



CUTN E-NEWS



Nov- Dec 2023 | Volume-1, Issue-5

DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS ORGANISED ALL INDIA INTERUNIVERSITY SOUTH ZONE KHO-KHO TOURNAMENT FOR WOMEN FROM 26-12-2023 TO 30-12-2023.



The Central University of Tamil Nadu (CUTN) hosted the All India South Zone Inter University Kho Kho tournament for women. The event was inaugurated by Prof M Krishnan, Vice Chancellor of CUTN. The inaugural ceremony was graced by the presence of Dr. Baljit Singh Sekhon, Joint Secretary Youth Affairs and Sports, Association of Indian Universities, New Delhi, Mahadevan, Observer, Association of Indian Universities and Prof R. Thirumurugan, Registrar, CUTN. The tournament witnessed enthusiastic participation from more than 900 participants from 65 universities hailing from the southern states of India, including Tamil Nadu, Kerala, Karnataka, Andhra Pradesh, Telangana, and Puducherry.

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VIKSIT BHARAT@2047: VOICE OF YOUTH

Viksit Bharat@2047 is the vision of Government of India to make India a developed nation by 2047, the 100th year of its independence. The vision encompasses various aspects of development, including economic growth, social progress, environmental sustainability, and good governance. The CUTN organises Rally on ViksitBharat@2047 on 15.12.2023 (Friday) inaugurated by Prof M Krishnan, Vice Chancellor of CUTN.



NATIONAL EDUCATION DAY ON 17.11.2023

The Department of Education celebrated the National Education Day on 17.11.2023 (Friday) in the Seminar Hall to commemorate the birth anniversary of Bharat Ratna Maulana Abul Kalam Azad, who was a visionary leader, a great freedom fighter, an eminent educationist and the first Union Minister for Education. The faculty of the department, research scholars, and the students of integrated B.Sc., B.Ed., (Mathematics) witnessed the celebration.



TREE PLANTATION

Plantation of 2000 saplings in association with Lions Club of Thiruvarur Araneri, District Forest officers and Exnora Tvr. The Dr.Velmurugan.PS & UBA wing of CUTN has initiated plantation in CUTN campus on 8th November 2023

MATH CLUB ACTIVITY

As part of Math Club Activity, weekly seminars were conducted by our faculty members and research Scholars. A special lecture has been delivered by our research scholar Mr. Manu Mathew entitled “Construction of a proper connected dense subgroup of R^2 ” (Part -2) on 08-11-2023



INTEGRITY PLEDGE ON 02-11-2023

All the faculty and staff of the Department of Education were assembled by 11.00 am at the Head of the Department's Room, Abhijit Banerjee Block. All of them took the Integrity Pledge.

SPECIAL LECTURE - TAMILIL PIRAMOLI NATAKANKAL



Mr. Ka.Balendra, Theatre Director, London & Mrs. Anandha Rani, London delivered a Special lecture Topic on "Tamilil piramoli natakankal" on 28.11.2023 at 3 pm in Tamil Department, Conference Hall.

NATIONAL WEBINAR

National Webinar on "Skill Enhancement on Statistical Techniques in Industries" on 18th Nov. 2023 with the chief guest by Dr.Sonaimuthu Niraikulathan, Tech Mahindra & Dr.C.Ponnuraja, ICMR-NIRT, Chennai; Coordinated by Dr. C. Vijayalakshmi and Dr. M. Manoprabha.

MAHAKAVI BHARATHIYAR BIRTHDAY CELEBRATION

The Department of Tamil was celebrating Mahakavi Bharathiyar Birthday on 11.12.2023.

Mr. S.Thiyagarajan (School Teacher, VS Boys Higher Secondary School, Thiruvarur) delivered a special speech about Bharathiyar.



Research Publications

Abdulkareem U, V Madhurima; Understanding complexity of hydrogen-bonded liquids through Voronoi entropy; *Chemical Physics Impact*, Volume 8, 2024,100403, ISSN 2667-0224, <https://doi.org/10.1016/j.chphi.2023.100403>.

Alex KV, Silva JP, Kamakshi K, Sekhar KC. Ternary Heterostructures Based on BaTiO₃/MoO₃/Ag for Highly Efficient and Reusable Photocatalytic Applications. *Advanced Materials Interfaces*. 2023 Sep;10(25):2201948.

Anu Maria Augustine, V Sudarsanan, P Ravindran, First-Principles Investigation on Delithiation Mechanisms in a Li-Rich Monoclinic Li₂MoO₃ Cathode Material for Li-Ion Batteries, , *Inorganic Chemistry* 62 (35), 14191-14206.

Balasundaram, V. G. Sivakumar, A. Sarathkumar, J. Henry, and K. Mohanraj, Structural, Optical, Morphological and Electrical Properties of Cu doped Calcium Stannate Nanoparticles for Electrochemical Performance, *Asian Journal of Chemistry*; Vol. 36, No. 1 (2024), 87-92. Published online: 31 December 2023. [Doi.org/10.14233/ajchem.2024.30672](https://doi.org/10.14233/ajchem.2024.30672).

Beer Mohamed Sanjitha Banu, Johnson Henry, Ganesan Sivakumar, Kandasamy Prabakar and Kannusamy Mohanraj, P-type to N-type conversion of Fe-doped Cu₂BaSnS₄, *New Journal of Chemistry*, 2023, 47, 18555–18566 Accepted 8th September 2023, [Doi: 10.1039/d3nj02153j](https://doi.org/10.1039/d3nj02153j)

Gokiladevi R, P. Ellampirai M, Ramesh Kumar A, Srivignesh S & K. Rama Krishna (2023) Natural colour extraction from horticultural crops, advancements, and applications—a review, *Natural Product Research*, DOI: [10.1080/14786419.2023.2280796](https://doi.org/10.1080/14786419.2023.2280796) (Impact Factor: 2.45)

Gokulakrishnan J, Sekhar KC, Rugmini R, Sekhar KC. Green synthesis of carbon dots-functionalized silver nanoparticles for SERS-based detection of thiram fungicide. *Applied Physics A*. 2023 Nov;129(11):778.

Research Publications

Kalangan N, Mary AS, Mani K, Nath B, Kondapalli J, Soni S, Raghavan VS, Parsanathan R, Kannan M, Jenkins D, Gorthi SS, Rajaram K. Repurposing ivermectin and ciprofloxacin in nanofibers for enhanced wound healing and infection control against MDR wound pathogens. *Journal of Drug Delivery Science and Technology* 2023; 90: 105166 (Impact factor: 5.0)

Kumar NK, Sekhar KC. Energy storage and electrocaloric properties of lead free $(1-x)(0.6 \text{ Ba}(\text{Zr}_{0.2}\text{Ti}_{0.8})\text{O}_{3-0.4}(\text{Ba}_{0.7}\text{Ca}_{0.3})\text{TiO}_3) - x\text{BiZn}_{0.5}\text{Ti}_{0.5}\text{O}_3$ ferroelectric ceramics. *Ferroelectrics*. 2023 Nov 18;616(1):20-32.

Kumar SR, Anusha R, Sathish S, Rugmini R, Sekhar KC, Ibrahim AS. Anti-Nephrotoxic effect of green synthesized *Actiniopteris radiata* silver nanoparticles (AR-AgNPs) against gentamicin induced nephrotoxicity. *Inorganic Chemistry Communications*. 2023 Nov 1;157:111244.

Madhurima,V. Ajmal Rahman M K, K Saishree, Swathi P V & Abdulkareem U ;Unravelling hydrogen bond network in methanol-propanol mixtures via molecular dynamics simulation and experimental techniques; *Physics and Chemistry of Liquids*, 62:1, 9-24, DOI: 10.1080/00319104.2023.2263897

Mahalakshmi,S. A journal article titled 'Corporate Sustainability Practices: A Systematic Literature Review and Bibliometric Analysis' was published in the Scopus-indexed journal 'Vision'.

Malarkodi Duraivel, Saravanan Nagappan, K. Mohanraj, Kandasamy Prabakar, Pyrite copper nickel sulfide for stable hydrogen evolution reaction in alkaline media, *International Journal of Hydrogen Energy*, Accepted 23 November 2023 Doi.org/10.1016/j.ijhydene.2023.11.273

Maniazhagu,D. Effect of low intensity plyometric training combined with aerobic training on explosive power of school kabaddi players, *Journal of advances in sports and physical education*, published by Scholars middle east publishers, Dubai, United Arab Emirates, pp165-169.DOI: 10.36348/jaspe. 2023.v06i11.001

Research Publications

Maniazhagu,D. Effect of low intensity plyometric training combined with aerobics training on agility of school kabaddi players, Journal of emerging technologies and innovative research, Vol.10, issue-12, pp.623-628.

Maniazhagu,D. Effects of different surface of plyometric training on speed of junior volleyball players,Asisan journal of applied science and technoloxy,Vol 7, Issue 4, pp 120-125, October – December 2023

Rajendran, P., Gouda, N.K., Srinivasavarathan, S. (2023). Understanding the Digital Divide in Inclusive Classrooms. In: The Palgrave Handbook of Global Social Problems. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-68127-2_419-1

Rameshkumar, V. “Paḷantamiḷar paṇpāṭum kirēkkap paṇpāṭum oppāyvu“,11th International Conference on Tamil Studies, International Association of Tamil Research (IATR), ISBN: 978-81-953243-2-3, Dec 2023.

Ravi, S. “Cōḷa maṇṭalak kaṭaṅkaraip pakutiyil peruṅkaṅkālap paṇpāṭṭuc ciṇṇaṅkaḷ kaṇṭupiṭippu“, 11th International Conference on Tamil Studies, International Association of Tamil Research (IATR), ISBN: 978-81-953243-2-3, Dec 2023.

Ravilisetty Revathi, Dunna Narsimhulu, Addepalli Ramu, “Investigating the impact of viscosity on magnetohydrodynamic (MHD) shock waves in a mixture of non-ideal gas and fine solid particles”, Journal of Mathematics in Engineering, Science, and Aerospace (MESA), Vol. 14(4), pp. 1021-1042. 2023. <http://nonlinearstudies.com/index.php/mesa/article/view/3428>

Rugmini R, Sekhar KC, Sathish S. Synthesis of silver nanoparticles for photothermal and sensing applications and sustainable gel formation. Materials Research Innovations. 2023 Nov 5:1-0.

Research Publications

Santy M. Thomas, P Ravindran, Graphene Monoxide and Its Variants for Photocatalytic and Photovoltaic Applications—An Ab Initio Study, , The Journal of Physical Chemistry C 127 (42), 20594-20607.

Selvavinayagam ST, Aswathy B, Yong YK, Frederick A, Murali L, Kalaivani V, Karishma SJ, Rajeshkumar M, Anusree A, Kannan M, Gopalan N, Vignesh R, Murugesan A, Tan HY, Zhang Y, Chandramathi S, Sivasankaran MP, Balakrishnan P, Govindaraj S, Byraredy SN, Velu V, Larsson M, Shankar EM, Raju S. Plasma CXCL8 and MCP-1 as surrogate plasma biomarkers of latent tuberculosis infection among household contacts-A cross-sectional study. PLOS Glob Public Health. 2023 Nov 22;3(11):e0002327. (Impact factor: 3.356)

Sivaprakash,S. Research Paper titled A Study on Brand Preference towards Smartphones among Teenagers and Youth in Chennai City. (An International Peer Reviewed Research journal (ISSN – 2321 – 5968) Vol-10 Issue-2

Srinivasavarathan, S. and Rajendran, P. (2023). Principals in Indian inclusive schools: bridge over troubled waters, Asian Education and Development Studies, Vol. 12 No. 4/5, pp. 249-261. <https://doi.org/10.1108/AEDS-07-2023-0086>.

Sreenivasa Murthy, K. & Dr K. Sai Kumar (2023) “Role of attributes in influencing customer satisfaction: a study with reference to jewellery stores in Chennai”, Int. J. Business Competition and Growth, Vol. 8, No. 3, 2023(ISSN: 2042-3853, 2042-3845) Inderscience, UGC Care List-I

Subash, S. “Cilappatikāratil ‘māṭala maṛaiyōṇ’ pāttirap paṭaiṭṭu”, 11th International Conference on Tamil Studies, International Association of Tamil Research (IATR), ISBN: 978-81-953243-2-3, Dec 2023.

Subramni R, Suresh k, Cecil Donald and Vijayalakshmi C. (2023). Lane Detection using Kalman Filtering, Elsevier, Science Direct, Procedia Computer Science, WoS, Scopus, 220, 598-607

Research Publications

Abhijith, B. & Sudhier, K. G. The Impact of Ontologies and the Semantic Web on Electronic Thesis and Dissertation Publishing. International Symposium on Electronic Theses and Dissertations, ETD 2023, INFLIBNET Centre, Gandhinagar, 26-28 October 2023.

Sabirali K P Reg. No: R191702 Department of Commerce: A journal article titled 'Corporate Sustainability Practices: A Systematic Literature Review and Bibliometric Analysis' was published in the Scopus-indexed journal 'Vision'.

Ph.D. Awarded

ELAVARSI (R161101) Department of Education.

Title: Emotional Intelligence, Academic Stress and Academic achievement among Secondary Grade Students.

T KRANTHI KIRAN (R201801) Department of Management

Title: Production and Marketing of Agri products in Kurnool district of Andhra Pradesh - An Economic Analysis

CHARAN PASANTH S (R151404) Department of Physics

Title: Promising Methods for Improving the Thermoelectric Properties of SrTiO₃ Based Ceramics.

CHRISTY MARIA JOY (R180401) Department of Physics

Title: The Influence of Solvent Interaction on the Dynamics of DNA Double Helix

SAMARJIT MAHARANA (R152003) Department of Life Sciences

Title: Molecular approach to cell death mechanisms in platelets

Awards & Achievements

Ashique Ali K A (Ph.D. Scholar- R181706) Bagged Best Paper Award at the Second Two-Day International Conference on Artificial Intelligence Towards Fostering Sustainable Development in Business hosted by the Center for Management Studies, Jain (Deemed-to-be University), Bengaluru, during 8-9 December 2023, for the research paper titled Youngsters continuance intention to use smartphone-based payment services: Modifying ECM with habit and pre-adoption expectancies.

Ms. Shanmuga Priya A: participated and presented a talk on A construction of non-isomorphic polyhedral cones using Lyapunov rank in the International conference on Linear Algebra and its applications (ICLAA 2023) held in Manipal Academy of Higher Education, Manipal, December 18-21, 2023. (Best Paper Award – Second Price)

New Initiatives

Facilitated installation of ELGI-EVTS products gallery at the Admin Block, CUTN portraying the association between Community College, CUTN & EVTS. by Dr. Velmurugan PS

Nodal officer for the Viksit Bharat 2047 activities of CUTN and organized a series of awareness activities for Viksit Bharat Idea generation among the students of CUTN and local communities. by Dr. Velmurugan PS

Organised a 60-day Coir Products training program (Dec-2023 to end Jan-2024) for rural women in association with Coir Board, Govt of India by Dr. Velmurugan PS

Papers Presented

Arjun T. P Ph.D. Scholar Department of Commerce: Presented paper a titled “Challenges in using Smartphone-based payment services: An exploratory study” in the 1st International Conference on Management Research (ICMR’23) hosted by Department of Management Studies, IIT Madras during 16-18 November 2023.

Ashique Ali K A (Ph.D. Scholar) Reg. No: R181706, Department of Commerce: The research paper titled Challenges in using smartphone-based payment services: An exploratory study was presented at the International Conference on Management Research 2023 (ICMR 2023) hosted by the Department of Management Studies, IIT Madras during 16-18, November 2023.

Ashique Ali K A (Ph.D. Scholar) Reg. No: R181706, Department of Commerce: The research paper titled Youngsters continuance intention to use smartphone-based payment services: Modifying ECM with habit and pre-adoption expectancies was presented at the Second Two-Day International Conference on Artificial Intelligence Towards Fostering Sustainable Development in Business hosted by the Center for Management Studies, Jain (Deemed-to-be University), Bengaluru, during 8-9 December 2023.

Dr. C. Vijayalakshmi, Associate Professor, Department of Statistics and Applied Mathematics, has participated and presented a paper in the International conference on Recent trends in Mathematics, Statistics and Engineering, titled “Analysis of Gestational Diabetes Mellitus Using Machine Learning Techniques and Its Applications”, organized by NMIMS, Indore, during December 22-23,2023

Dr. S. Rameshkumar, Assistant Professor, Department of Commerce presented a paper “Determinants of Investment Characteristics”; “Does Participation in Self Help Group-based Micro-Financial Activities Improve Financial Literacy?”; “Determinants of Continuance to Use Mobile Payment: A Meta-Analysis”, at the International Finance and Accounting Conference (IFAC-2023)”, Indian Institute of Management, Jammu, on September 8-9, 2023.

Papers Presented

Dr.K.Vishnuvardhan Reddy, Assistant Professor, Department of Physical Education & Sports, Presented a paper on “Exploring the Combined Effect of Plyometric and Aerobic Exercise Trainings on Abdominal Muscular Strength, Endurance, and Flexibility Long Distance Runners in Palamuru University,” at the World Conference on Exercise Medicine 2023 organised by the International Federation of Physical; Education, Fitness, and sports science Association and Indian Federation of Computer science in sports and Palamuru University on 2nd to 4th September 2023

Dr.Nagaraja Y, Assistant Professor, Department of Physical Education & Sports, Presented a paper on A study on Body Mass Index among yogic practitioners and non-yogic practitioners in Shivamogga District, International conference on Emerging trends and development in education, Organised by Swamy Vivekanda Vidya Samathe® Kumadwathi College of Education,Shikaipura,Shivamogga Karnatakka on 20th and 21st October 2023

Nag, Sushree Namita & Sudhier, K. G. International Journal of Geographical Information Science: A Bibliometric Study based on Scopus (2013-2022). National Conference on Next Generation Public Libraries: Exploring emerging trends and technologies (NGPL-2023), 8-9 September, 2023. Alagappa University, Kariakudi.

Tamil Barathi, T. K. & Sudhier, K. G. Role of Public Libraries as e- Government providers: A study on Public Libraries in Tamil Nadu. National Conference on Revitalizing Libraries in the Google Generation (SALIS 2023). 12-14 October, 2023. Thoothukudi, National Engineering College & SALIS, Chennai.

Invited Lectures

Chair person in a session of the Eighth Nitte International Conference on 28th and 29th December. by Dr. Velmurugan PS



Delivered a “Short Invited Lecture” in the 20th International Conference on Modern Trends in Inorganic Chemistry (MTIC-XX) held at the Indian Institute of Science, Bangalore, from 14-17 December 2023 by Dr. V. Rajendiran

Delivered a lecture on “Global Initiatives for Mitigating Climate Change” organized by Department of Environment and Climate Change, Tamil Nadu Climate Change Mission on 15th November 2023. by Dr. Velmurugan PS

Dr Kokila J participated in the seven days Workshop cum FDP on Mathematical Computing from 11-17, Dec 2023 organized by the Department of Computational Sciences and Humanities, IIIT Kottayam.

Dr V. P. Ramesh served as a resource person in a Two Day workshop on Linear Algebra (state Level) Organized by St. Xavier’s College (Autonomous), Palayamkottai on 06-07, December 2023.

Dr. A. Chandrashekar organized a workshop entitled “Pedagogical Training for Mathematics Teachers 2023” during the period between 11 to 16 December 2023.

Dr. C. Vijayalakshmi, Associate Professor, Department of Statistics and Applied Mathematics, acted as Resource person in FDP on “Machine Learning using Python”, conducted by SRM Institute of Science and Technology on 8th December 2023.

Invited Lectures

Dr. C. Vijayalakshmi, Associate Professor, Department of Statistics and Applied Mathematics, delivered an invited talk in the Ninth International Conference on “Statistics for Twenty first century-2023(ICSTC-2023) on “Implementation of Machine Learning algorithms for the prediction of Surface Tension of Organic compounds”, organized by the International Statistics Fraternity, Department of Statistics and School of Physical and Mathematical Sciences, University of Kerala, Trivandrum, during 15-18 December 2023

Dr. C. Vijayalakshmi, Associate Professor, Department of Statistics and Applied Mathematics, delivered a talk on “Role of Mathematics in Engineering and its Applications”, organized by RMD Engineering College, Chennai on 30th November 2023.

Dr. N. Barani Balan attended UGC-HRDC online Refresher course in Mathematics organized by Bharathidasan University from 26.10.2023 to 08. 11 .2023

Dr. R. Roopkumar attended in Pedagogical Training for Mathematics Teachers (PTMT) 2023 during the period between 11th to 16th December 2023 organized by Central University of Tamil Nadu.

Dr. R. Roopkumar delivered a talk on Implicit Function Theorem and Applications in 37th Refresher Course conducted by UGC-HRDC at University of Madras, Chennai on 01-12-2023.

Dr. R. Roopkumar delivered a talk on Inverse Function theorem in 37th Refresher Course conducted by UGC-HRDC at University of Madras, Chennai on 30-11-2023.

Dr. S. V. Bharanedhar attended UGC-HRDC online Refresher course in Mathematics organized by Bharathidasan University from 26.10.2023 to 08. 11 .2023

Dr. T. Kavaskar delivered a talk on Ramanujan Graphs in the National Mathematics Day at Thiagarajar College in Madurai on 22-12-2023.

Invited Lectures

Dr. V. Renuka Devi delivered a talk on Dynamical Properties in Dynamical systems in the International Conference on Computational Engineering ICCE-2023 at Saveetha Institute of Medical and Technical Sciences, Chennai held on 09-09, December 2023

Dr. Velmurugan PS organized a lecture on “The relevance of Kesavanatha Bharathi case (1973) on the Constitution of India” at the School of Legal studies, CUTN to mark the Constitution Day.

Dr. Velmurugan PS acted as a Resource Person in UGC Sponsored Online Refresher Course in “Commerce & Business Studies” organized by the UGC- Human Resource Development Centre, Bharathidasan University, Tiruchirappalli.

Dr. C. Vijayalakshmi, Associate Professor, Department of Statistics and Applied Mathematics, acted as Resource person in the International Conference on Mathematical and Statistical computing for social sciences 2023, organized by Department of Statistics, Kunthavai Nachiyar Government Arts College, Tanjore on 28th December 2023.

Dr. Velmurugan PS attended “Conduct Enforcement (Abuse of Dominance and Anti- Competitive Agreement) and Combination”, organised by School of Legal Studies, CUTN in association with Competition Commission of India on 1st December 2023.

Dr. Velmurugan PS attended the “Ideas for The Vision VIKSIT BHARAT @ 2047 at Governor’s Residence at Raj Bhavan, Tamil Nadu representing CUTN on 11th December 2023.

Dr. Velmurugan PS: Facilitated the visit by team of academicians from Srimati Indira Gandhi College, Thiruchirapally to CUTN exploring probable collaboration with CUTN.

Sibani Jena, Department of Commerce: Participated in One Week National Level Workshop Cum Hands- on Training (Online) on “SPSS SOFTWARE FOR STATISTICAL DATA ANALYSIS” CONDUCTED BY DIGISKILLS CENTER, A.C.T. Academy, Tamil Nadu from 28th December 2023 to 5th January 2024.

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