



## COTTON UNIVERSITY

## Newsletter

Volume 5, Issue 2, July to December, 2021 Cotton University, Guwahati- 781001, Assam, India www.cottonuniversity.ac.in

## International Conference on Mobility and Multilingualism in South and Southeast Asia



Department of Archaeology, Cotton University in association with Pragjyotish Centre for Cultural Research (PCCR), Assam; Indian Institute of Technology Gandhinagar; Navrachana University, Vadodara and Central Institute of Indian Languages, Department of Higher Education, Ministry of Education, Govt. of India organised an International Conference on "Mobility and Multilingualism in South and Southeast Asia: Impacts of global ecological change on local society" at Cotton University during 27-29 December, 2021. Indian Council of Social Research (ICSSR), New Delhi and Social Science Research Council (SSRC), Brooklyn, New York, USA supported the conference.

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## Open House Discussion on New Education Policy, 2020

The National Council for Teacher Education (NCTE), a statutory body Government of India, and Cotton University, organized a one-day Open House discussion on "New Education Policy, 2020" on November 19, 2021, at the University. The discussion invited opinions and suggestions from teachers and officials across all levels on National Professional Standards for Teachers (NPST para 5.20) and National Mission for

(Contd. at page no. 3)



### Conclave on Atmanirbhar North-East

North East Centre for Technology Application and Reach (NECTAR), an autonomous society, under Department of Science & Technology, Government of India joined hand with Cotton University, Unnat Bharat Abhiyan and Vijnana Bharati for the conclave on Atma Nirbhar North East at the University on December 21-22, 2021. The conclave aimed at reaching out to students, faculties, scientists, entrepreneurs by providing a platform where they could present their entrepreneurial and research traits to the people. The events of the conclave included technical session on start-up ideation, science and technology quiz, ideation on addressing climate change in the Northeast region, heritage through the lens of science, exhibition stalls of various products and a cultural programme by the Cottonians. Professor Jagdish Mukhi, Honourable Governor of Assam graced the conclave on inaugural day. Dr. Krishna Kumar (NECTAR), Dr. Partha Jyoti Das (NECTAR), and Dr. Ujjal Deka Baruah (CU) were the convenors of the conclave.

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INSIDE

# VICE CHANCELLOR SPEAKS



Professor Bhabesh Ch. Goswami, VC

This year India is celebrating the 75th year of Independence. This is a good moment to reflect on some of Gandhiji's views on education and the relevance of those views today.

Way back in 1936 Gandhiji said "I have believed and repeated many times without number that India is to be found not in its few cities but in its 7,00,000 villages". This quote is still relevant, and we should be committed to supporting the needs of the 68.8 percent of our population living in the 5,97,608 villages (Census data, 2011) regarding documentation, adding value and protecting the intellectual property rights (IPR) of the grassroot innovators and traditional experts. This means recognizing, rewarding, and proliferating small and innovative ideas from the remote villages, which will help in building bridges between formal and informal education systems.

Gandhiji once wrote: "Geometry was a new subject in which I was not particularly strong... and the English medium made it still more difficult for me". Later, he wrote: "When, however, with much effort I reached the 13th proposition of Euclid, the utter simplicity of the subject was suddenly revealed to me. A subject which only requires a pure and simple use of one's reasoning power could not be difficult. Ever since...... geometry has been both easy and interesting to me". This reveals the importance of understanding the fundamental principles of any subject and then applying logical reasoning, as opposed to mindlessly memorizing facts without understanding the depth behind them. Recent weightage on vernacular medium in NEP 2020, was also viewed by Gandhiji.

Gandhiji believed that education meant more than just knowledge. He repeatedly said: "Knowledge is important but not without character". Gandhiji established several schools where he had made a rule that children will not be instructed to do anything the teacher is not doing. This is relevant even today. For example, perhaps we should mandate that before providing an online course, the teacher should follow/study the whole course and then only instruct afterwards.

These were just a few examples of Gandhiji's perspectives on education. These specific examples highlight the importance of respect towards grassroots knowledge, logical and first principles thinking, and a more holistic view of education than the simple acquisition of knowledge. I believe all of these are just as applicable to today's education systems as they were during pre-Independence times.

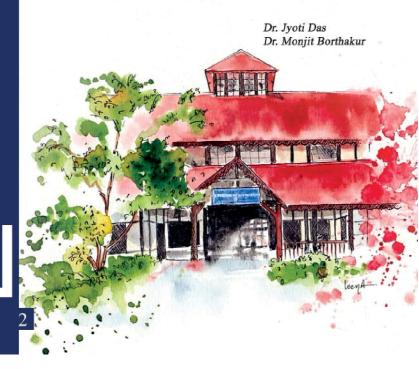


## **EDITORIAL**

Adhering to the perspectives of the New Education Policy, 2020 (contemporary, need-based, multi-disciplinary and holistic curriculum towards enhancing knowledge and capability of the students) Cotton University is gearing up for its implementation with full swing. This may require discussion on certain critical points such as appreciation of the ongoing courses at the university, collaboration of faculties across disciplines to develop and teach full semester credit courses of their choices which would be multi-disciplinary, contemporary and relevant, drawing attention of academic communities from across the globe.

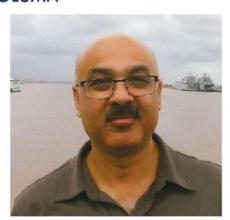
The University has already gone for SWAYAM and NPTEL platforms for online courses with the adoption of credit transfer mode as well. The faculties at the university may take the opportunity to contribute and join such platforms. The courses developed could provide ample freedom to the students to select from a wide basket of courses as per their choice and interest. The university however needs to keep a track and evaluate the outcomes of such choices in the long run. The evaluation mode may take into consideration the demand or necessity of such courses in the larger society and market. This may go a long way in shaping the career of students, the bulding blocks of our future.

Cotton University is a teaching intensive institution that also concentrates on research. The NEP, 2020, provides required scope and incentive to the academic community to integrate research work with the teaching curriculum at all possible levels. The teaching community is empowered to visualise a novel mode of teaching that is flexible and effective with classroom teaching, assignments, practicals, tutorials as well as online discussion platforms, ensuring holistic and joyful learning.



#### UNIVERSITY NEWS

#### **GUEST COLUMN**



## A wish of an alumnus

Dr. Jayanta B. Sarma

The two years post high school education is the most critical and formative part of one's life. The time I spent in Cotton College (now Cotton University) during 1982-84 was the most exciting time for me. Our minds were fresh, impressionable and to an extent vulnerable too. I was a quiet student, but somewhat restless, with various possibilities bubbling in my young mind searching for directions. This is the story I bet of any reflective alumnus of such an institution. I believe this premier institution with all its wonderful legacies continues to strive for excellence, delivering the institutional mandate in pace with rest of the world.

In this context, the idea of leadership springs to the mind. Leadership is required in every single profession and in every aspect of society. I however get the impression that leadership is taken to be synonymous with political leadership in our community. For instance, we often hear the cliché that Cotton College has produced most of the chief ministers of Assam. I have never heard anyone saying that Cotton College has produced exceptional leaders who successfully transformed the medical or the educational scenario of the state and, for that matter, any other aspect of society. Leadership does not necessarily require political power but it is about influencing individuals or masses, instilling in them a powerful vision and make them act accordingly to realize that vision. A leader may or may not possess any political power yet can make an enormous difference by transforming the regular state of affairs into a shared purpose. Today all our sufferings and anguish stem from a lack of leadership, be it education, medicine, business, polity or administration.

Here comes my wish!

Though bound by various regulatory frameworks and requirements of the funding agencies; a university usually enjoys the freedom to transform into a site of experimentation and churning of ideas. Any such institution would require good administrators who could be either maintainers of the statuesque or transformers of a collective vision. Transformers are leaders. Moreover, leadership could also spring from the available pool of teachers and students, those who are capable to inspire and bring the players or the orchestra together to play the perfect game or symphony. Then the pursuit of excellence begins in the true sense, and future leaders are born. The pursuit of excellence is not a vacuous activity but an exercise of solving real-life problems and making the world a better place. The pursuit of excellence has to be 'authentic', which in its basic form is learning by doing. Authentic learning mirrors the complexities and ambiguities of real life. It is less about winning the Nobel Prize but more about the learners making some form of genuinely helpful contribution to their community or a field of study. To my mind, teachers are learners too both literally and figuratively, while they are constantly engaged in ensuring authentic learning for the students. The buzzword thus is 'Authentic'- authentic leadership and authentic learning can go a long way in promoting a better society. I wish Cotton University becomes one such site of authentic learning, manifesting authentic leaders of today and tomorrow.

(Dr. Jayanta B. Sarma is a leading Microbiologist based in England. An author and translator, Dr Sarma is intimately involved with various social activities in Assam)

## Open House Discussion...



(Contd. from page no. 1) Mentoring (NMM, para 15.11) as visualized in NEP, 2020 towards fulfilling expectations on the role of the teacher at different levels of expertise.

The inauguration programme was attended by Dr. B. Kalyan Chakravarthy, Principal Secretary (Education), Government of Assam, Professor B C Goswami, Vice Chancellor, Cotton University, Guwahati, Ms. Kesang Y. Sherpa, Member Secretary, NCTE, and Professor Nilima Bhagabati, Chairperson, ERC, NCTE.

Shri Santosh Kumar Sarangi, Chairperson NCTE, was the chief guest in the post lunch session. Prof. S C Roy, Chairperson, NMM Committee emphasized on culture of learning from experience and that in this teachers will play a pivotal role.

#### International Conference...



(Contd. from page no. 1) Speakers from diverse academic fields - linguistics, literature, cultural studies, anthropology, archaeology, visual culture, sociology, development studies, education, and environmental studies were invited to share their knowledge for a better understanding and appreciation of linguistic and cultural roots and diversity of South and Southeast Asia.

The conference was inaugurated by Professor Bhabesh Chandra Goswami, Vice Chancellor, Cotton University who stressed on the relevance of organising such academic events on environment, ecology and the role of science and technology for documentation and preservation of indigenous languages and local cultures. The Chief Guest, Professor Nani Gopal Mahanta, Advisor Education, Government of Assam inaugurated the book 'Archaeology in Northeast India: Essays Celebrating 150 Years of Research Recent Trends and Future Prospects' edited by Milan Kumar Chauley and Manjil Hazarika. Professor Mahanta in his speech highlighted potential role of recent developmental models in the sustainability of local cultures, and in this context emphasised relevance of the New Education Policy 2020.

#### DEPARTMENTAL ACTIVITIES

#### JULY

The university constituted a Task Force at Cotton University on 28 July 2021 to look into the matter of implementation of NEP 2020 at Cotton University. Professor G C Wary is the Chairperson of the Task Force.

#### **SEPTEMBER**

The university celebrated Teacher's Day 2021 on September 5. Professor Kamalendu Deb Krori, Indian Theoretical Physicist, formerly Principal of Cotton College was the Chief Guest of the celebration.

Sandamita Choudhury, Clinical psychologist, Army Base hospital, Guwahati delivered a talk on 'Learning to find meaning in times of crisis' at the university on 28 September 2021

#### **OCTOBER**

The Department of Law organised a lecture on Right to Privacy in Cyber Space on 7 October

#### **NOVEMBER**

The Department of Geography organised a National Webinar on 'Sustainable Approach to Resource Management for Social Development' during 2-3 November 2021. The webinar was sponsored by the Indian Council of Social Science Research, New Delhi. Professor D K Navak, North Eastern Hill University, Shillong delivered the inaugural talk of the webinar.

Department of Economics published E-magazine entitled "Arthapatra" (Hosted on University Website) on November 3, 2021.

Department of Hindi, organized a Two-Week Interdisciplinary online Faculty Development programme in collaboration with TLC, Ramanujan College, New Delhi on the theme 'Sahitya, Media, Manovigyan, Itihas aur Vanijya: Sreejanatmakata aur Navachar' during 6-20 Novemher 2021

A collaborative student interaction program was organized on 18 November 2021 with the students of Masters in Library and Information Sciences of the Department of Library and Information Science program of University with the students of Library Sciences of the University and Science and Technology, Meghalaya. Altogether four faculty of members of MLISc of USTM participated in the program along with the faculty members of Department of LIS, Cotton University. The session had discussion on working culture, academic profiles of both the departments as well as that of the students. Various career prospects after the degree of MLIS were also key discussion points in the interactive session.

#### DECEMBER

The Department of History organized film screening on the occasion of 16 days activism against gender-based violence in an international campaign to challenge violence against women and girls on December 6, 2021.

The Truth India in association with the Department of Mass Communication and Journalism organized "Truth Conclave" on December 9, 2021. The event was attended by Shri Pijush Hazarika, Minister of Water Resources, Parliamentary Affairs, Information and Public Relations, Zarir Hussain Chief Managing Editor of News Live, Gautam Sharma Senior journalist of Amar Axom, Dr Kumud Das Executive Editor of DY365 and Deeplina Deka, Artist. An open debate was held on the occasion; the State General Secretary of BJYM Himangshu Shekhar Baishya and President of Assam Youth Congress Dr Angkita Dutta were the panelists of the open debate.

The Department of Law organised a lecture on Human Rights: The Lynchpin of Democracy on December 10, 2021, in collaboration with Centre for Women's Studies and Department of Political Panelists of Open Debate - Himangshu Shekhar Science, Cotton University.

The University organized a Lecture on Nobel Prize in Physics, 2021 'Complexity in Climate Science' by Professor B N Goswami SERB Distinguished Fellow at Cotton University and Winner of S S Bhatnagar award on Climate Science on 10 December 2021 at Sudmersen Hall.

Department of Anthropology organized a One-Day Training Program on Data Analysis Using SPSS on 12 December 2021.

IDSC, Department of Physics organized a National Workshop on "Computation, Data Analysis and Documentation" during 16-18 December 2021. The workshop was sponsored by Assam Science Technology and Environmental Council, Government of Assam.

The Department of Political Science organised an interaction with noted freedom fighter Shri Krishna Kanta Lahkar on 23 December 2021, as a part of the by Prof. Ganesh Ch. Wary, the Dean of Research celebration of Azadi Ka Amrit Mahotsav.

The Department of Mass communication, Journalism and Media Studies organised a street play performed by the students (UG Batch 2020-23) to create awareness on the consequences of mobile overuse at different locations of Guwahati on December 30, 2021.



Resource persons and participants of the workshop on Computation, Data Analysis and Documentation



Baishya and Dr. Angkita Dutta



Kisan Divas 2021 was celebrated in the Department of Molecular Biology and Biotechnology, Cotton University, through the inauguration of a Skill Development Unit for Mushroom cultivation and Development on 23 December 2021, Coordinator, IQAC, Cotton University, Prof. Santanu Sarma, also graced the programme where a plantation activity by students was organized. This was in line with the green initiatives and campus development activities envisioned by Honorable Vice-Chancellor, Cotton University.

#### Research Projects

Professor Jiban Jyoti Das, Department of Physics is serving as the Principal Investigator of a research project titled "Production and slowing down of fast neutron beam produced using 15-UD Pelletron accelerator and HIRA facility for AD-BNCT investigations." Dr Abhijit Barthakur is the Co-Principal Investigator of the Project. Dr Mridula Baro, Professor M Patgiri, Dr A K Nath, Professor D Sarma and Professor G C Wary are the team members. The project is supported by IUAC, New Delhi and the value of the project is Rs. 6,00,300.00.

and the Cyborg Body: A Post-Colonial of Manjula Padmanabhan;s Harvest at and predictive distribution of critically endangered Amentotaxus Medical University of Lodz, Poland, during 14-15 December 14-15, 2021

Biswajit Brahma (Bodo) presented a paper "Language as Cultural Representation with Special Reference to the Bodo Language" in National Level Semianr on Life and Works of Brajendra Kumar Brahma and Language as Cultural Representation with Special Reference to the Bodo Language organised by Bodo Department Association in Collaboration with Sahitya Akademi, December 10-11, 2021

National Level Seminar on Marxism, Feminism and Ecocriticism: Theoretical Perspective in Bodo Literature organised by Department of Bodo Bodoland University, Kokrajhar in Collaboration with Kokrajhar Government College, Kokrajhar, November 18, 2021

Hemanta Mochahary (Bodo) presented a paper "Influence of Marxism in Bodo Poetry: An Analytical Study", at a National Level Seminar on Marxism, Feminism and Ecocriticism: Theoretical Perspective in Bodo Literature organised by Department of Bodo Bodoland University, Kokrajhar in Collaboration with Kokrajhar Government College, Kokrajhar, November 18, 2021

Hemanta Mochahary (Bodo) presented a paper "Portrayal of Brajendra Kumar Brahma's creation poetry book on 'Baidi Dengkhw Baidi Gaab': An Analytical Study" at a National Semianr on Life and Works of Brajendra Kumar Brahma and Language as Cultural Representation with Special Reference to the Bodo Language organised by Bodo Department Association in Collaboration with Sahitya Akademi, December 10-11, 2021

Hemanta Barman (Economics), presented a paper 'Determinants of Financial Inclusion: An Empirical Analysis among Tea Garden Workers in Assam' at 22nd Annual Conference of North Eastern Economic Association (NEEA) held at Rajiv Gandhi University, Itanagar, Arunachal Pradesh during December 14-15, 2021

Jimmy Y Yumnam (Botany) made a presentation 'Tree diversity, community characteristics and population dynamics in disturbed and undisturbed forest stands of Garbhanga Reserve Forest, Assam' at Assam Botany Congress (ABC - 02) and International Conference on Plant Science, organised by Botanical Society of Assam, Guwahati and Department of Botany, Cachar College, Silchar, Assam on December 3-5, 2021, at Cachar College, Silchar, Assam

Jimmy Y Yumnam (Botany) made a presentation, Comparative study of diversity and community characteristics of trees in natural and planted forest stands of Patharia hills reserve forest, Assam at Assam Botany Congress (ABC 02) and International Conference on Plant Science, organised by Botanical Society of Assam, Guwahati and Department of Botany, Cachar College, Silchar, Assam on 5 December 3-5, 2021, at Cachar College, Silchar, Assam

Jougathi Basumatary (Archaeology) presented a paper 'Stone-Age Cultures of Tripura: An assessment of the previous Research and Future Prospects' International Programme for Ph.D. Scholars and Post-Doctoral Fellows, Mizoram University, HRDC held during December 14-20, 2021

Jyoti Das (Sociology), presented a paper "The Right to Information and Grassroots Movement in India: Implications for Human Rights in a Democracy" at ICIL-Congress of International Law organized by Nova school of law, Lisbon, Portugal, Erasmus and Programme of the European Union, July 19-20, 2021

Jyoti Das (Sociology), presented a paper "Usage of semi-controlled experimental technique in qualitative analysis" at International Congress on Research Methodologies (QUALIS) organized by University of Santiago de Compostela, Spain, July 7-9, 2021

Anupom Kumar Hazarika (English) presented a paper 'India Science Fiction Kuladip Sarma (Zoology) presented a paper 'Potential altitudinal shift assamica in Arunachal Pradesh, India' at First Annual Symposium of Indian Regional Association for Landscape Ecology, October 3-5, 2021

> Leena Borah (EBWS) presented a paper "Community based traditional knowledge in nutrient and pesticide management of rice agro ecosystem in four agro climatic zones of Assam, North East India" at ICSSR sponsored National Webinar on "Sustainable approach to resource management for social development" organized by Department of Geography, Cotton University, November 2-3, 2021

Biswajit Brahma (Bodo) presented a paper "Ecocriticism in Bodo Poetry" at a Leena Borah (EBWS) presented a paper "Variations in morphological and grain characteristics of rice exposed to heat stress under irrigated conditions" at National Conference of Plant Physiology- 2021 on 'Frontiers of Plant Physiology for Climate Smart Agriculture" organized by ICAR-National Institute of Abiotic Stress Management, Pune, India and Indian Society for Plant Physiology, New Delhi, December 9-11, 2021

> Mala Dutta (Geography) presented a paper 'Agriculture and Women: From Policy to Practice' at a national webinar on Sustainable Approach to Resource Management for Sustainable Development, organised by Department of Geography, Cotton University and sponsored by the ICSSR, New Delhi during November 2-3, 2021

> Muktikam Hazarika (MCJMS) presented a paper titled "Reviewing the Fake News Conundrum: A Study of Literature concerning Covid-19 from India" in an International Conference titled-ICAN (International Communication and Artificial Networks) 4 organized by-Delhi Metropolitan Education, Noida NCR, Guru Gobind Singh Indraprastha University, New Delhi, India in collaboration with School of Communications and Creative Arts, Faculty of Arts and Education, Deakin University, Melbourne, Australia during July 1-10, 2021

> Parijat Borgohain (Geography), presented a paper 'Determining residents' satisfaction with urban liveability to build a people-oriented city: An empirical study of Guwahati City, India' at XVI DGSI International Geography online conference (The Deccan Geographical Society, India), organized by: centre for Geographical Studies, Aryabhatta Knowledge University Campus, Patna held during September 10-12, 2021

> Parijat Borgohain (Geography), presented a paper 'Socio-economic perspectives and carbon footprints among the residents of Guwahati City, India during COVID -19 Pandemic' at XVI DGSI International Geography online conference (The Deccan Geographical Society, India), organized by: centre for Geographical Studies, Aryabhatta Knowledge University Campus, Patna held during September 10-12, 2021

> Parijat Borgohain (Geography), presented a paper 'Assessment of urban liveability through residents' perspective: An empirical study of Guwahati City', at a national webinar organized by Department of Geography, Cotton University and sponsored by the by the ICSSR, New Delhi during November 2-3, 2021

> Parijat Borgohain (Geography), presented a paper 'A review on calculating carbon footprints: Current status and research developments' at a national webinar organized by Department of Geography, Cotton University and sponsored by the by the ICSSR, New Delhi during November 2-3, 2021

> Preetee Sharma (History) presented a paper titled 'A micro study of pottery from the Brahmaputra Valley' at a national Seminar "Assessing the Ahom rule: With special reference to Lachit Borphukan" organized by Indian Council of Historical Research in association with Tengakhat College, Dibrugarh during December 22-23, 2021.

> Ritika Sahu (Archaeology) presented a paper "Remembering the Reign: A case study of the Ahoms of Assam" at a National Seminar Assessing the Ahom Rule: With Special Reference to Lachit Barphukan, organized by the Tenghaghat College, Dibrugarh, sponsored by ICHR, during December 22-23, 2021

FACULTY ACTIVITIES Cotton University Newsletter

Akalesh Kumar Verma (Zoology) delivered a talk 'Fresh water Pearl culture and human resource development' at an event 'Celebration of Vigyan Utsav as part of the Azadi ka Amrit Mahotsav, organized by Department of Science and Technology (DST) Government of India and State Council of Science, Technology & Environment (SCSTE), Meghalaya on October 20, 2021

Amiya Barua (Geology) delivered a talk 'The Dynamics of Plate Tectonics: it's initiation and implications on crustal evolution' at a workshop on "Recent Developments in Earth Sciences", organised by Arya Vidyapeeth College, Guwahati on November 3, 2021

Anupom Kumar Hazarika (English) delivered a talk 'Post-Colonial Literature', at Department of English, HPB Girls' College, Golaghat on September 25, 2021

Anupom Kumar Hazarika (English) delivered a talk 'Queer Studies', at Department of English, HPB Girls' College, Golaghat on October 2, 2021.

Ashish Paul (Mathematics) delivered a talk 'Differential Equations and their Applications' at Nowgong College, on July 30, 2021

Bharat Engleng (MBBT) delivered a talk 'Understanding the Biology of Viruses' at Rangapara College, Rangapara, Sonitpur, Assam on July 24, 2021

Bidisha Sharma (Botany) delivered a talk 'Impact of land used systems on Arbuscular Mycorrhizal Species diversity in the tropical forests of Kaziranga National Park, Assam, India', at international conference on Plant Science organised by Botanical Society of Assam in collaboration with Cachar College, Silchar on December 3, 2021

Chandan Jyoti Kumar (Computer Science and Information Technology), delivered a talk 'Recent advancements in Artificial Intelligence and Machine Learning' at a AICTE sponsored workshop organized by Kaziranga University during October 4, 2021

Chandan Jyoti Kumar (Computer Science and Information Technology), delivered a talk 'Soft Computing and Data Analytics' at University of Science and Technology, Meghalaya on December 4, 2021

Daisy Das (Economics) delivered a talk 'Economics of disaster: Revisiting evidence from developing countries' at Gauhati University, Guwahati, Assam on December 2, 2021.

Daisy Das, (Economics) delivered a talk 'Source of data in social science research', at North Eastern Hill University, Shillong, Meghalaya on December 3, 2021

Devartha Morang (Philosophy) delivered a lecture 'A Critical Reflection on Society, Governance and Justice' at Bapujee College, Sarukshetri, Sponsored by Indian Council of Philosophical Research (ICPR), New Delhi on November 22, 2021

Dhrubojyoti Das (English), delivered a talk 'Education and Society: Role of Teachers', on Occasion of Teachers' Day organized by the Office of Deputy Commissioner, Marigaon and Inspection of School, Marigaon district on September 5, 2021

Dhrubojyoti Das (English) delivered a talk 'Contemporary Issues of Climate Change and their mitigation', at Guwahati Grand Poetry Festival' on October 12, 2021

G C Wary, M Patgiri, A Barthakur, K Boruah, J J Das, V M Datar, B Jyrwa, P C Rout, S Santra, D Sarma, N Nimai Singh deliverd a talk on "Proposed accelerator facility for fundamental and applied sciences by CUPAC (Cotton University Particle Accelerator Centre)-North East Collaboration" at the 65<sup>th</sup> DAE-BRNS Annual Symposium on Nuclear Physics, DAE Convention Centre, Anushaktinagar, Mumbai 400094 Dec 1 to Dec5 2021, sponsored by Board of Research in Nuclear Sciences, Department of Atomic Energy, Government of India.

G C Wary, M Patgiri, A Barthakur, K Boruah, J J Das, V M Datar, B Jyrwa, P C Rout, S Santra, D Sarma, N Nimai Singh, presented on "Developing a Discovery Class Particle Accelerator Facility at Cotton University" by CUPAC- North East Collaboration at the DAE Symposium on Nuclear Physics 65 (2021).

Jiban Jyoti Das (Physics), delivered a series of talks on "Proposed accelerator facility for fundamental and applied sciences" at DAE-BRNS during December 1-5, 2021

Jimmy Y Yumnam (Botany) delivered a talk 'Habitat fragmentation at Royal School of Life Sciences and Royal School of Biosciences', Royal Global University, Guwahati on July 3, 2021

Jonali Devi (Anthropology) delivered a talk on "Traditional knowledge and Natural Resource Conservation: Some Insights from Anthropological Perspective in India's North East" at the conference Mobility and Multilingualism in South and Southeast Asia: Impacts of global ecological change on local society organised by Central Institute of Indian Languages (CIIL), Department of Higher Education, Ministry of Education, Govt. of India, Pragjyotish Centre for Cultural Research (PCCR), Assam, Department of Archaeology, Cotton University, Guwahati, Assam, Indian Institute of Technology Gandhinagar, Gujarat and School of Liberal Studies and Education, Navrachana University, Vadodara Gujarat on 27-29 December 2021

Kalyan Das (Geography) delivered a talk 'Population and the Environment' at MDK Girls' College, Dibrugarh on October 29, 2021

Kalyan Das (Geography) delivered a talk "Human Resource Development Strategies in Tea Plantations of Assam" at Bal Sakha, Dibrugarh and Centre for Tea and Agro Studies, Dibrugarh University on October 29, 2021

Kukil Kalpa Rajkhowa (Mathematics), delivered a talk 'A glimpse in the world of Mathematics' at GIMT, Guwahati on October 26, 2021

Kuladip Sarma (Zoology) delivered a lecture 'Programming with python, R & Matlab' at Faculty Development Programme, organized by J N College, Boko during 28 June- 4 July 2021

Kuladip Sarma (Zoology) delivered a lecture 'Biological Data Science using R' at a programme organized by National Institute of Electronics and Information Technology (NIELIT), Guwahati Centre, during July 21-30, 2021

Kusum Kunja Malakar (Hindi) delivered an online talk 'Jine Ka Naam Jindegi: Kahani Sangrah ki Alochana' at Himalaya Virasat Trust, Uttarkhand on November 7, 2021

Leena Borah (Environmental Biology and Wildlife Sciences) delivered a talk on 'Climate Change and Ecological Footprint' at a workshop on Ecological Footprint organized by NILOY in association with ASTEC at Chaygaon Higher Secondary School on December 1, 2021

Manjil Hazarika (Archaeology) delivered a talk 'Ancient Society and Cultures of Northeast India: An Archaeological Perspective' at 32nd Orientation/ Induction Programme of UGC Human Resource Development Centre, Mizoram University, on July 23, 2021

Manjil Hazarika (Archaeology) delivered a talk 'Reconstructing Past Environment: Perspectives from Archaeology' at Interdisciplinary Refresher Course on Environmental Studies and Disaster Management, UGC Human Resource Development Centre, Mizoram University, on December 1, 2021 Heritage - Architecture of India - Scientific Temper and Ancient Wisdom' at Centre for Cultural Resources and Training (CCRT), Guwahati Regional Centre, on December 13, 2021

Manjit K Bhattacharyya (Chemistry) delivered a talk 'Crystal Engineering of Coordination Compounds: Exploring Chemistry beyond the molecules' at Pragjyotish College, Guwahati on November 30, 2021

Mayuri Chabukdhara (Environmental Biology and Wildlife Sciences) delivered a talk on 'Biomedical Waste: Hazards, Treatment and Disposal' at North Eastern Hill University, Shillong, Meghalaya on August 28, 2011

Mayuri Chabukdhara (Environmental Biology and Wildlife Sciences) delivered a talk on 'Concept of Green Building and Green Campus Audit' at Assam Royal Global University, Guwahati, Assam on November 2, 2021

Nabajit Hazarika (Environmental Biology and Wildlife Sciences) delivered a talk on 'Fundamentals of Remote sensing and its applications', at Assam Royal Global University, Guwahati, Assam on December 16, 2021.

Narayan Sharma (Environmental Biology and Wildlife Sciences) delivered a talk on 'Citizen Science' at CASFOS, Burnihat Organised by Central Academy for State Forest Service (CASFOS), Ministry of Environment, Forest and Climate Change, Govt of India on July 14-15, 2021.

Narayan Sharma (Environmental Biology and Wildlife Sciences) delivered a talk on 'Role of NGOs in Citizen Science Initiative, at CASFOS, Burnihat Organised by Central Academy for State Forest Service (CASFOS), Ministry of Environment, Forest and Climate Change, Govt of India on September 23, 2021.

Narayan Sharma (Environmental Biology and Wildlife Sciences) delivered a talk on 'Human-wildlife Conflict' organised at Daulat Ram College, Delhi, in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, New Delhi on October 7, 2021.

Narayan Sharma (Environmental Biology and Wildlife Sciences) delivered a talk on 'People's Biodiversity Register: What, why and how' at CASFOS, Burnihat Organised by Central Academy for State Forest Service (CASFOS), Ministry of Environment, Forest and Climate Change, Govt of India on October 7, 2021.

Narayan Sharma (Environmental Biology and Wildlife Sciences) delivered a talk on 'Designing Successful Livelihood Programme for Biodiversity Conservation' at CASFOS, Burnihat Organised by Central Academy for State Forest Service (CASFOS), Ministry of Environment, Forest and Climate Change, Govt of India on October 8, 2021.

Narayan Sharma (Environmental Biology and Wildlife Sciences) delivered a talk on 'Invasive and alien species and their impact on biodiversity, society and culture' at International Conference on Mobility and Multilingualism in South and Southeast Asia: Impact of Global Ecological Change on Local Society, Central Institute of Indian Languages, Pragjyotish Centre for Cultural Research, IIT Gandhinagar, School of Liberal Studies and Education, Navachana University and Cotton University during December 27-29, 2021.

Manjil Hazarika (Archaeology) delivered a talk 'Tangible Nurjahan Rahmatullah (Hindi) delivered a talk 'Purani Pension Bahai Ko Samarpit' at National Poetry Conference organized by Parishadiyon Sahityakar Manch, Uttar Pradesh on October 3, 2021.

> Nurjahan Rahmatullah (Hindi) delivered a talk as Guest of Honor on 'Literature and International Relations', at an international seminar organized by Dr. Dinesh Chandra Sen Gaweshena Kendra, Dhaka, Bangladesh on December 27-28, 2021.

> Pooja Chetry (Centre for Women Studies) delivered a talk 'Patriarchy, Society and Feminist Movement: Understanding the interlinkages in Indian Context', at Madhabdev University on July 14, 2021.

> Raju Bharalee (MBBT) delivered a talk 'Molecular cloning and abiotic stress induced expression analysis of a eukaryotic translation initiation factor 5A gene from tea [Camellia sinensis (L.) O. Kuntze]' at an event organized by Botanical Society of Assam and Cachar College, Silchar, Assam on December 4, 2021

> Rakhee Kalita Moral (Centre for Women Studies) delivered a talk 'Mind the Gap: The Politics of Gender, Precarity and the Pandemic' at Royal Global University. July 30, 2021

> Rakhee Kalita Moral (Centre for Women Studies) delivered a talk 'The Ecological Imagination of Women Writers: Engaging NE India' at Don Bosco University, on November 22, 2021

> Ritika Sahu (Archaeology) delivered a talk 'The Royal Necropolis: Study of the Moidams of Charaideo, India' at Virtual One Day Workshop on Rewriting World Archaeology (South Asia Group), Durham University, UK on July 23, 2021

> Ritu Thaosen (History) delivered a talk on 'Sambudhan Phonglo and the Anti-Colonial resistance in the North Cachar Hills' at Indian Council of Historical Research (ICHR) on October 22, 2021

> Samikshya Gohain (Philosophy) delivered a talk 'Philosophy of Existentialism with special reference to Jean Paul Sartre' at MDK Girls' College, Dibrugarh on December 24, 2021

> Sayanika Dutta (MCJMS), delivered a talk 'How Media is changing the perception of masses towards political power and cultural identity in India's national and north-east context post 2000' at Sonapur Collge on November 29, 2021

> Simashree Bora (Sociology) delivered a talk 'Gendered Devotion in Neo-Vaishnavism: Women, Monks and Sattras of Majuli, Assam' at Department of Women's Studies, Gauhati University on December 11, 2021.

> Ujjal Deka Baruah (Geography), delivered two talks on 'GIS/RS applications in climate / environmental studies' at Department of Geography Gauhati University on November 30, 2021, and December 7,

> Neeta Baglari (Education) delivered a talk 'Mental Well-Being of Children' at Kendriya Vidyalaya, NFR, Maligaon July 29, 2021.

> Nurjahan Rahmatullah (Hindi) delivered a talk 'Harivali ek Jana Andolan' at a National Webinar organized by Harivali Andolan, Sonbhadra, Uttar Pradesh on June 27, 2021.

> Nurjahan Rahmatullah (Hindi) delivered a talk 'Hindi Pakhwara' at an event organized by Department of Hindi, Pune College of Arts, Science and Commerce, September 14, 2021.

## Publications in Journals by Faculty Members and Research Scholars July- December 2021

A S Naorem, S Saikia, A Buragohain, R A Begum, S S Boyane, and H V Ghate (Zoology) First report of Scipinia horrida (Stål) (Heteroptera: Reduviidae) from Assam, with comments on related genus Irantha Stål', Journal of Threatened Taxa, 2021, ISSN 09747893, https://doi.org/10.11609/jott.7124.13.12.19824-19830

A S Naorem, B Thongatabam, P Aggarwal, G Gupta, A Raza, and A Yadav (Zoology), 'Efficacy of manjistha and ginger powder in extending the lifespan of Drosophila melanogaster', Indian Journal of Traditional Knowledge, 2021, ISSN 09725938

Ajaikumar B. Kunnumakkara, Varsha Rana, Dey Parama, Kishore Banik, Sosmitha Girisa, Sahu Henamayee, Krishan Kumar Thakur, Uma Dutta, Prachi Garodia, Subash C. Gupta, Bharat B. Aggarwal (Zoology) 'COVID-19, cytokines, inflammation, and spices: How are they related', Life Sciences, 2021, ISSN 0024-3205, https://doi.org/10.1016/j.lfs.2021.119201

Amal Das, P Sharma, R M Gomila, A Frontera, Akalesh Kumar Verma, Bipul Sarma, Manjit K Bhattacharyya (Zoology and Chemistry) 'Synthesis, Structural Topologies and Anticancer Evaluation of Phenanthroline-based 2,6-Pyridinedicarboxylato Cu (II) and Ni(II) Compounds' Polyhedron, 2021, ISSN 0277 5387, https://doi.org/10.1016/j.poly.2021.115632

Angita Sarmah Boruah (Education) "Academic stress of post graduate students: Evidence from Cotton University of Assam, India", Research and Reviews Journal of Agriculture and Allied Sciences, Volume 10, Issue 3, September 2021, ISSN 2319-9857

Anjuma Begum, Archana Mishra, Chandana Das, Somdatta Das, Ratul Dutta, Natasha Kashyap, Purabi Bose Purabi and Sujoy Bose (Molecular Biology and Biotechnology), 'Impact of TNF-α profile in recurrent pregnancy loss pathogenesis: A patient based study from Assam', Journal of Reproductive Immunology, 2021, ISSN 0165-0378, doi. 10.1016/j.jri.2021.103430

Anupam Das, Bipan Hazarika, Nipen Saikia, Nihar Kumar Mahato (Mathematics), 'Iterative method to find approximate solution of system of integral equations via generalized Meir–Keeler condensing operator', São Paulo Journal of Mathematical Sciences, 2021, ISSN 2316-9028, 10.1007/s40863-021-00255-y

Anupam Das, S.A. Mohiuddine, Abdullah Alotaibi, Bhuban Chandra Deuri (Mathematics), 'Generalization of Darbo-type theorem and application on existence of implicit fractional integral equations in tempered sequence spaces', Alexandria Engineering Journal, 2021, ISSN 1110-0168, https://doi.org/10.1016/j.aej.2021.07.031

Anupam Das, Hemant Kumar Nashine, Rabha W. Ibrahima, Manuel De la Sen (Mathematics) 'Best proximity point results and application to a system of integro-differential equations', Advances in Difference Equations, 2021, ISSN 1687-1847, https://doi.org/10.1186/s13662-021-03567-7

Anupam Das, Iyad Suwan, Bhuban Chandra Deuri, Thabet Abdeljawad (Mathematics), 'On solution of generalized proportional fractional integral via a new fixed point theorem', Advances in Difference Equations, 2021, ISSN 1687-1847, https://doi.org/10.1186/s13662-021-03589-1

B. Abida Choudhury, P. V. Rajesh, Yasmin Zahan, B. N Goswami (Physics) Evolution of the Indian summer monsoon rainfall simulations from CMIP3 to CMIP6 models. Climate Dynamics, 2021 (ISSN 0930-7575)

Bibhuti Gogoi (Geology) 'Dynamics of a subvolcanic magma chamber inferred from viscous instabilities owing to mafic-felsic magma interactions' at Arabian Journal of Geosciences 14, 1626, August 2021.

Bibhuti Gogoi (Geology) 'Role of viscous swirling in the formation of magnetite ocelli or fleck structure in the migmatites of Shillong Plateau Gneissic Complex, eastern India at Geochemical Journal 55(6), 341-353, November 2021.

Brindaban Gohain, Palash Dutta, Surabhi Gogoi, Rituparna Chutia (Mathematics), 'Construction and generation of distance and similarity measures for intuitionistic fuzzy sets and various applications', International Journal of Intelligent Systems, 2021, ISSN 1098-111X, https://doi.org/10.1002/int.22608

Daisy Das (Economics) "Is pest attack responsible for crop loss? Learning from farmers of Assam" at Pestology, Volume XLV (8), pp: 19-38, 2021

Debasish Dutta, Pranay Sharma, Rosa M Gomila, Antonio Frontera, M Barcelo-Oliver, Akalesh Kumar Verma, Munmi Gogoi, and Manjit K Bhattacharyya (Zoology and Chemistry) 'Solvent Driven Structural Topologies involving Unconventional O–H (methanol) π contact and Anti-cooperative HB••• Anion-π••• HB assemblies with Unusual Enclathration of dual guest (H2O) 4 cores in Mn (II) and Ni (II) Coordination Compounds: Antiproliferative Evaluation and Theoretical Studies', Polyhedron, 2021, ISSN 02775387, https://doi.org/10.1016/j.poly.2021.115503

Dilip Rajbongshi (Department of Assamese) published an article "Sadagar Bholanath Barua Aru Asomiya Bhasa Sahityar Unnayan" in Satsori, October 2021, ISSN – 2319-8893

Dipjyoti Mudiar, S. D Pawar, Anupam Hazra, V.Gopalkrishnan, D.M Lal; Kaustav Chakravarty, Manoj A Domkawale, Manoj K. Srivastava, B. N. Goswami, Earle Williams, (Physics) Lightning and precipitation: The possible electrical modification of observed raindrop size distributions, Atmospheric Research, 2021 (ISSN 0169-8095)

Dipannita Deka, Pinky Bora, N. Nirjanta Devi, Mayuri Chabukdhara (Environmental Biology and Wildlife Sciences) 'Biosorption of Cadmium by fungi isolated from Bharalu river, Assam' Journal of Tropical Life Science, 2021, eISSN:2527-4376, http://dx.doi.org/10.11594/jtls.11.03.04

Hemanta Mochahary (Department of Bodo) published an article "Traditional Beliefs and Practices of the Bodosof Assam: An Analytical Study" in Dogo Rangsang Research Journal, December 2021, ISSN No. 2347-7180

Hiren Nath, Pranay Sharma, Rosa M. Gomila, Antonio Frontera, Miquel Barceló-Oliver, Akalesh K. Verma, Kasturi Dutta, Manjit K. Bhattacharyya (Chemistry) Unconventional Enclathration of Guest Adipic acid and Energetically Significant Antiparallel  $\pi$ -stacked Ternary Assemblies involving unusual Regium- $\pi$ (Chelate) Contacts in Phenanthroline-based Ni (II) and Cu (II) Compounds: Antiproliferative Evaluation and Theoretical Studies 131038-131049. Journal of Molecular Structure 1245, 2021 (ISSN: 0022-2860)

#### PAPER PUBLICATIONS

Hiren Nath, Pranay Sharma, Antonio Frontera, Miqual Barcelo-Oliver, Akalesh K Verma, Jumi Das, and Manjit K Bhattacharyya, (Zoology and Chemistry), 'Phenanthroline-based Ni (II) Coordination Compounds involving Unconventional Discrete Fumarate-Water-Nitrate clusters and Energetically Significant Cooperative ternary π-stacked Assemblies: Antiproliferative N. Mahanta and R. Talukdar Trend (Statistics) Pattern and Evaluation and Theoretical Studies', Journal of Molecular Structure, 2021, ISSN 0277 5387, https://doi.org/10.1016/j.molstruc.2021. 131424

J.M. Kalita, M.L. Chithambo, (Physics) Phototransferred thermoluminescence characteristics of microcline (KAlSi3O8) under 470 nm blue- and 870 nm infrared-light illumination, Applied Radiation and isotopes,2021 (Elsevier) (ISSN: 0969-8043)

J.M. Kalita, S. Kaya-Keles, G.Ö. Çakal, N. Meric, G.S. Polymeris, (Physics) Thermoluminescence and optically stimulated luminescence of colemanite-rich borate mineral. Journal of Luminescence, 2022 (Elsevier) (ISSN: 0022-2313)

Jintu Thakuria and Dr Phunu Das Sarma (Education) "Dr. Ambedkar's philosophy on Education: Relevance in Education for women empowerment", JIJNASA, ISSN-0337-743X

Kuladip Sarma, Malabika Kakati Saikia, Bidyut Sarani, Himolin Basumatary, Siddhartha Sankar Baruah, Bhrigu Prasad Saikia, Awadhesh Kumar & Prasanta Kumar Saikia (Zoology), 'Habitat monitoring and conservation prioritization of Western Hoolock Gibbon in Upper Brahmaputra Valley, Assam', Scientific Reports, 2021, ISSN 2045-2322, https://doi.org/10.1038/s41598-021-94844-

Kulendu Kashyap Chakraborty, Rashmi Mukherjee, Chandan Chakroborty, Kangkana Bora (Computer Sciences and Information Technology) 'Automated recognition of optical image-based potato leaf blight diseases using deep learning', Physiological and Molecular Plant Pathology, Elsevier 2021, ISSN 0885-5765, https: //doi.org/10.1016/j.pmpp.2021.101781

Kuntala Das and Sayanika Dutta (Mass Communication). Media Consumption and Human Behavioural Change: A Study on Post Abnormal "Boxed-in" Syndrome. Global Media Journal, Indian Edition, 2021 (ISSN: 22495835)

Kusum Kunja Malakar (Hindi) 'Bhumandali Karan aur Sanchar Madhyam: Ek Adhyan, at Purvadeva', September 2021

M. Dutta, J.M. Kalita, G. Wary (Physics) Optical processes and apparent increase of optical band gap in Y2O3:Eu2+ nanoparticles synthesised by a gradually heated solution combustion method, Optik, 2021 (Elsevier) (ISSN: 0030-4026)

M.Sharma, C J Kumar and A Deka (Computer Sciences and Information Technology), 'Early diagnosis of rice plant disease using machine learning techniques', Archives of Phytopathology and Plant Protection, Taylor &Francis, 2021, ISSN PrinprintISSN:0323-5408 Online ISSN: 1477-2906, https://doi.org/10.1080/03235408.2021. 2015866

M.L. Chithambo, J.M. Kalita (Physics) Phototransferred thermoluminescence of BeO: Time-response profiles and mechanisms. Journal of Applied Physics, 2021 (AIP), (ISSN: 0021-8979)

M.L. Chithambo, A.J. Lontsi Sob, J.M. Kalita, (Physics). Lightinduced inter-electron-trap charge movement in annealed Al2O3: C, Mg. Physica B: Condensed Matter, 2022 (Elsevier) (ISSN: 0921-4526).

forecasting of electricity consumption in Assam, International Journal of Agricultural Statistics Sciences, 2021 (ISSN:0973-

Namram S. Singh, Anand S Dixit and Debashah Khanikar (Zoology) Morphological and Ultrastructural studies of pacter in the Eurasian Tree sparrow, Microscopy and Microanalysis, 2021, ISSN 1431-9276 (print) 1435-8115 (web), DOI: https://doi.org/10. 1017/S1431927621012885

Nurjahan Rahmatullah (Hindi) 'Dalit aur Dalit Sahitya Ka Andolan' in Sama Samayik Srijan, Vol 22, April -June 2021

Nurjahan Rahmatullah (Hindi) 'Dakhini Hindi Gaddya Sahitya Ka Mulyankan' in Samichin, Vol. 29, October -December 2021

P.P Gogoi, D Barooah, (Physics). Study of radon exhalation rates from coal using solid state nuclear track detectors, J Radioanal Nucl Chem, 2021, 330 (3) (ISSN: 0236-5731)

Pinku Sarma, Pranay Sharma, Rosa M Gomila, Antonio Frontera, Miquel Barcelo-Oliver, Akalesh K Verma, B Baruwa and Manjit K Bhattacharyya. (Zoology and Chemistry) 'Charge Assisted Hydrogen Bonded Assemblies and Unconventional O··· O Dichalcogen Bonding Interactions in Pyrazole-Based Isostructural Ni (II) and Mn (II) Compounds involving Anthraquinone Disulfonate: Antiproliferative Evaluation and Theoretical Studies', Journal of Molecular Structure, ISSN 222860, https: //doi.org/10.1016/j.molstruc.2021.131883

P Sharma, D Dutta, R M Gomila, A Frontera, M Barcelo-Oliver, A K Verma, and M K Bhattacharyya ((Zoology and Chemistry) 'Benzoato bridged dinuclear Mn (II) and Cu (II) compounds involving guest chlorobenzoates and dimeric paddle wheel supramolecular assemblies: Antiproliferative evaluation and theoretical studies', Polyhedron 208, 2021, ISSN 02775387, https: //doi.org/10.1016/j.poly.2021.115409

Pritam Bardhan, Julie Baruah, G V S Bhagya Raj, Eeshan Kalita, Manabendra Mandal (Molecular Biology and Biotechnology), 'Optimization of culture conditions for biomass and lipid production by oleaginous fungus Penicillium citrinum PKB20 using response surface methodology (RSM)', Biocatalysis and Agricultural Biotechnology, 2021, ISSN 1878-8181, https://doi. org/10.1016/j.bcab.2021.102169

Rituparna Chutia (Mathematics), 'Ranking interval type-2 fuzzy number based on a novel value-ambiguity ranking index and its application in risk analysis', Soft Computing, 2021, ISSN 1433-7479, 10.1007/s00500-021-05743-z

Rituparna Chutia, Mridul K. Gogoi, M. Adabitabar Firozja, Florentin Smarandache, (Mathematics), 'Ordering single-valued neutrosophic numbers based on flexibility parameters and its reasonable properties', International Journal of Intelligent Systems, 2021, ISSN 1098-111X, https://doi.org/10.1002/int. 22362

#### PAPER PUBLICATIONS

Rituparna Chutia (Mathematics) 'Ordering intuitionistic fuzzy numbers by a convex combination of values and multiple of ambiguity inclusion functions with ambiguities of membership and nonmembership functions', International Journal of Intelligent Systems, 2021, ISSN 1098-111X, https://doi.org/10.1002/int.22530

Rituparna Chutia (Mathematics), 'A novel method of ranking intuitionistic fuzzy numbers using value and 0 θmultiple of ambiguity at flexibility parameters', Soft Computing, 2021, ISSN 1433-7479, https://doi.org/10.1007/s00500-021-06102-8

Sosmitha Girisa, Sahu Henamayee, Dey Parama, Varsha Rana, Uma Dutta and Ajaikumar B Kunnumakkara, (Zoology), Targeting Farnesoid X receptor (FXR) for developing novel therapeutics against cancer', Molecular Biomedicine, 2021, ISSN 2662-8651, http://doi.org/10.1186/s43556-021-00035-2.

S Girisa, V Rana, D Parama, U Dutta, A B Kunnumakkara (Zoology), 'Differential roles of farnesoid X receptor (FXR) in modulating apoptosis in cancer cells', Advances in Protein Chemistry and Structural Biology, 2021, ISSN 1876-1631, doi:10.1016/bs.apcsb.2021.02.006. PMID: 34090620

Sudipta Nandy, Gautam K Saharia, Sagardeep Taludar, Riki Dutta, Rahul Mahanta, (Physics) Even and odd nonautonomous NLSE hierarchy and reversible transformations, Optik 2021 (Elsevier). (ISSN: 0030-4026)

Suraj Chetri, Rezina Ahmed and Akalesh K Verma (Zoology) 'Efficacy of Cassia fistula against Callosobruchus chinensis (Linn.): An in-silico approach', International Journal of Entomology Research, 2021, ISSN 2455-4758

Suraj Chetri, Rezina Ahmed and Renu Gogoi (Zoology) 'Edible Insects used as food by Tangsa and Wancho Tribes of Changlang District, Arunachal Pradesh', Indian Journal of Entomology, 2021, ISSN 0367-8288, www.entosocindia.org Ref. No. e21036

Suraj Chetri, Rezina Ahmed and Renu Gogoi (Zoology) 'Efficacy of extracts of Shorea robusta and Oroxylum indicum against Callosobruchus chinensis (L.)', Indian Journal of Entomology, 2021 ISSN 0367-8288, www.entosocindia.org Ref. No. e21067

Ujjal Deka Baruah (Geography) "Spatio-temporal characterization of tropospheric ozone and its precursor pollutants NO2 and HCHO over South Asia, Science of The Total Environment at Science of the Total Environment; Volume 809, 2022

Uma Dutta, Trishna Kalita, Barnali Haloi, Bhaigyaroti Muchahary and Enush Daimari, (Zoology) 'Ameliorative potential of plants and bioactive components in fluoride-induced toxicity: A minireview', Uttar Pradesh Journal Zoology, 2021, ISSN 0256-971X

#### Faculty awarded Ph.D

**Jyoti Das**, Assistant Professor, Department of Sociology was awarded Ph.D. on February 23, 2021 for the thesis titled 'Sustainable development and indigenous knowledge: A study of agricultural practices in Phek district of Nagaland' by Jawaharlal Nehru University, New Delhi.

Pratisha Borborah, Assistant Professor, Department of Sociology was awarded Ph.D. on December 29, 2021, PhD for the thesis on 'Ethnicity, Gender, Rural Urban Linkages: A study of Periodic Market in Guwahati' by Jawaharlal Nehru University, New Delhi.

Sima Baruah, Assistant Professor, Department of Philosophy was awarded PhD on 30 October 2021, for the thesis 'Critical Analysis of the Concept of Karma in the Bhagavat Gita', from the Gauhati University, Guwahati.

Sushma Lama, Assistant Professor, Department of Psychology was awarded PhD on July 31, 2021, for the thesis Self-efficacy and Achievement Motivation Among Undergraduate and Postgraduate Tribal and Non-Tribal Students by Gauhati University, Guwahati.

#### **Faculty Achievements**

Dhrubojyoti Das, Department of English, was nominated as Vice-President of the State Committee, Assam by Social Research Foundation, Kanpur.

Dhrubojyoti Das, Department of English, was nominated as literary/cultural secretary of Lakshminath Bezbaroa Smriti Raksha Committee, Guwahati, Kolkata, Sambalpur.

Nurjahan Rahmatullah, Department of Hindi was awarded Mukhtai Rashtirya Hindi Gaurav Samman, by Kiran Bahu Udheysa Seva Sangh, Wardha on 14 September 202.

#### Student Achievements

Apalok J. Baruah, Department of Economics (UG VI semester) won silver medal in Roll Ball at First East Zone Senior Roll Ball National Championship 2021 for Men / Women held during 13-14 November 2021.

Bhusan Talukdar, Department of History was awarded as best competitor in Dance Competition organized by Bharat Mata Pujan Samiti on 10-11 October 2021.

Manavendra Kalita, Department of Statistics (UG III semester) won Silver Medal at National Grappling Championship, held during 21-26 December 2021

Aranyani Borah, Department of Mass Communication, Journalism and Media Studies (PG III semester) won the third prize in Indian Classical Dance category at Nritya Manjary, an international dance competition, organised by Manjary Dance Academy during December 20-25, 2021

Priyan D, Jyotsna, Department of History was selected for All-India Contest of PM-Yuva Mentorship Scheme, 25 December 2021.

Kamakshi Chakravarty, Department of Psychology (PG III semester) student secured third position at the National level Virtual Pride Event, 2021 Dance competition organized by Hues of Life.

Ankita Sarma, a Post graduate student of department of English awarded internship from NPTEL for excellent performance in MOOCs Program.

#### Activities of the UBA Cell and the SESRE Cell





Distribution of lemon saplings at Nij Panbari

At Chakardo-Kalitapara

#### Distribution of Lemon saplings and fruiting tree samplings for plantations:

The UBA cell of Cotton university is implementing a project, 'Towards sustainable and green villages: Plantation of lemon and other fruit-bearing trees' and under this intervention distributed about 9000 lemon saplings and 600 saplings of fruiting trees of more than 30 species among 1000 beneficiary households in six villages- Keotpara, Kalitapara, Satargaon, Nij Panbari, Hajongbori and Patgaon near Guwahati. The plantations would help yield revenue for the villagers and provide protection from wild elephants in three of the villages Hajongbori, NijPanbari and Satargaon. Dr. Narayan Sharma is the coordinator of the project.

#### Celebration of Gandhi Jayanti at Hajongbori village:

On the occasion of Gandhi Jayanti, a 25 km marathon for social awareness on cleanliness drive was organized by the Khamrenga Khel Parisalona Committee at Hajongbori Village, adopted under the UBA program, Cotton University on October 2, 2021. The University rendered its support, cooperation and participation in the event, including the sponsorship of a cash prize Rs. 10000/- and a trophy.

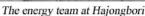
#### Energy awareness and audit:

With an aim to spread awareness on energy, its sources and its conservation, a team of members comprising faculty members and students led by Dr Parijat Borgohain, visited the villages Satargaon and Kalitapara on October 29, 2021 and then Hajongbori and Nij Panbari on November 8, 2021. An audit on energy consumption was carried out in each of the villages through personal interviews and detailed household surveys by the student groups. Every household was gifted an LED bulb on the occasion.

#### Celebration of Women's Entrepreneurship Day:

The UBA and SESREC Cells of Cotton University celebrated Women's Entrepreneurship Day on November 19, 2021, by inviting noted Educational Entrepreneur Ms. Nellie Ahmed, the Founder and Managing Trustee of Maria's Public School, Guwahati, to interact with the students and faculty of the University on her journey in education, entrepreneurship and social engagement in a bid to promote, amongst the upcoming generations, the desire and focus to take up entrepreneurship and become self-reliant.







Faculty member creating awareness on energy issues at Satargaon



Dr. Forman Ali Arabic-Persian



Dr. Mina kumari Devi Education



Dr. Kamal Barman Statistics



Dr. Padma Sarma Economics



Dr. Upala Barua



Ms. Zabeen Ahmed Librarian



Dr. Binoy K. Deka Zoology



Dr. Ruma Sarma Botany



Dr. Parag K. Deb Mathematics

### Anthropology

#### MEMBERS OF NON-TEACHING STAFF

Prafulla Das (Gardener) Kalilash Sarma (Supervisor Assistant) Prafulla Das (Hostel Boy)

#### **NEW JOINING**



Prof. Manobjyoti Bordoloi Professor, Chemistry DoJ: 24 November, 2021 Ph.D.: NEIST (Gauhati University)



Dr. Nithi Phukan Assistant Professor, Chemistry DoJ: 6 July, 2021 Ph.D.: IIT-G



Dr. Saurabhi Borthakur Assistant Professor, Commerce DoJ: 1 September 2021 Ph.D.: Gauhati University



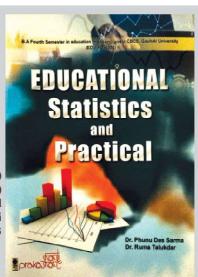
Dr. Nabajit Hazarika Assistant Professor, EBWS DoJ: 2 August, 2021 Ph.D.: Tezpur University



#### **Published Books**

Dilip Rajbongshi (Assamese) Boga Lephapha (transalated from Sada Kham) Sahitya Akademi ISBN: 978-93-90866-68-7

> Dr. Phunu Das Sarma (Education) Dr. Ruma Talukdar (Statistics) Educational Statistics and Practical Shanti Prakashan, Guwahati ISBN: 8176800023



Chief Advisor Bhabesh Ch. Goswami Vice Chancellor

Advisors Diganta Kumar Das Registrar Santanu Sarma Coordinator, IQAC

Editor Jyoti Das Monjit Borthakur Editorial Board Member Kalyan Das Bidisha Sharma Kuntala Das

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