

**INDIAN JOURNAL OF NATURAL SCIENCES (IJONS)**  
**BIMONTHLY INTERNATIONAL JOURNAL (PRINT)**

**Editor-in-Chief**  
**Dr.S.Vijikumar**

**Published by**

**TAMILNADU SCIENTIFIC RESEARCH ORGANISATION**

Regd.Off. : NO 46-141, MEENAKSHIPURAM RD, NEAR POST OFFICE,ARIMALAM 622  
201,PUDUKKOTTAI, TAMIL NADU, INDIA

---

Admin. Off. : PLOT NO 39,MURA BHAVAN,KOODAL NAGAR,RAJAGOPALAPURAM POST,  
PUDUKKOTTAI, TAMIL NADU, INDIA.

[ijonstnsro@gmail.com](mailto:ijonstnsro@gmail.com), [editorijons@gmail.com](mailto:editorijons@gmail.com)-[www.tnsroindia.org.in](http://www.tnsroindia.org.in)

**Editor-in-Chief, Editorial Board and Publisher take no responsibility for inaccurate, misleading data, opinion and statements appeared in the articles and advertisements published in this journal. It is the sole responsibility of the contributors and advertisers. No part of this journal can be reproduced without the written permission of the Editor-in-Chief who also holds the copyright © of the "Indian Journal of Natural Sciences (IJONS)".**

## JOURNAL PARTICULARS

Journal Name	INDIAN JOURNAL OF NATURAL SCIENCES (IJONS)
Frequency	Bi-monthly ( Feb, Apr, Jun, Aug, Oct, Dec)
ISSN	0976 – 0997 ( Print)
Publisher	TamilNadu Scientific Research Organisation , Pudukkottai, Tamil Nadu, India
Chief Editor	Dr.S.Vijikumar
Copy right	TamilNadu Scientific Research Organisation (TNSRO) Pudukkottai, Tamil Nadu, India.
Starting Year	2010
Subject	Multi Disciplinary Science Subjects
Review Process	Double Blind Review Process
Language	English
Publication Format	Print
Access	 OPEN ACCESS
License	 Creative Commons Attribution License 4.0
Phone Nos:	04322- 458193, 04322 –261088 (10.00 A.M to 05.00 P.M)
Email	ijons@tnsroindia.org.in& ijonstnsro@gmail.com
Website	<a href="https://www.tnsroindia.org.in/">https://www.tnsroindia.org.in/</a>
Registered office Address	No 46-141, Meenakshipuram Rd, Near Post Office, Arimalam 622 201, Pudukkottai, Tamil Nadu, India.
Admin. Office Address	Plot No 39, Mura Bhavan, Koodal Nagar, Rajagopalapuram Post, Pudukkottai, Tamil Nadu, India.

# Indian Journal of Natural Sciences (IJONS)

## Editorial Committee Members (ECM)

---

Editor-in-Chief	<b>Dr.S.Vijikumar</b> Director TamilNadu Scientific Research Organisation Pudukkottai-622003, Tamil Nadu. India.
	<b>Editorial Committee</b>
Honorable Chief Advisor	<b>Dr.Neelesh Sharma</b> Professor, Sher-E-Kashmir University of Agricultural Sciences and Technology of Jammu (SUKAST), Jammu, University in Wadoora, Jammu & Kashmir
Honorable Chief Advisor	<b>Dr.C.Anandharamakrishnan</b> Director, CSIR – National Institute for Interdisciplinary Science and Technology (NIIST) Council of Scientific and Industrial Research (CSIR), Ministry of Science and Technology, Government of India, Industrial Estate PO, Thiruvananthapuram, India
Honorable Chief Advisor	<b>Dr.G.G.Hammad Ahmad Shadab</b> Associate Professor, Department of Zoology, Aligarh Muslim University, Aligarh-202002,Uttar Pradesh, India
Honorable Chief Advisor	<b>Dr. B. Vaseeharan</b> Professor and Head, Department of Animal Health and Management, Alagappa University, Karaikudi – 630003 TamilNadu, India
Honorable Member	<b>Dr. T.S. Saravanan</b> Sr.Professor of Biotechnology, Dr.M.G.R Educational and Research Institute University, Periyar E.V.R High Road, Maduravoyal,Chennai-600095.
Honorable Member	<b>Dr. K.Gurunathan</b> Prof & Head, Department of Nano science & Technology, Alagappa University, Karaikudi, TamilNadu, India.
Honorable Member	<b>Dr.C.Balusami</b> Assistant Professor, Department of Livestock Production and Management, College of Veterinary and Animal Sciences Pookode-673576.Kerala, India.
Honorable Member	<b>Dr. Rajashekhar O, Patil</b> Assistant Professor, Department of Environmental Management, Sant Gadge Maharaj College of Commerce & Economics, Mumbai 400004, India
Honorable Member	<b>Professor.G.Ganesan</b> Professor, Department of Mathematics, Adikavi Nannaya University,Rajahmundry-533105, Andhra Pradesh, India
Honorable Member	<b>Dr.M.Krishnan</b> Vice Chancellor, Central University of Tamil Nadu, Thiruvarur, Tamil Nadu. India

Honorable Member	Mis D.Kalpana Asst.Professor, Department of Chemistry, Bon Secours College for Women,Vilar bypass road, Thanjavur TamilNadu, India.
Honorable Member	<b>Dr.H.Syed Jahangir</b> Associate Professor, P.G. and Research Department of Botany, Jamal Mohamed College (Autonomous) Trichirappalli-620020,TamilNadu,India.
Honorable Member	<b>Dr.Sujatha Ilangovan</b> Assistant Professor, PG & Research Department of Zoology, Holy Cross College, Tiruchirappalli-620002. TamilNadu, India.
Honorable Member	<b>Dr.Vasudevan Ayyappan,</b> Post Doctoral Research Associate, Department of Biotechnology, Delaware State University, Dover, Delaware – 19901
Honorable Member	<b>Prof.K.Kumarasamy</b> Emeritus Professor, ICSSR-Senior Fellow Department of Geography, School of Earth Sciences Bharathidasan University Tiruchirappalli - 620 024, TN, INDIA
Honorable Member	<b>Dr. S. Balasubramanian</b> Assistant Professor, Department of Mathematics, Government Arts College (A), Karur – 639 005,Tamilnadu,India.
Honorable Member	<b>Dr.R.Muthukrishnan</b> Associate Professor (SS&AC) & HOD (Crop Management) Department of Soil Science and Agricultural Chemistry, Vanavarayar Institute of Agricultural Manakkadavu, Pollachi-642- 103, TamilNadu, India
Honorable Member	<b>Dr.Subbiah poopathi</b> Scientist-G/ Director Grade ICMR-Vector control Research Centre, Medical complex, Indira Nagar,Pondicherry-605006,India
Honorable Member	<b>Dr.P.Govindaraj</b> Head & Associate Professor in Chemistry Department of Chemistry, SBK College, Aruppukottai - 626 101, TamilNadu, India
Honorable Member	<b>Dr.Sindhu. K</b> Assistant Professor, Department of Veterinary Pharmacology and Toxicology Veterinary College, Gadag – 582101, Karnataka, India.
Honorable Member	<b>Dr. S. Umamaheswari</b> Assistant Professor, Department of Environmental Biotechnology School of Environmental Sciences Bharathidasan University, Tiruchirappalli – 620 024, Tamil Nadu
Honorable Member	Dr. P. Santhanam Associate Professor, Department of Marine Science, School of Marine Sciences,Bharathidasan University, Tiruchirappalli. Tamil Nadu. India

Honorable Member	<b>Dr. S. Jayachandran</b> Professor & Head, Dept. of Oral Medicine and Radiology, Tamil Nadu Govt. Dental College and Hospital, Chennai -600003, Tamil Nadu, India.
Honorable Member	<b>Dr. Komalavalli Narayanaswamy</b> Associate Professor and Head, PG and Research Department of Botany, Alagappa College of Arts & Science, Karaikudi, Tamil Nadu, India
Honorable Member	<b>Dr. V.M. Srinivasan</b> Assistant Professor (Plant Pathology) Department of Crop Protection Thanthai Roever Institute of Agriculture and Rural Development, Valikandapuram Post, Perambalur - 621115., Tamil Nadu.
Honorable Member	<b>Dr. Rina Poonia</b> Associate Professor, Department of Arts, Faculty of Arts & Law, Manipal University, Jaipur, India.
Honorable Member	<b>Dr. M. Shanthasheela</b> <b>Professor</b> Department of Agricultural Extension and Rural Sociology Tamil Nadu Agricultural University, Lawley Road Coimbatore, Tamil Nadu, India - 641003
Honorable Member	<b>Dr. M. Lekeshmanaswamy</b> Principal, PG and Research Department of Zoology, Kongunadu Arts and Science College G.N. mills (PO), Coimbatore-641 029, TamilNadu, India.
Honorable Member	<b>Dr. N. Balakrishnan</b> Professor, Directorate of Research Tamil Nadu Agricultural University, Lawley Road, Coimbatore, Tamil Nadu, India - 641003.
Honorable Member	<b>Dr. Syed Mohamed</b> Asst. Prof. Dept. of Zoology, Jamal Mohamed College Tiruchirappalli, TamilNadu, India
Honorable Member	<b>Dr. N. Raman</b> Associate Professor, Department of Chemistry, VHNSN College, Virudhunagar-626 001, TamilNadu, India.
Honorable Member	<b>Dr. Komal Kumar Javarappa</b> Institute of Molecular Medicine Finland, University of Helsinki, Finland, Biomedicum Helsinki 2U, G315b, Finland- 00014.
Honorable Member	<b>Dr. A. Dinakara Rao</b> Professor, Center for Bioinformatics, School of Life Sciences, Pondicherry University, Puducherry, India

Honorable Member	<b>Dr.K.Sivakumar</b> Professor, Department of Botany, Annamalai University, Annamalai Nagar, TamilNadu, India
Honorable Member	<b>Dr.A.Kalyana Sundaram</b> Associate Professor(Entomology), Tamil Nadu Agricultural University, Lawley Road Coimbatore, Tamil Nadu, - 641003.
Honorable Member	<b>Dr.P.Ramachandran</b> Director & Head, Trichy Institute of Regenerative Medicine, Thillai Nagar West,Trichy,TamilNadu, India.
Honorable Member	<b>Dr.S.Senthil Murugan</b> Assistant Professor, Department of Animal Nutrition, College of Veterinary and Animal Sciences, Pookode, Wayanad, Kerala, India
Honorable Member	<b>Dr.V.Violet Dhayabaran</b> Associate Professor ,Department of Chemistry, Bishop Heber College (Autonomous), Puthur, Tiruchirappalli, Tamil Nadu, India.
Honorable Member	<b>Dr.Ananthnag B</b> Lecturer, Department of Environmental Science, Kuvempu University,Shivamogga, Karnataka, India.
Honorable Member	<b>Dr.G. Rubalakshmi</b> Scientist & Director, GRD Bio Research Centre #3/41, Nanbargal Nagar, Muthukalipatty, Rasipuram TK, Namakkal DT- 37401. T.N. ,India.
Honorable Member	<b>Dr.M.Ramesh</b> Professor, Department of Biotechnology, Alagappa University, Karaikudi-630003,Sivagangai Dt, TamilNadu,India.
Honorable Member	<b>Dr.S.Ezhil Vandan,</b> <b>Scientist,</b> Food Protect ants & Infestation Control Department, CSIR-Central Food Technological Research Institute, Mysore-570 020,Karnataka,India.
Honorable Member	<b>Dr.S.Yamini Sudha Lakshmi</b> Assistant Professor, Department of Medical Biochemistry, University of Madras,Taramani Campus, Chennai-600113,TamilNadu,India.

Honorable Member	<b>Dr.V.L.Madhu Prasad</b> Directorate of Extension, University of Agricultural Science, Hebbal,Bangaluru-560024. Karnataka,India.
Honorable Member	<b>Dr.T.Shanmugasundaram</b> Department of Vegetable Crops, Horticultural College and Research Institute, Tamil Nadu Agricultural University, Coimbatore-641 003, Tamil Nadu,India.
Honorable Member	<b>Dr.C.Thamaraiselvi</b> Assistant Professor, Dept. of Biotechnology Mother Teresa Women's University Kodaikanal-624101,TamilNadu,India.
Honorable Member	<b>Dr.R.Selvaraj</b> Department of Veterinary Physiology, Centre for Laboratory Animal Technology & Research (CPCSEA approved), Sathyabama University, Chennai – 600 119.
Honorable Member	<b>Dr. Hasan S.A. Jawad</b> Animal Production Department, Agricultural Faculty, University of Baghdad, Baghdad, Iraq.
Honorable Member	<b>Dr.C.Kathirvelan</b> Assistant Professor, Department of Animal Nutrition Veterinary College and Research Institute, Tamil Nadu Veterinary and Animal Sciences University, Namakkal -637002. TamilNadu, India.
Honorable Member	<b>Dr. John Abraham</b> Assistant Professor, Department of L.P.M., College of Veterinary and Animal Sciences, Pookode, Wayanad. 673576, Kerala, India
Honorable Member	<b>Dr.P.Kavitha</b> Assistant Professor, Department of Zoology and Biotechnology AVVM Sri Pushpam College (Autonomous) Poondi, Thanjavur, TamilNadu, India.
Honorable Member	<b>Dr. Gopal Muthu</b> Scientist -'C', DHR-Model Rural Health Research Unit ICMR-National Institute of Epidemiology Government of India, Primary Health Centre Campus Kallur-627 010, Tirunelveli District, Tamil Nadu, India

Honorable Member	<b>Dr.Ranjith.D</b> Assistant Professor, Department of Veterinary Pharmacology and Toxicology, College of Veterinary and Animal Sciences, Pookode, Wayanad – 673576. Kerala, India
Honorable Member	<b>Dr.Prantosh K. Paul</b> Assistant Professor, Department of Computer & Information Science, Raiganj University, Raiganj, West Bengal-733 134, India.
Honorable Member	<b>Dr. Ajay Anil Gurjar</b> Professor & Dean Academics, Sipna College of Engineering & Technology, Amravati(M.S)- 444606,India.
Honorable Member	<b>Dr.V.E.Nethaji Mariappan</b> Scientist"F" Centre for Remote Sensing and Geoinformatics Sathyabama University,Rajiv Gandhi Road, Sholinganallur, Chennai – 600119,Tamil Nadu
Honorable Member	<b>Dr.N.Mahesh</b> Assistant Professor – III Department of Chemistry & Biosciences SASTRA University Srinivasa Ramanujan Centre, Kumbakonam,Thanjavur Dist, Tamilnadu, INDIA
Honorable Member	<b>Dr.Sumit Kumar Gupta</b> Dean of Science, Department of Physics, Parishkar College of Global Excellence , Jaipur, Rajasthan, India
Honorable Member	<b>Mr.S.M.Prasad</b> Assistant Professor, Department of Nutrition and Dietetics, Sadakathullah Appa College, Rahmath Nagar,Tirunelveli-627011. T.N.India
Honorable Member	<b>Dr.Prakash.M</b> Professor, Department of Genetics and Plant Breeding, Faculty of Agriculture,Annamalai University, Annamalai nagar- 608002.Cuddalore District
Honorable Member	<b>Dr.M.N.Harisha</b> Guest Lecturer, Department of Wildlife and Management, Kuvempu University, Jnanasahyadri, Shankaraghatta - 577451. Shimoga, Karnataka, India
Honorable Member	<b>Mr.Sridhar Ramachandran</b> Assistant Professor, Department of Biological Science, Gojan College of Teacher Education , Chennai-600 052, TamilNadu, India

Honorable Member	<b>Dr.P.Jeyaseelan</b> Department of Agricultural Extension, Faculty of Agriculture, Annamalai University, Annamalai Nagar – 608 002, Cuddalore
Honorable Member	<b>Dr.Suja George</b> Principal Scientist, Department of Biotechnology, M.S. Swaminathan Research Foundation, Taramani, Chennai 600113.
Honorable Member	<b>Dr.Muthuraman A.,</b> Senior Lecturerm , Pharmacological unit, AIMST University, 08100 Bedong, Kedah, Malaysia
Honorable Member	<b>Dr.G.Rama Rao</b> Principal Scientist &Head, Dept.of Crop Physiology, RARS Lam, Guntur-522034, ANGR Agricultural University, Andhra Pradesh, India
Honorable Member	<b>Dr.Y.V. Krishna Reddy</b> Department of Agricultural Engineering, Aditya Engineering College, Surampalem- 533437, East –Godavari, A.P., India
Honorable Member	<b>Dr.Pushpa S Murthy</b> Senior Scientist, Department of Spice and Flavor Science, AcSIR Associate Professor (Biological Sciences), CSIR - Central Food Technological Research Inst. MYSURU, Karnataka, INDIA
Honorable Member	<b>Dr.Mathews Plamoottil</b> Asst. Professor in Zoology, Govt. College Chavara, Kollam, Kerala, India
Honorable Member	<b>Dr.N.Vijayakumar</b> Assistant Professor Dept.of Biochemistry & Biotechnology Annamalai University, Annamalainagar-608 002, Tamilnadu, India.
Honorable Member	<b>Dr. E.Emimal Victoria</b> Assistant Professor, Department of Zoology Sri Meenakshi Govt. Arts College for Women, Madurai, TamilNadu, India
Honorable Member	<b>Dr.C.Kandeepan</b> Asst.Professor and Head, PG Department of Zoology, A.P.A College of Arts and Culture, Palani-624601, Dindigul Dt. Tamil Nadu,India.

Honorable Member	<b>Dr.A.Radha</b> Assistant Professor, Dept. of Zoology Kunthavai Naacchiyar Govt Arts College for Women, Thanjavur-7,TamilNadu, India.
Honorable Member	<b>Dr.P.Ramachandran</b> Director & Head, Trichy Institute of Regenerative Medicine, Thillai Nagar West,Trichy,Tamil Nadu,India.
Honorable Member	<b>Dr.B.Kaleeswaran</b> Assistant Professor, Dept. of Zoology & Biotechnology, A.V.V.M.Sri Pushpam College, Poondi, Thanjavur, TamilNadu, India.
Honorable Member	<b>Dr.S.Yamini Sudha Lakshmi</b> Assistant Professor, Department of Medical Biochemistry, University of Madras,Taramani Campus, Chennai-600113,TamilNadu,India.
Honorable Member	<b>Dr.K.Nagarajan</b> Associate Professor & Head Department of Zoology VHN Senthikumara Nadar College, Virudhunagar,TamilNadu,India.
Honorable Member	<b>Dr.S.Lingathurai</b> Assistant Professor, Department of Zoology and Research Centre, at Aditanar College of Arts & Science, Virapandianpattinam, Tiruchendur - 628 216 Thoothukudi District.
Honorable Member	<b>Dr.D.Sivaraman</b> Scientist-C Department of Pharmacology, Sathyabama University, Jeppiaar Nagar, Rajiv Gandhi road, Chennai- 600 119. TamilNadu, India.
Honorable Member	<b>Dr.Suja George</b> Principal Scientist, Department of Biotechnology, M.S. Swaminathan Research Foundation, Taramani, Chennai 600113.
Honorable Member	<b>Dr.S.V.Sai Prasad</b> Principal Scientist & Head ICAR-IARI, Regional Station, Near Agriculture College, Indore – 452 001, Madhya Pradesh, India

Honorable Member	<p><b>Subburaj. M</b>  Authorized Officer,  Kolkata Seaport, Kolkata International Airport and Haldia port  Food Safety and Standards Authority of India  Ministry of Health and Family welfare, Govt. of India Benfish  Tower, 31 GN Block, Sector V, Salt lake city  Kolkata -700091, India</p>
Honorable Member	<p><b>Dr.Ga.Bakavathiappan</b>  Associate Professor in Zoology  SBK College, Aruppukottai - 626 101,  TamilNadu, India  E.Mail: ga.bakavathiappan@gmail.com</p>
Honorable Member	<p>Dr.Omkar Prasad Baidya  Assistant Professor,  ESI-PGIMSR and ESIC Medical College,  Joka, Kolkata,West Bengal, India</p>
Honorable Member	<p><b>Dr. Preethi Balasundaram</b>  Post-Doctoral Fellow, Wieden Group  Alberta RNA Research &amp; Training Institute  Department of Chemistry and Biochemistry  University of Lethbridge, 4401 University Drive  Lethbridge, Alberta, Canada T1K 3M4</p>
Honorable Member	<p><b>Dr. Horne Iona Averal</b>  IQAC Coordinator, Associate Professor  PG Research Department of Zoology, Holy cross college  (Autonomous), Trichy. TamilNadu, India.</p>
Honorable Member	<p><b>Dr. S. Thenmozhi</b>  Assistant Professor (SS &amp; AC)  Soil Fertility and Irrigation Water Management  TNAU, Coimbatore, Tamil Nadu, India</p>
Honorable Member	<p><b>Dr. S. Suganya Kanna</b>  Associate Professor, (Agricultural Entomology),  Agricultural College and Research Institute,  Tamil Nadu Agricultural University.  Coimbatore, Tamil Nadu, India</p>
Honorable Member	<p><b>Dr.K.Saravanan</b>  Assistant Professor ,PG &amp; Research Dept. of Zoology,  Nehru Memorial College (Autonomous),  Puthanampatti, Tiruchirappalli,  TamilNadu,India</p>
Honorable Member	<p><b>Dr.C.Ravinder Singh</b>  Chief Scientist - Tissue Culture &amp; Hydroponics  AAKASH GREEN RESEARCH PRIVATE LIMITED  14B/1, Bryant Nagar, 9th Street East Thoothukudi, Tamil Nadu -  628008, India.</p>

Honorable Member	<b>Dr.M.Biruntha</b> Assistant Professor, Department of Animal Health and Management, Alagappa University,Karaikudi, TamilNadu,India
Honorable Member	<b>Dr.S.Sasikala</b> Head&Associate Professor, Department of Computer Applications, Hindusthan College of Arts and Science, Coimbatore - 641 028, Tamilnadu, India.
Honorable Member	<b>Dr.Y.V. Krishna Reddy</b> Department of Agricultural Engineering, Aditya Engineering College, Surampalem- 533437, East –Godavari, A.P., India
Honorable Member	<b>Dr.Manigopa Chakraborty</b> Chief Scientist cum University Professor Department of Genetics & Plant Breeding, Birsa Agricultural University, Kanke, Ranchi, Jharkhand – 834006., India.
Honorable Member	<b>Dr.Huda Falah Hasan Radi Alqaraghuli</b> Assistant Professor, College of Veterinary Medicine, University of Baghdad,Baghdad, Iraq.
Honorable Member	<b>Dr.Arvind Prasad Dwivedi</b> Lecturer, Department of Biochemistry, Govt. Sanjay Gandhi Smriti College, Sidhi, Madhya Pradesh, India.
Honorable Member	<b>Dr.A.Suganya</b> Associate Professor, Department of Agricultural Science, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India.
Honorable Member	<b>Dr.M.Karthikeyan</b> Assistant Professor (Plant Pathology) Department of Vegetable Crops ,HC&RI Tamil Nadu Agricultural University ,Coimbatore TamilNadu,India
Honorable Member	<b>Vijaya Bhaskara Reddy.MUTHA</b> Asst. Prof.Faculty of Public Health, St Theresa International College, 1 Moo 6 Rangsit-Nakhon Nayok Road (Klong 14), Bungsan,Ongkharak – 26120 Nakhon Nayok, Thailand

Honorable Member	<b>Dr.Thirumal Kumar D</b> Assistant Professor(Jr) Department of Integrative Biology, School of Bio Sciences and Technology Vellore Institute of Technology Vellore – 632014, Tamilnadu, India.
Honorable Member	<b>Dr. Saikat Sen</b> Dean of Faculty, Faculty of Pharmaceutical Sciences Assam down town University, Panikhaiti, Guwahati, Assam - 781026, India
Honorable Member	<b>Dr. P. Chandramani</b> Professor, (Agricultural Entomology), Agricultural College and Research Institute, Tamil Nadu Agricultural University Kudumiyanmalai – 622 104. Pudukkottai Dist., Tamil Nadu, India
Honorable Member	<b>Dr.S.Prema</b> Associate Professor of Computer Science, Arulmigu arthanareeswarar arts and science college, Tiruchengode, Tamilnadu

Volume XIV (14) CODEN: IJONS (82) (2024)		February 2024 ISSN: 0976 - 0997
S. No.	CONTENTS	Page No.
331	Template-Engineered Macrocyclic Schiff-Based Metal Complexes: Synthesis, Antibacterial and DNA Photo cleavage Efficacy Purti Mishra and Pooja Sethi	69950-69956
332	Synthesis, Characterization and Neurotoxicity Screening of the Complexes Derived from Thiazole based Ligand Praveen Kumar Gupta, Reena V Saini, Savita Kumari and Harshika	69957-69962
333	Preparation, Characterization and Evaluation of Bimetallic Zn-Cu Nanoparticles Obtained from Aqueous Seed Extract of <i>Trifolium alexandrinum</i> Noval Pharmacological and Photocatalytic Agents Nirantak Kumar, Anita Rani and Manoj Kumar	69963-69971
334	Utility of Phenolic Acids and Bio molecules in <i>Moringa oleifera</i> plant Extracts for the Synthesis of Metallic Nanoparticles and their Applications: A Review Amit Bhardwaj and Arun K. Singh	69972-69983
335	Reduced Graphene Oxide Supported Ni/Co- Based organic Frameworks for Visible Light Assisted Photo catalytic degradation of Methylene Blue Sonu Jakhar and Nirankar Singh	69984-69989
336	New Media and Romance Scam: A Study on the Mental Health of Victims Amit Kumar Singh and Rahul Amin	69990-69997
337	Quasi-Ideals and Quasi-Prime Ideals of Ternary Right Almost Semigroups G. Ramesh and S. Mahendran	69998-70002
338	Artificial Intelligence and Literature: The Muse in the Machine Balagopal A.M and Richa Arora	70003-70007
339	Wound Healing Potential of Siddha Herbo Mineral Formulation <i>Mathan Thailam</i> – A Review R.Subhashri , J.Lavanya, D Periyasami and M V Mahadevan	70008-70015
340	Shaping the English Language: The Influence of Sports Terminology Hitesh D Raviya and Deepali D Shahdadpuri	70016-70021
341	On Ternary Quadratic Diophantine Equation $2(x^2 + y^2) - xy = 57z^2$ K.Radhika, S.A. Shanmugavdivu and C.Alexander	70022-70038
342	Automated Brain Tumor Detection in MRI Images using Deep Learning Approach Dipti Mathpal and Nikhil Gondaliya	70039-70054
343	Fake News Detection using Machine Learning and Natural Language Processing Maitri Patel, Krunal Shinde, Manav Shah and Bijal Dalwadi	70055-70062
344	Facial Emotion Recognition using Deep Learning A B Bambhaniya, Viny Selopal, Deepak Vala, Jagdish Rathod and Devang Rathod	70063-70067

345	<i>Pseudomonas stutzeri</i> NC1: A Potent Halotolerant Diesel Oil Degradere and Versatile Biosurfactant Producer Isolated from Dwarka Coast, Gujarat, India Boski Thakkar, Nishant Choudhari and Nisha Daxini	70068-70076
346	SLHD: Safety of Little Heart Device to Protect Crime Against Girl Child Kamini Solanki , hailesh Khant, Jaimin Undavia and Atul Patel	70077-70083
347	Chargers for Solar and E-Vehicles Hitarth Solanki, Tarang Patel, Chintan Bamania, Vithal Kamat Managing and Dharita Patel	70084-70091
348	A Sustainable Approach for Pollution-Free Mobility: Green Airport Jagruti Kautkar, Jagruti Shah and Indrajit Patel	70092-70097
349	Real Time Parking System Using IoT Viranchi Pandya, Manisha Upadhyay, Pranjal Yadav and Salonee Agarwal	70098-70102
350	Deep learning approaches for image restoration Comprehensive Survey Rikita Chokshi and Sudhir Vegad	70103-70109
351	Process Automation in Women-Led Msme Units :A Case Study of Small-Scale Industries in Uttarsanda Aadarsh Pillai and Rina Dave	70110-70113
352	Coal Mining Safety using Zig Bee Viranchi Pandya, Manisha Upadhyay, Maitri Patel and Munmun Sangtani	70114-70118
353	Evaluation of Strength and Comparative Study on Silica Fume Vishal Nihalani, Aashish Chhatani, Deepa Sinha and Nekzad Umrigar	70119-70123
354	Real Time Implementation of IoT based Robotic Car and Automatic Solar Powering Street lights with Solar Tracker Soni P M and Benn Mathew Bobby	70124-70129
355	Devops Adoption: Evaluating its Influence on Software Development Efficiency Siji Jose Pulluparambil and Fredy Varghese	70130-70137
356	The Role of Artificial Intelligence in Enhancing Early Detection and Diagnosis of Melanoma Joicy Joy and Amritha S	70138-70142
357	Early Detection of Diabetic Retinopathy Using Machine Learning Approaches Sabeena A.S and M.K.Jeyakumar	70143-70153
358	Data Mining Approach for the CRM Application in the Banking Domain Soni P M and Anna Diana K M	70154-70159
359	Exploring the Effectiveness of Information Gain Method for Feature Selection in Designing Intrusion Detection Systems for IoT Security: A Comprehensive Literature Review Laiby Thomas and Anoop B K	70160-70167
360	Advancing Towards a Secure and Sustainable Energy Economy- Insights from the State Energy and Climate Index of NITI Aayog Sindhu. K and Santhosh. R	70168-70175
361	Algebraic Properties of Graph Theory and Its Applications Shajitha T B and Stinphy Maxon	70176-70181
362	An IoT based crypto lock model using AES-128 and SHA-512 Livin P Wilson	70182-70189

363	Comparing Perspectives: Analysing the Gendered Division of Unpaid Care Work through the Resource-Based and Gender-Centred Approaches. Dev Mathew and Siby Abraham	70190-70194
364	Enhanced Traceable CP -ABE for Effective Data Transmission in Military Systems Anusha Sivanandhan, Neenu Thomas and Bibitha Baby	70195-70199
365	The Impact of Environmental Education on Shaping Eco-conscious Citizen Vandana C H and Githin T James	70200-70204
366	Enhancing Digital Infrastructure for Sustainable Development: Addressing Challenges and Solutions in Ensuring Data Security in the Internet of Things Dhanya G .S	70205-70211
367	Breast Cancer Detection Using Machine Learning Algorithms-A Survey Nithya Paul and A Nagappan	70212-70216
368	The Impact of Women Empowerment on Sustainable Development Remya Cheriyan and Kavitha Vincent	70217-70221
369	Advancing Osteosarcoma Detection in Histopathology Images through Weighted Bilateral Filtering, Parabolic Balance Contrast Enhancement, and Morphological Operations Deepak K.V and R. Bharanidharan	70222-70228
370	Unveiling Determinants of Consumer Intent in Green Purchasing Cinnu Mohanan and Antony George	70229-70235
371	Advancements in Character Recognition through Diverse Deep Learning Techniques: A Literature Review Sarithadevi S and Jayakrishnan S	70236-70240
372	Sustainable Business Practices and Corporate Responsibility in MSMEs: A Catalyst for Achieving SDGs Anita Mary Alex	70241-70248
373	A Study on Ornamental Fish Distribution Channels Ditty Johnson and Antony George	70249-70255
374	Advancements in Bone Cancer: Exploring Opportunities, and the Potential impact of Machine Learning in Early Diagnosis Anna Diana. K.M and Prakash M	70256-70261
375	Transforming the Banking Sector: The Rapid Adoption of IoT Vargese Paul and Shebin Sharief	70262-70267
376	Integrated Floating Agriculture – Aquaculture: A Sustainable Approach for Kerala's Self-Sufficiency and Livelihood Enhancement – A Conceptual Model Antony George and Jissmol Vaghese	70268-70274
377	Towards Sustainable Manufacturing: Integrating Lean Practices for Industrial Transformation Syama S S	70275-70280
378	Perceptions and Perspectives: An In-Depth Analysis of Hospitality Professionals' Views on Women in Leadership Roles in the Hospitality Industry in Kerala Sonia Thomas and Varghese Johnson	70281-70286

379	Exploration of Hybridity: An Analysis of Beauty Standards in Chimamanda Ngozi Adichie's "Americanah" Purnima S Kumar	70287-70292
380	Role of Society in Shaping Gender Roles: An Analysis of Sarat Chandra Chattopadhyay's <i>Srikanta</i> and <i>Devdas</i> Jannet Johny	70293-70299
381	From Bias to Breakthrough: Traversing the Shift in Gender Stereotypes of Women in Advertisements Jesleen Jose and Gigy Johnson	70300-70305
382	From Submission to Defiance: Discovering the Metaphors of Women's Long Hair and the Empowering Act of Cutting John Majel P	70306-70310
383	Can Biospheric Values and Local Environmental Concern Shape Private Sphere Behaviors Towards Sustainable Living? Mudang Tagiya and Odang Mara	70311-70319
384	Beyond Stereotypes: Unraveling Cognitive Diversity in Contemporary Literature's Gender Narratives Zayana. PK	70320-70324
385	Beyond Mourning: Empowerment of Widows in Cinema and Culture Najla PM and Aysha Muradh PC	70325-70329
386	Gendered Cultural Norms: The Maternal Authority Paradox In Kerala's Muslim Marriages Jouhra K.P	70330-70334
387	Collective Experience and Socio-Cultural Trauma: An Analysis of Gloria Naylor's <i>The Women of Brewster Place</i> and <i>Linden Hills</i> B. Sindhiya and N. Cinthia Jemima	70335-70340
388	Indianness Within Superhero/heroine Protagonists in COVID-19 Health Literacy Comics: A Graphical Exploration from a Gendered Lens Albeena Stephen	70341-70347
389	Challenging Beauty Norms: A Discursive Analysis of the New Malayalam Cinema through Social Media Reactions Aneesunneesa P	70348-70352
390	Malabar Muslim Women's Reading of Kamala Das' Poem <i>Middle Age</i> Mohammed Shafeer K. P	70353-70357
391	Exploring Sensitive and Dangerous Terrain in <i>Nirmala</i> by Munshi Premchand S. Senthilkumari	70358-70362
392	Exploring Multi-Layered Marginalisation in Rejina Marandi's novel "Becoming Me" J. Sebastian Poonolly <sup>1*</sup> and Mathew Antony Kattokaran <sup>2</sup>	70363-70366
393	Bridging Education and Community: SCMS Cochin School of Business' Pedagogical Initiatives for Sustainable Development Goal 4 with special focus on Gender Devika. S and Poornima Narayan	70367-70371
394	Smart Maritime Conservation: Enhancing MPA Surveillance with IoT, Haversine Method and LoRa Technology C. Sivakumar	70372-70378

395	Tragedy and Solidarity: Examining the Impact of the 2002 Gujarat Riots on Muslim Women across Rural and Urban Divides Aasifa Rahmath Hameed	70379-70382
396	Innovations in Medical Technology: Bridging Nanoscience, Nanotechnology, Nanorobots and Computer Science for Advanced Healthcare Applications C. Sivakumar	70383-70394
397	The Power Divide: Tracing the Roots of Segregation and Exclusion of Transgender people in India Amrita Das	70395-70400
398	Smart System For Live Human Detecting Robot for Disaster Rescue Operation using IoT C. Sivakumar, T.Geetha, S.Shankar and K. Velan	70401-70413
399	Silent Dissent: Counter-Narratives in Indian Police Memoirs Moulina Bhattacharya	70414-70422
400	Shaping Tomorrow: Unraveling the social construction of Youth in the Digital Age Fatimah Nilofer	70423-70426
401	Beyond Boundaries: Migrant Women's Narratives in <i>The Grapes of Wrath</i> Aleena Babu	70427-70432
402	Revolutionizing Healthcare Delivery: An Integrated Approach to E-Health Donation Oversight, Nutritionist Support and IoT Services C. Sivakumar	70433-70441
402	An Insight into the Theoretical Perspectives of the Portrayal of Women in the films of Mahboob Khan" with reference to the Bollywood films "Aurat" and "Mother India Mohammad Ashraf Ali, Ritu.S.Sood, Manawwar Alam and Sanjeev Sood	70442-70452
403	On Some Transformations and Summations of Basic Hypergeometric Series-I Jayprakash Yadav and NidhiSahni	70453-70456
404	Revolutionizing Education: Unraveling the Transformative Effects of Covid-19 Pandemic on Teaching and Learning Khursheed Alam, M Premkumar, Kamakshi and Santosh Kumar	70457-70462
405	Volatility Prediction of Oil and Gold Prices Using GARCH Model Piyush Kumar, Divyansh Sagar and Lakhwinder Kaur Dhillon	70463-70473
406	A Comprehensive Review and Classification of Numerical Methods for American Options Pricing Poonam Deshpande and Khursheed Alam	70474-70486
407	Wavelet-Based Diffusion Model for Image Denoising and Deblurring Alka Chauhan and Santosh Kumar	70487-70491
408	Algorithmic Solutions for Hate Speech Detection: A Machine Learning Perspective Salim Al Hudafi, Sunita Sharma, Ajay Singh and Khursheed Alam	70492-70495
409	Remote Sensing Applications for Human Healthcare: A Review Manjunata M.C, Madhu B, Sawant Sushant Anil, Karthik C.B, Sahana K.S, Mounika Sree M and Chaithra M	70496-70504
410	Biosynthesis of Silver Nano particles using Microbes Chitra Rathod, Vijay Jagdish Upadhye and Anupama Shrivastav	70505-70508

411	The Impact of the Tamil Nadu Pollution Control Board in Regulating River Pollution - A Study A.S.Naveenkumar and C.Subramanian	70509-70517
412	Interval-Valued Neutrosophic Hyper Soft Rough Sets V.S.Subha and R.Selvakumar	70518-70259
413	A Cryptographic Method Applied on a Trigonometric Ratio using Laplace Transform Rinu Verma, Megha Shrivastava and Deepali Biniwale	70530-70534
414	Hybrid Precoding and Channel Estimation form Wave MIMO OFDM System M.Jagadeesh Chandra Prasad, Chennakesavula Usha Rani, Kuncham Lakshmi Prasanna	70535-70544
415	Effect of Chemical Seed Priming on Crop Growth and Yield Traits of Okra [ <i>Abelmoschus esculentus</i> (L.) Moench] CV. Arka Anamika H Mohamed shafiq, C. Praveen Sampath Kumar, A. Kamaraj , J. Sam Ruban and R. Ebenezer Babu Rajan	70545-70549
416	A Study to Evaluate the Morphometric Measures of Gonial Angle and Bi-gonial Width for Healthy Individuals in Garden City University Dental Camp. Sandhya Nagolu, S Jeyakumar, Anugula Divya Sai and Vrinda T A	70550-70555
417	Evaluation of Effectiveness of Remedial Measures on Pesticide Residues in Grapes Manu Jose, Jayalakshmi P M, Aswin Biju and Fathima Nezzrin Muhammed	70556-70565
418	Multi-Object Manufacture with Multi-Trader Optimization of Fuzzy Inventory System Feasible Events along Credible Demand R.Vithyadevi and K. Annadurai	70566-70580
419	Very Irredundant Excellence in Fuzzy Graphs K.M. Dharmalingam, P.Nithya and M.Revathi	70581-70586
420	A Scoping Review to Determine the Efficacy of Kinesiotape Impact in the Prevention and Symptomatic Relief of Delayed Onset Muscle Soreness D.Arnold Nikhilesh, Pinky Dutta and G.Sai Chetan	70587-70591
421	Impact of Circuit Training with Different Frequencies and Durations on Mean Arterial Pressure of School Students R. Madhanagopal and M. John	70592-70596
422	On New Class of Continuous Functions in Topological Spaces R.Vijayalakshmi and V.Thiripurasundari	70597-70602
423	Protocol on a Systematic Review and Meta-Analysis of Qualitative Studies on Diabetes Peripheral Neuropathy Treatment Challenges Experienced by Diabetes Patients Rittu Sharma and Manu Goyal	70603-70610
424	An Overview on Herbal Bilayered Tablets Karra Geetha, Vudutha Bhavani and T. Ramarao	70611-70625
425	Development and Evaluation of A Poly herbal Cream Possessing Anti-Oxidant Properties that Aid in the Healing of Wounds Toufique Ahmed, Bhaskar jyoti Deka , Mayuri Upagya Kalita, Nur Shaid Mondal, Punam Kumari and Himangshu Deka	70626-70633
426	Comparative Study of Bio Plastic Production from Plants P.M. Saraswathi, K. Rekha and S. Narmatha	70634-70642

427	Relation of Flat foot with Knee Osteoarthritis in Adults Dhvani P Naik and Neha Mukkamala	70643-70648
428	Effect of Phosphate Solubilizing Bacteria on the Growth of <i>Solanum lycopersicum</i> L. Shipra Kumari	70649-70659
429	IoT and Deep Belief Network-based Object Detection for Visually Impaired People M.Sowmya, K. Padmavathi , J.Mythili and K.Prabhavathi	70660-70666
430	A New Passive Islanding Detection Method for Hybrid Distributed Generation System with Phase Angle between Negative Sequence Voltage and Current PVV. Satyanarayana and A.Radhika	70667-70674
431	Pharmacological Review of <i>Epiphyllum oxypetalum</i> - Nishagandhi Kiran. P, Yakshitha.V, Padmaa M. Paarakh and Noopur Srivastava	70675-70683
432	On The Integral Solutions of System of Diophantine Equations $m \pm D = u^2$ and $\frac{m}{D} \mp (D \pm S) = v^2$ for the Analysis of Square Numbers of Some Specific Algebraic Forms A. Hari Ganesh and K. Mahalakshmi	70684-70696
433	Adventure Sports : A New Trend Sushama Narayan Chougule and Sandeep Sadashivrao Shinde	70697-70701
434	Effect of Preparatory Process and Antimicrobial Finish on Physical Properties of the Ramie Fiber ( <i>Boehmeria nivea</i> ) Suravi Konwar, Manashree Saikia and Binita B. Kalita	70702-70707
435	Some Sort of Generalization in Ideal Nano Topological Spaces K Palani and M Karthigai jothi	70708-70714
436	<i>In vitro</i> Antioxidant and Anti-Inflammatory Potential of <i>Clematis wightiana</i> Wall. ex Wight & Arn.: A Wild Medicinal Plant Vishnu Kumar.S, Jemima Danny Kingsley, Dharani.S, Divya Bharathi.G, Narayanan.N and Priyadharshini.G	70715-70723
437	Alteration in Biotic and Abiotic Components of Environment Due to Iron Stress and Its Management for Sustainable Ecosystem: A Review Nibedita Badajena, Saswat Mohanty and Atia Arzoo	70724-70730
438	Inhibition Effect of Black Seed ( <i>Nigella sativa</i> L. ) Extract against <i>Listeria monocytogenes</i> and <i>Vibrio cholerae</i> G. Usharani, M. Jayanthi,P. Venkatesan and D. Kanchana	70731-70734
439	On Picture Fuzzy Ideals of Semi Groups R. Hema and D. Anitha	70735-70745
440	<i>In-vitro</i> Antioxidants assessment and herbal capsule formulation of aerial parts of <i>Enhydra fluctuans</i> Mrinmoy Basak, Moksood Ahmed Laskar, Santa Mandal, Rinchi Bora, Himangshu Deka, Sajidul Haque Ansari and Biplab Kumar Dey	70746-70755
441	Effects of Plyometrics Training on Football Players of Vadodara District Noopur Bhatt, Amal Bhattacharya, Dwiduyangnit and Bhavnagadhvi	70756-70763
442	Molecular Docking Studies of Kojic Acid Derivatives as Anti-Cholinesterase Agents for the Treatment of Alzheimer's Disease Suman Basak, Satyasish Sandilya and Kunal Bhattacharya	70764-70773

443	Development and Evaluation of Cevimeline HCL Controlled Release Microcapsules using Natural Polymers T.Balakrishna, T. Sravani, B.D.L.N. Pattabhi Ram, K.C.L. Rama Devi, A.Veda Sri, A. Sankar Deekshith, M. Kavya and K. Lalitha Kumari	70774-70781
444	One Century of Wolff's Law Ravindra Manerikar, Yash Goenka, N.G.Toshniwal, Shubhangi Mani and Sumeet Mishra	70782-70787
445	Effectiveness of Pilates on Core Endurance among College Level Cricket Player Sandip Parekh and Kishita Davariya	70788-70792
446	An Astonishing Contemplation on Pitha Sura Kudineer to Modulate Pitha Suram R.N.Hema, R.Gomathi, E.Preetheeka and G.Tamilarasan	70793-70803
447	Free Radical Scavenging and Phytochemical Characterization in Aqueous Bark Extract of <i>Cinnamomum verum</i> Arul Mozhi Padmanabhan and Doss VA	70804-70810
448	Analysis of Abdominal Pressure and SPO2 between Power lifters and Obese Individuals Rajan Balakrishnan, Vanitha Krishna Subbaiah, Annie Thomas, Arun B and Selvaraj Sudhakar	70811-70817
449	Area Biased Quasi Garima Distribution with Properties and its Applications among Type 2 Diabetes Patients Ramya M.S and C.Subramanian	70818-70828
450	<i>In-Vitro</i> Carminative Activity of A Polyherbal Siddha Formulation– <i>Panchadeepakini Legium</i> S. Swathi, V.Chitra ,V. Mahalakshmi and N. J. Muthukumar	70829-70833
451	Bioconversion of Chicken Feather Waste in to Biofortified Compost using Keratinolytic Fungi M.Kannahi and K.S.Lakshmipriya	70834-70840
452	Review on Perspectives of Childhood Disorders in Developmental Stages and Treatment in Traditional Siddha System of Medicine E.Preetheekha, R.Gomathi, T.Subathra, A.Priyadharshini and S.Priyadharshini	70841-70847
453	Analysis of A Markovian Retrial Queue with Working Vacation and Vacation Interruption Under Bernoulli Schedule S.Pazhani Bala Murugan and U.Chitra	70848-70854
454	Deconstructing Gender Expectations: A Scrutiny of <i>Udal's</i> Character sand Their Forced Gender Roles Nina Ann Mathew	70855-70860
455	The Study on the Awareness Level of SDGs Goals Among Youth Jeena Antony and Reeta Babu	70861-70865
456	Sustainable Marketing for Micro Enterprises: A Study of Challenges and Achieving Growth Focusing on Koratty Grama Panchayat Gouri S and Reeta Babu	70866-70872
457	Home Automation using Mitsubishi GOC35 PLC Kaushika D. Patel, Darshankumar C. Dalwadi and Rakesh D. Patel	70873-70881
458	Application of Block Chain in Elections Iftikhar Haider, AmeerlarebKhan, NishaKumari and KhursheedAlam	70882-70887

459	Health Risk Prediction using Deep Learning Approach Rajesh Babu Ahirwar, Neeraj Shrivastava and Prateek Nahar	70888-70894
460	Effect of Phosphate Solubilizing Bacteria on the Growth of <i>Solanum lycopersicum</i> L. Shipra Kumari	70895-70905
461	Determination of Genotypic Pattern of $\beta$ -Case in Indian Local, Crossbred and Exotic Cattle Shailja Vyas and Jenabhai Chauhan	70906-70911
462	PCOS Detection using Machine Learning Algorithms Diya Gandhi, Bansri Patel and Namrata Dave	70912-70918
463	Evolving Horizons: Horn Antennas, SIW Advancements for 5G and their Pivotal Role in Satellite Communication Avinash Giri, Ananta Sood and Anita N. Bhatt	70919-70924
464	A Study on Evaluating the Effectiveness of Environmental Education in Achieving SDGs Jithin Scaria and Rinku K Vithayathil <sup>2</sup>	70925-70928
465	Instruction to Author	70929-70930



*The International Day for the Participation of Women and Girls in Science has been celebrated every year on 11<sup>th</sup> February since 2015 to focus on the importance of both science and gender equality in achieving the internationally agreed development goals by 2030. From improving health to combating climate change, tackling*

*some of the biggest challenges in a country's sustainable development agenda. It is worth noting that women are showing their skills in all fields till fighting. There is no doubt that society can achieve new perspectives by identifying and engaging diverse and talented women researchers in scientific research. The day is a reminder that women and girls play an important role in scientific and technological communities and their participation should be strengthened. This year, various initiatives and activities are taking place at the global level based on the central theme "Women and Girls in Science Leadership: A New Era for Sustainability".*

*The day is also a reminder to strengthen women's participation in Science, Technology, Engineering and Mathematics (STEM) fields in particular. Social activists and anthropologists feel that although the above-mentioned fields are considered important for national economic development, most countries, regardless of their level of development, have not achieved complete gender equality in science. But now the situation is changing in our country. Recently, they have been appreciated by the central and state governments realizing that the contribution of women in scientific fields is very essential for our country. Encouraged by the excellent reception.*

*On the occasion of Republic Day, the central government has felicitated women scientists of ISRO's Sriharikota, Thiruvananthapuram and Bangalore research centers along with their families. Similarly, the Ministry of Space has also praised women scientists. After the success of the Chandrayaan 3 project on August 3<sup>rd</sup> 2023, India became an internationally important country. Similarly, all the honors of implementing India's Aditya L1 project parallel to NASA's Parker project to explore the Sun are attributed to women scientists. Not only this, but also in the fields of education, medicine, environment, health, economy and business etc., women are paving the country's development path through their noble scientific research work. A statistic suggests that globally less than 33 percent of researchers are women. It is an indisputable fact that by raising this percentage, we can achieve a more transparent and consistent representation of women in science without gender discrimination. Let's protect, educate, appreciate and make the girl child proud with the goal of having a women scientist at every home.*

*Editor, IJONS*

*Cover image: Common jezebel (Delias eucharis) , Family: Pieridae  
Photo by : Vijikumar Sahadevan*