinciale de santé de Lomami (RD Congo) <i>N.B. Mukuna, N.N. Kabyahura, Y.C. Kyungu, L.E. Lubangi, and M.A. Kiomba</i>	509-516
La qualité de vie et le cadre urbain: Pour quelle approche de mesure ? <i>Chouaf Houria and Gherzouli Lazhar</i>	517-528
Impact de la variation des paramètres climatiques sur la production du riz pluvial dans la région du Haut-Sassandra (Centre-Ouest de la Côte d'Ivoire) <i>Affoué Berthe Yao, Kouao Armand Anoh, Zilé Alex Kouadio, Kouakou Lazare Kouassi, Kouakou Bernard Dje, and Kouassi Edouard Yao</i>	529-541
Contribution à l'étude pétrolière dans le bassin Ouest Congolien: Cas des formations géologiques affleurant aux environs de Sekelolo et de Kwilu, Snel dans la province de Kongo Central, RD Congo <i>David Ndumbi Katende, Raïs Seki Lenzo, Jean Pierre Kalay Kut, Shams Mbudi Diambu, Hugues Makima Moyikula, Grady Kalonji Lela, Jeaney Lusongo Elua, and Yanick Mananga Thamba</i>	542-554
Causes et fréquences des anémies sévères chez les enfants sous cinq ans à l'Hôpital Général de Référence de Kabinda	555-559

<i>N.B. Mukuna, N.N. Kabyahura, M.J.B. Kawumbu, and L.E. Lubangi</i>	
Relation entre couvert végétal et les termes du bilan hydrologique dans le bassin versant forestier de la Hana au sud-ouest de la Côte d'Ivoire	560-574
<i>Siaka Bakayoko, Ismaila Ouattara, Amidou Dao, Seydou Diallo, and Bamory Kamagaté</i>	
Etude chimique et activité antioxydante des huiles essentielles de deux Annonaceae endémiques ( <i>Uvaria chamae</i> et <i>Monanthes toxiaria</i> ) de Côte d'Ivoire	575-586
<i>Oussou Kouamé Raphaël, Choho Meney Frédéric, Kassi Amian Brise Benjamin, and Dongui Bini Kouamé</i>	
FPGA Based on airflow Noise Cancelling of mechanical ventilation	587-592
<i>Khalifa Elmansouri, Mohamed Abouzahir, and Aziz Et-Tahir</i>	
Termite communities in lemon tree plantations ( <i>Citrus limon</i> , Rutaceae) in the Tiassalé region (South of Côte d'Ivoire)	593-601
<i>Akpesse A. Alexandre Moïse, Coulibaly Tenon, Agossadou H. Anette, and Koua K. Herve</i>	
Les documents pour une situation d'enseignement, apprentissage des rapports de 3C: Cas des enseignants de l'Enseignement Primaire, Secondaire et Technique	602-630
<i>Israël DISASHI KABADI, Boniface Engombe Wedi, and Alain Kuzniak</i>	
Quid de la création d'une structure de sécurité sociale en République Démocratique du Congo dans la ville de Lubumbashi	631-647
<i>Manika Tshishimu Paul</i>	
Impact de la Certification ISO 9001 sur la Performance Organisationnelle: Etat de L'Art	648-654
<i>Ibtissam El Moury, Mohammed Hadini, Adil Chebir, and Adil Echhelh</i>	
Influence of the coupling of IrO <sub>2</sub> and PtO <sub>x</sub> on the charging / discharging process at the electrode / electrolytic solution interface	655-667
<i>Kambiré Olo, Pohan Lemeyonouin Aliou Guillaume, Kouakou Yao Urbain, Kimou Kouakou Jocelin, Koffi Konan Sylvestre, Kouadio Kouakou Etienne, and Ouattara Lassiné</i>	