



CENTRAL UNIVERSITY OF PUNJAB

NAAC ACCREDITED 'A' GRADE UNIVERSITY
FIVE STAR RATING UNDER GRIHA-LD MASTER PLAN

RANKED 84th AMONG UNIVERSITY CATEGORY IN N.I.R.F. INDIA RANKINGS 2021
BATHINDA-BADAL ROAD, GHUDDA, BATHINDA, PUNJAB-151401

HIGHLIGHTS



CUPB organizes Industry-Academic Interaction Programme (Page No. 7)



CUPB signs MoU with Research for Resurgence Foundation to promote academic partnership (Page No. 6)



IIT Rpar Director Prof. Rajeev Ahuja motivates CUPB Scientists to conduct path-breaking research (Page No. 5)



University Campus Photograph

सुदीक्षा (SUDI KSHA)

A CUPB Newsletter

October—November, 2021 | Volume 16 (No. 1)

In this edition...

Contents	Page Number
University Achievements	3—4
Visit by eminent personalities	5
MoU signed & Major Events held at university	6—7
International Conference organized	8
Faculty Development Workshops organized	9—10
Azadi ka Amrit Mahotsav Activities	10—11
Activities organized by NSS	11—13
Activities organized by IIC / IPR Cell	13
Vigilance Awareness Week Celebrations	14—15
Webinars / Invited Lectures	15—22
Student Achievements	22
Research Publications	23—25
Glimpses of CUPB in fourth estate	26



EDITORIAL

It gives us immense pleasure to share that while moving forward to actualize the university's vision of transforming young minds to serve humanity through skill and innovation driven teaching and research, the talented faculties of the Central University of Punjab have made their mark in the scientific and intellectual community at national and international level. The selection of seven faculty members and an alumnus in the list of top international scientists released by Stanford University in October 2022; approval of two International Joint Research Projects under India-Slovenia Bilateral Scientific and Technological Cooperation programme and ICSSR (India)--NIHSS (South Africa) Joint Research Programme; and honouring with the Best Literary Book Award by Govt. of Punjab to CUPB Professor are some of the examples that highlighted the remarkable work of our faculty in the field of education and research.

The university's commitment to strengthen the NEP2020 implementation process reflects from the collaborative and research-centric approach of our Hon'ble Vice Chancellor Prof. Raghavendra P. Tiwari, who always motivated CUPB faculty to find innovative solutions to various problems of society in collaboration with scientists and industry experts. The two major events of October—November 2021 period particularly the MoU signing ceremony with Bharatiya Shikshan Mandal's Research for Resurgence Foundation to develop learner-centric teaching pedagogies and Industry-Academia interaction programme were the outcomes of this approach.

The contribution of CUPB faculty to take the university to greater heights within just 12 years of its establishment was even applauded by Prof. Rajeev Ahuja, Director, IIT Ropar, during his visit to the university. While interacting with CUPB Scientists, he also highlighted the need for adoption of Collaboration and Innovation Model to conduct path breaking research. This signifies that the university under the able leadership of Prof. Tiwari has appropriately formulated its strategies to achieve the objective in accordance with other leading Research/HEIs.

The Academic Session 2021—22 commenced with a series of academic and extracurricular activities held in the period of October—November 2021. During this period several invited lectures, workshops, conferences and research centric programmes were organized at the university viz. International Conference of International Academy of Physical Sciences, Faculty Development Programme on 'Strategic Planning & Implementation in Digital Era'; Workshop on "Spectroscopic Techniques using sophisticated Instruments"; Research Internship Program on 'Freedom Fighters of Punjab' etc. In addition to celebration of national and international days, the university also organized a special awareness campaign to mark Vigilance Awareness Week, and conducted a tree plantation cum cleanliness drive focusing towards the overall development of faculty, research scholars, and students.

The above activities are very well aligned to the university's mission to promote skills and innovation in the teaching-learning process and create an ignited workforce responsive to local, regional, national and global needs in tune with the requirements of academics, industry, business and administration. The collective effort of all stakeholders will accelerate the pace to accomplish this task.

University Achievements

Seven Faculty Members and an alumnus of Central University of Punjab features in ‘Stanford’s top International Scientist List’



Seven faculty members and an alumnus of the Central University of Punjab, Bathinda (CUPB) have got featured in the list of top international scientists “Updated Science-wide Database of Stanford Citation Indicators” released by Stanford University, USA and published by Elsevier BV on 19th October, 2021. The selection for this ‘updated science-wide database’ was based on top 1,00,000 scientists or scientists with percentile rank of 2% and above that provided standardized information on citation, h-index, co-authorship adjusted hm-index, citation to papers, and fulfilled other parameters.

This database has been prepared by the research group of Dr. Jeroen Baas (Elsevier B.V.), Dr. Kevin Boyack (SciTech Strategies, Inc., USA), and Dr. Jon P.A. Loannidis (Stanford University, USA). The creators of this database have classified top scientists of the world in 22 different fields and 176 subfields. The research group published two different datasets to recognize the top scientists who have made outstanding research contributions in the year 2020 and the international scientists who have done exceptional research work during their career.

The seven faculty members of the Central University of Punjab who have been included in this database for their outstanding research work in the year 2020 are Prof. Vinod Kumar Garg (Dept. of Environmental Science and Technology), Dr. Shashank Kumar (Dept. of Biochemistry), Dr. Ashok Kumar (Dept. of Physics), Dr. Nasir Salam (Dept. of Microbiology), Prof. Raj Kumar (Dept. of Pharmaceutical Sciences and Natural Products), Dr. Vikas Jaitak (Dept. of Pharmaceutical Sciences and Natural Products), and Dr. Suresh Thareja (Dept. of Pharmaceutical Sciences and Natural

Products). Apart from this, an alumnus of the Central University of Punjab Dr. Anil Arya (who has completed his Ph.D. in Physics from CUPB) has also made his mark in this list. The above scientists have been enlisted in this database for their contribution in the discipline of Environment Sciences; Oncology & Carcinogenesis; General Physics; General & Internal Medicine; and Medicinal & Biomolecular Chemistry.

Among them, Prof. Vinod Kumar Garg from CUPB Dept. of Environmental Science and Technology, who got featured in Stanford’s top 2% scientist list published by ‘PLOS Biology’ journal in the year 2020 also shines in the prestigious ‘top international scientists list’ of 2021 who have made remarkable contributions in their discipline throughout their career.

Prof. Raghavendra P. Tiwari, the Vice Chancellor, congratulated CUPB Scientists for bringing laurels to the university with their outstanding research work. He stated that this achievement is not only the reflection of the high-quality research work conducted at CUPB, but this database also brings forward the fact that the faculty members of this university have competencies to conduct research at par with the global scientific community. He added, these rankings have motivated the entire scientific fraternity of CUPB to set further high records in the field of education and research and contribute to make this university recognized as a premier Higher Education Institution at national and international level.

Shri Kanwal Pal Singh Mundra, the Registrar, while complimenting the CUPB scientists stated that this achievement will further inspire our students and research scholars to conduct high quality research.

Central University of Punjab’s Faculty bags two International Joint Research Projects

In continuation to its pursuit towards creating new knowledge to make India Vishwaguru and to strengthen international research collaborations as envisioned in NEP2020, the Central University of Punjab, Bathinda (CUPB) faculty achieved another milestone by bagging

two International Joint Research Projects. Dr. Surender Kumar Sharma from the Dept. of Physics and Dr. Sandeep Kaur from the Dept. of Economic Studies contributed to this accomplishment by getting an

International Joint Research Project each in the field of nano science and social sciences respectively

Dr. Surender Kumar Sharma, Associate Professor, in the Dept. of Physics received a joint research project in nano science discipline under the India-Slovenia Bilateral Scientific and Technological Cooperation programme funded by the Department of Science & Technology (DST), Government of India and Slovenian Research Agency, Republic of Slovenia. The title of the project is ‘Investigation of ferrimagnetic vortex iron oxide-based nanoparticles for magnetic hyperthermia applications’. Under this project Dr. Surender Kumar Sharma (CUPB, India) will work in collaboration with Dr. Darko Makovec, Dept. for Materials Synthesis, Jožef Stefan Institute, Slovenia, to develop supplementary thermal therapy (an alternative to current chemotherapy) for cancer treatment. The project is of three years duration and in this tenure, DST will provide funding of about Rs 15 Lakh to researchers. Under this project, there will be a total of 12 visits each of 15-30 days (6 for Indian researchers and 6 for Slovenian researchers) over the next 3 years to carry this research out.

Dr. Sandeep Kaur, Associate Professor, in the Dept. of Economic Studies, got the sanction order of the Joint Research Project under ICSSR (India)--NIHSS (South

Africa) Joint Research Programme in the field of Social Sciences. The title of the project is “Women, Social Innovation and Entrepreneurship: Possible Lessons from India and South Africa”. The project is for the duration of two years. Under this project, Dr. Sandeep Kaur will jointly conduct research with Prof. Mammo Muchie, at Tshwane University of Technology, Pretoria. In this tenure, both the principal investigators will travel to each other’s locations and participate in the combined research activities which include a field survey of Indian and South Africa to understand the innovation under social entrepreneurship. As a part of the project, the investigators will conduct a Workshop/Conference on the project theme. The ICSSR has sanctioned a grant-in-aid of Rs. 13.7 Lakh for the joint research project.

Prof. Raghavendra P. Tiwari, the Vice Chancellor, congratulated both the faculty members for getting the International Joint Research Project. He stated that the award of international joint research collaborations will not only help our scientists to develop innovative solutions for various social problems but also help to actualize the university’s vision to represent our country in the international scientific community.

Central University of Punjab’s faculty Prof. H.S. Pannu honoured with “Best Literary Book Award” by Government of Punjab

The Dept. of Higher Education and Languages of the Government of Punjab has accorded Prof. Harpal Singh Pannu, Chair Professor, Shri Guru Gobind Singh Ji Chair at the Central University of Punjab, Bathinda with ‘Best Literary Book Award’ for authoring a Punjabi Book entitled “From Joan to Malala” published in the year 2016.



Punjab Higher Education and Language Minister Sh Pargat Singh conferring Best Literary Book Award to Prof HS Pannu in the presence of Punjab Language Dept Director Smt Karamjit Kaur and Punjabi University VC Prof Arvind.jpg

Shri Pargat Singh, Hon’ble Minister of the Dept. of Higher Education and Languages, Government of Punjab, conferred this award to Prof. H.S. Pannu in the gracious presence of Smt. Karamjit Kaur, Director, Language Department, Government of Punjab, and Prof. Arvind, Vice Chancellor, Punjabi University, during the special programme organized on the Punjab Day to honour Punjabi writers. Along with this Award, Prof. Pannu received a letter of appreciation and a sum of Rs 25000/- from the Government of Punjab

On this occasion, Prof. Raghavendra P. Tiwari, the Vice Chancellor, congratulated Prof. Harpal Singh Pannu for bringing laurels to the university. He stated that Prof. Pannu in his illustrious career of over 40 years has written more than 20 books in Punjabi Language. He is an inspiration for youngsters who want to contribute towards the promotion of Punjabi language, literature, and culture. Shri Kanwal Pal Singh Mundra, the Registrar, complimented Prof. Pannu on this accomplishment and expressed his gratitude for making the university proud.

Visit by eminent personalities

October 27, 2021: IIT Ropar Director Prof. Rajeev Ahuja inspired Central University of Punjab's Scientists to conduct path-breaking research through Collaboration and Innovation

Central University of Punjab, Bathinda (CUPB) under the patronage of Vice Chancellor Prof. Raghavendra P. Tiwari organized an interactive session of Prof. Rajeev Ahuja, Director, Indian Institute of Technology (IIT), Ropar with CUPB scientists and faculty members.



IIT Ropar Director Prof Rajeev Ahuja sharing his views with CUPB Vice Chancellor Prof RP Tiwari

During his address, Prof. Rajeev Ahuja shared his experiences of working at Uppsala University, Sweden, and stressed that the international scientific community works on the model of 'innovation and collaboration' which Indian Scientists should also adopt to conduct path-breaking research. He emphasized on the development of low-cost and research-based indigenous solutions in science and technology to solve various grassroot problems for making our country Self-Reliant.

Prof. Ahuja mentioned that the scientists of our country have the competency to conduct high-quality research at par with international standards. But, to enhance the research output they need to start focusing on collaborative assignments, new research dimensions, and the development of research-based solutions to achieve sustainable development goals. He added that although the transformative educational reforms under NEP 2020 such as the development of scientific temperament among youngsters through the adoption of student-centric teaching pedagogy etc. have set the stage to conduct multidisciplinary research for

researchers. But for effective implementation of these reforms, teachers should also need to provide freedom to students and research scholars to work together with research scholars of other disciplines to conduct research on new areas.

While interacting with faculty members Prof. Ahuja applauded the CUPB faculty for taking the university to greater heights. He called on CUP Bathinda's Scientists to work together with IIT Ropar Scientists to develop new-age solutions with the use of science and technology.



IIT Ropar Director Prof Rajeev Ahuja interacting with CUPB Scientists

In his presidential remarks Prof. Raghavendra P. Tiwari, the Vice Chancellor, expressed gratitude towards Prof. Ahuja for encouraging CUP faculty members to take their research to the higher pedestal. He announced to formulate a team consisting of scientists from various discipline to work out the key areas on which CUP Bathinda can collaborate with IIT Ropar to promote new academic partnership aiming to make our country a Knowledge Capital.

On this occasion, Prof. R.K. Wusirika, Dean Incharge Academics, Prof. V.K. Garg, Dean Student Welfare, Prof. Anjana Munshi, Dean Research, HoDs of Sciences departments and faculty members were present.

MoU Signed / Major Events held at University

October 28, 2021: Central University of Punjab, Bathinda signs MoU with Bharatiya Shikshan Mandal's Research for Resurgence Foundation



Glimpse of MoU signing ceremony between Central University of Punjab and Bharatiya Shikshan Mandal Research for resurgence foundation

Central University of Punjab, Bathinda (CUPB) under the dynamic leadership of Vice-Chancellor Prof. Raghavendra Prasad Tiwari, signed a Memorandum of Understanding (MoU) with Bharatiya Shikshan Mandal's Research for Resurgence Foundation to promote a new academic partnership. The objective of this MoU is to promote research for developing innovative solutions to various problems of society and to develop learner-centric teaching pedagogies as envisioned in NEP-2020. The chief guest of the program was Shri Mukul Kanitkar, National Organizing Secretary, Bharatiya Shikshan Mandal (BSM).

During the MoU signing ceremony, Shri Kanwal Pal Singh Mundra, Registrar, CUPB, and Shri Mukul Kanitkar, National Organizing Secretary, BSM, signed the pact in the gracious presence of CUPB Vice Chancellor Prof. Raghavendra P. Tiwari and BSM Samparks Sah Pramukh Shri Pankaj Nafde.

In his keynote address, Chief Guest Shri Mukul Kanitkar delivered a lecture on "Research: the pedagogy of knowledge realization". He referred to Swami Vivekananda's quote "Education is the manifestation of perfection already present in a man" to state that Education is the process to bring out knowledge from within and learning is the process of uncovering and discovering our inherent knowledge. He stated that in the Indian Knowledge System and traditional Gurukul System of imparting knowledge, the learning was research-oriented, and the teacher facilitates the learner in acquiring knowledge and developing essential skills. He underlined that post introduction of Macaulay Education Policy in 1835, the adoption of teacher-

centric pedagogy has detached students from the Bharatiya philosophy of education which is based on 'research-based learning'. He exhorted that the transformative educational reforms introduced in National Education Policy-2020 give us a way forward for the adoption of learner-centric education model and re-introduce the Bharatiya philosophy of education at school and higher education level to make India the VishwaGuru.



Vice Chancellor Prof Tiwari along with CUPB and BSM officials releasing the book written by Shri Mukul Kanitkar

Raghavendra Prasad Tiwari, Vice Chancellor, CUPB, in his presidential address expressed his gratitude towards Shri Mukul Kanitkar for enlightening the participants with his scholarly address. He discussed Adi Shankara's Methods of Education as well as Bloom's Taxonomy of Education and stated that both approaches of education focused on 'learner'. He stressed that NEP-2020 emphasized the need for the adoption of flip learning, and other innovative teaching pedagogies to impart self-directed learning techniques to the learners and develop global intellectual citizens who will contribute to nation-building. He expressed his hope that this MoU will fulfil its objectives by realizing the vision of NEP-2020 and will prove to be beneficial for society. Shri Kanwal Pal Singh Mundra, the Registrar, stated that this MoU will serve as a platform to promote high quality research and create innovative pedagogy to inculcate research-based learning ability among learners.

On this occasion, Vice Chancellor Prof. Tiwari along with university officials released the Punjabi version of a Book entitled "Sangathan Gade Chalo" authored by Shri Mukul Kanitkar.

Faculty, research scholars, and students of the university attended this programme.

November 24, 2021: Industry-Academia Meet held at Central University of Punjab

To bridge the gap between industry and academia, and to actualize the vision of AtmaNirbhar Bharat as envisioned by our Hon'ble Prime Minister Shri Narendra Modi, the Central University of Punjab, Bathinda (CUPB), organized an Industry-Academia interaction programme during which leading industrialists of Bathinda participated. In this interaction session, CUPB scientists and industrialists from Bathinda discussed the opportunities to collaborate to find innovative solutions to various problems faced by industry and work together to develop skilled manpower who will contribute towards nation-building.



Vice Chancellor Prof Tiwari interacting with Bathinda Industrialists

At the start, Prof. Anjana Munshi, Dean Research, welcomed the industrial representatives. She shared that the Central University of Punjab has emerged as the leading higher educational institution in the region and, within a short span, the university has made a mark among the top 100 universities list in the NIRF Rankings. She spoke about the quality of research conducted by faculty and scholars, and shed light on world-class research facilities available at the university in the form of the Central Instrumentation Laboratory, Departmental Laboratories, etc. After this, Dr. Vinod Pathania, programme coordinator, introduced the Deans/HoDs of the Science Departments running at the university and shared their expertise. He invited industrialists to share their problems and expectations.

During the programme, the industry representatives from different fields, such as pharmaceuticals, transformer manufacturing, edible oil manufacturing, casting and fabrication units, etc., shared their issues and challenges. The industrial delegates expressed happiness with the research-centric approach of the university and conveyed their willingness to collaborate with the university in the areas of product testing, refinement of manufacturing processes, and project-based research. They emphasized the importance of providing students with hands-on training and informing them about available job opportunities in their field.

In his presidential address, Prof. Raghavendra P. Tiwari, the Vice Chancellor, expressed his gratitude towards industrial delegates and put forward his mission to actualize the dream of AtmaNirbhar Bathinda. He said that this programme is an initial attempt in the way forward to understand the needs of local industry and work together to find innovative solutions to accomplish this mission. He emphasized that the university is committed to implementing NEP2020 transformative educational reforms and working to develop an ecosystem to promote experiential learning and strengthening industrial-academic collaborations. He encouraged industrial representatives and university scientists to work together to strengthen industry-academia partnerships to boost the opportunities of consultancy, project-based research, skill development, and entrepreneurship.



Group photograph of CUPB Vice Chancellor Prof Tiwari with Bathinda Industry Representatives

While interacting with industry representatives, Prof. Tiwari, the Vice Chancellor, shared that the university is putting its best efforts into setting up a world-class research park at the university campus, which will facilitate local industrial units. He expressed hope that their support would help to accomplish this task in a limited time.

Towards the end, Shri KPS Mundra, the Registrar, gave a formal vote of thanks. The industry representatives who participated in this programme were Mr. Mukesh Jindal (President, Bathinda Small Industries Association) from PP Industries, Mr. Virendra Garg (President, Bathinda Industrial Owners Association) from Kosva Industries, Mr. Vikram Garg from Vikas Industries, Mr. Krishan Bansal from KK Impex, Mr. SK Garg from Unitech Pharma, Mr. Manjeet from Monats Biotech, Mr. Satish Bansal from PP Industries, and Mr. Rahul Bansal from MS Glistar Inc.

International Conference organized

October 27–29, 2021: 27th International Conference of International Academy of Physical Sciences (CONIAPS XXVII) organized at Central University of Punjab

The Department of Mathematics and Statistics, Central University of Punjab under the patronage of Vice Chancellor Prof. Raghavendra P. Tiwari and in association with the International Academy of Physical Sciences, Prayagraj organized the 27th International Conference of International Academy of Physical Sciences (CONIAPS-XXVII) on the focal theme of “Recent Advances in Differential Geometry and Topology (RADGT-2021)” from October 26–28, 2021.



Glimpse of the International Conference

The inaugural ceremony commenced with the welcome address by Prof. Gauree Shanker, Convener of the CONIAPS XXVII on RADGT-2021, where he informed that the Conference received a total of 415 registrations from different parts of the country and abroad. Prof. Parmeswaran Sankaran, Distinguished Professor, Chennai Mathematical Institute, Chennai, and Prof. Andrei Y Vesnin, Tomsk State University, Russia, graced the occasion as chief guest and guest of honor respectively. They highlighted the importance of Differential Geometry and Topology in space science, Physics, and Civilization. Prof. R. P. Tiwari, Hon'ble Vice Chancellor, Central University of Punjab, emphasized to discuss the different aspects, applications of this topic to

make it more beneficial and understandable. He suggested to publish the contents of the conference in the form of Conference proceedings by the IAPS Journal.

In the Conference, a total of 20 technical sessions were conducted. In these sessions, 6 plenary talks, 10 invited talks, and 3 short talks were delivered by the eminent Mathematicians of India and abroad. Also, a total of 55 oral presentations were given by the participants including the presentation for the Young Scientist Award.

The Chief Guest of the valedictory session Prof. S. K. Srivastava, D. D. U. Gorakhpur University, Gorakhpur appreciated the organizers for choosing the relevant focal theme for this conference which provided an opportunity to participants to know about Recent Advances in Differential Geometry and Topology and their applicability in different fields. Prof. Krishnedu Gongopadhyay, Head, Department of Mathematical Sciences IISER, Mohali and Co-convener of the Conference, mentioned that the deliberations on different sub-themes made during this conference has enhanced the conceptual understanding of participants and would be helpful for conducting further research in their discipline.

Prof. R. Wusirika, Dean, In-charge (Academics), Central University of Punjab, and co-patron of the CONIAPS XXVII, appreciated the participants for their active participation in all the sessions. He complimented the Programme Organizing Secretaries Dr. Sachin Kumar and Dr. H.S. Kapoor for the smooth execution of such a big event in a well-organized manner.

Faculty Development Workshops organized

October 4—8, 2021: Central University of Punjab organized five-day AICTE ATAL sponsored Faculty Development Programme on ‘Strategic Planning & Implementation in Digital Era’

The School of Management of the Central University of Punjab, Bathinda (CUPB) under the patronage of Vice Chancellor Prof. Raghavendra P. Tiwari successfully organized AICTE-ATAL sponsored Faculty Development Programme (FDP) from 4—8 October 2021 on the focal theme of ‘Strategic Planning & Implementation in Digital Era’. Out of 122 registered participants, 67 participants including faculty, researchers, students and corporate professionals have successfully completed this workshop.

In the inaugural session Prof. V.K. Garg, Dean Student Welfare and Prof. Monisha Dhiman, Director IQAC, motivated the participants to actively participate in all the sessions of this programme.

This five-day FDP programme features fourteen sessions on different sub-themes of this workshop during which the participants learnt about corporate and business level strategies, effect of globalization and digitalization, unique strategies to identify strengths and weaknesses of an organisation, manufacturing cycle, value chain analysis, balance scorecard, digital transformation, importance of shared vision, consumer behaviour in digital era, advantages of technological upgradation, strategy formulation in dynamic business environment.



DSW Prof VK Garg addressing the participants

The invited speakers of this workshop were eminent academicians including Prof. Prashant Salwan (IIM Indore), Prof. Manjit Singh (Punjabi University, Patiala), Prof. Vikas Chaudhary (NIT Kurukshetra), Prof. T. Radha Ramanan (NIT Calicut), Prof. Santosh Rangnekar (IIT Roorkee), Prof. A.K. Vashishth (Punjab University, Chandigarh), Prof. Ravi Inder Singh (UBS PU, Ludhiana), Prof. Praveen Sahu (Central University of Rajasthan, Bandar Seendri), Dr. R.K. Soni (Advisor AICTE), Prof. Navkiranjit Kaur (Punjabi University, Patiala), Prof. Rajesh Verma (Lovely Professional University Phagwara), Prof. Karunesh Saxena (MLSU, Udaipur).

October 18—24, 2021: Central University of Punjab organized one-week Workshop on “Spectroscopic Techniques using sophisticated Instruments”

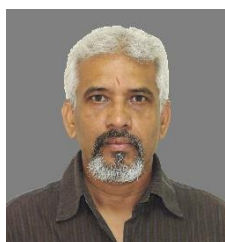
The Department of Chemistry at the Central University of Punjab, Bathinda (CUPB) under the patronage of Vice Chancellor Prof. Raghavendra P. Tiwari organized a one-week Workshop on the focal theme of “Spectroscopic Techniques using sophisticated Instruments” from 18—24 October, 2021. This workshop is being sponsored by the Science and Engineering Research Board (SERB) under ‘KARYASHALA’ scheme of Accelerate Vigyan with the aim to boost research & development in the country by developing dedicated research skills among youngsters in selected areas. The Chief Guest and keynote speaker of the inaugural ceremony of this workshop was Dr Anil Kumar Mishra, Director, Institute



CUPB faculty participating in the Inaugural Session of Workshop

of Nuclear Medicines and Allied Sciences (INMAS). Out of 150 applicants who got registered for this workshop, around 110 shortlisted candidates including PG/Ph.D. students from leading Higher Educational Institutions participated in this workshop.

The Inaugural ceremony commenced with the welcome address by Dr. Vinod Kumar, Workshop Convener, and HoD, Dept. of Chemistry, wherein he introduced the workshop theme. He highlighted that the Department of Chemistry at CUPB was established in the year 2015 and in this short span of time, the faculty of the Department has bagged research grants of more than 700 lakh and published more than 110 research papers in highly reputed journals.



Dr Anil Kumar Mishra

The Chief Guest Dr Anil Kumar Mishra complimented the faculty of the Dept. of Chemistry for their achievements and delivered a keynote lecture on 'Shift Reagents to Imaging Probes: Chemistry Point of View'. He described the discovery and use of non-invasive

contrast agents developed for the early detection of diseases like brain tumor, cancer etc. Dr. Mishra discussed the applications of various analytical

spectroscopic instruments in the diagnosis of diseases and emphasized that the hands-on training on such instruments to be provided in this workshop will be useful for PG/Ph.D. students.

During this workshop expert sessions were conducted on various sub-topics related to focal theme of this workshop such as Innovation in Conventional Sciences; Intellectual Property Rights; Plagiarism and tools for its detection; Atomic Absorption Spectroscopy; Inductivity Coupled Plasma Spectroscopy UV, CD and Fluorescence samples; NMR spectroscopy; Mass spectroscopy; HPLC etc.

During the valedictory session Prof. R.K. Wusurika, Dean Incharge Academics, stressed on the importance of spectroscopic techniques in research as well as in diagnostics, made an appeal to the participants to utilize the knowledge gained during this workshop for conducting qualitative research.

Towards the end, the programme organizers stated that this workshop served as a platform to participants to know about theory, principle, problem-solving and get hands-on training on the handling of various spectroscopic instruments used in chemistry.

Azadi Ka Amrit Mahotsav Activities

November 8, 2021: Central University of Punjab and SHODH organized a workshop to flag-off Research Internship Program on 'Freedom Fighters of Punjab'

As a part of Azadi ka Amrit Mahotsav organized by the Government of India to commemorate the 75 Years of Independence of progressive India, the Central University of Punjab along with SHODH (Students for Holistic Development of Humanity) conducted a workshop on 8th November 2021 for conducting a 15-day research internship programme on 'Freedom Fighters of Punjab' from 9–23 November 2021. The programme was executed under the patronage of Hon'ble Vice Chancellor Prof. Raghavendra P. Tiwari. The invited speakers of this workshop were Dr. Alok Pandey, Punjab State, In-charge, SHODH; Prof. Prashant Gautam, University Institute of Hotel & Tourism Management, Punjab University; Prof. Shiv Kumar Dogra, Department of Law, Himachal Pradesh University; and Prof. Bipin Pal, Central University of Punjab.

During the inaugural session, Dr. Alok Pandey, State, In-charge, SHODH, informed that this workshop would bring out the modalities for conducting a 15-day research internship programme wherein the university students participating in this programme would document the sacrifices of unsung/forgotten heroes of India's freedom struggle from Punjab after visiting their native places in the various districts of the state and meeting their families. He emphasized that during this programme, students will learn through a project-based cooperative learning approach, while coordinating with each other. He informed that the data obtained during the internship programme will be compiled as a research document.

Prof. Raghavendra P. Tiwari, the Vice Chancellor, in his presidential address stated that the university is committed to develop responsible learners by teaching the self-directed learning approach along with the

adoption of a multidisciplinary holistic education framework in all PG/Ph.D. programmes as envisioned in NEP2020. He highlighted that this workshop and research internship programme would help in developing the intellectual and analytical ability of the participants through an experiential learning approach as they will collect information based on real-life interactions during the field visits. He expressed his hope that this research internship programme will help to bring out inspirational life stories of the events that shaped the character, integrity and patriotism of our unsung heroes of the freedom struggle.

This workshop featured two technical sessions during which invited speakers shared the framework of the research internship programme with participants. Around 72 students from the university and different educational institutions of Punjab registered in this workshop.

The event was coordinated by CUPB faculty & staff members Prof. Ramakrishna Wusirika (Dean Incharge



Glimpse of interaction session held during the workshop

Academics), Dr. Kulbhushan Sharma, Dr. Narender Dhania, Dr. Deepak Pandey, Dr. R.K. Chaitanya, Dr. Ramnpreet and Er. Puneet Jassal along with educationists Shri. Rahul Sharma and Shri. Sourabh Kapoor.

Activities organized by NSS

October 2, 2021: CUPB NSS cell organized cleanliness drive on the closing ceremony of Swachhta Pakhwara 2021

The NSS Cell of the Central University of Punjab organized a Cleanliness Drive at the university campus on 2nd October 2021, to contribute towards the making of Swachh Bharat. The NSS Cell organized this activity to mark the birth anniversary of Mahatma Gandhi and to inspire youngsters to adopt cleanliness in their daily life.

On this occasion, NSS and student volunteers cleaned the university campus and spread awareness for making plastic free campus.



Group photograph of NSS volunteer during the cleanliness drive

October 12, 2021: CUPB NSS cell organized Tree Plantation Drive



Registrar Shri KPS Mundra planting tree sapling during the Tree Plantation Drive

In continuation to Van Mahotsav activities, the NSS Cell in collaboration with the Dept. of Botany of the University organized a tree plantation drive at Botanical Garden, Central University of Punjab.

On this occasion, the Registrar Shri Kanwal Pal Singh Mundra and the students planted tree sapling to preserve our environment.

October 28, 2021: CUPB NSS cell organized Mega Cleanliness Drive & Unity Day Pledge Ceremony

As a part of Azadi ka Amrit Mahotsav celebrations, the NSS Cell of the Central University of Punjab under the aegis of Ministry of Youth Affairs and Sports organized a 'Mega Cleanliness Drive' on 28th October, 2021. Mrs. Harinder Kaur, Regional Director, NSS Directorate, Chandigarh graced the occasion as a special guest of the programme.

On this occasion Prof. V.K. Garg, Dean Student Welfare along with Prof. Monisha Dhiman, NSS Coordinator, Prof. Tarun Arora, Nodal Officer EBSB Cell, Mrs. Harinder Kaur, Regional Director, NSS Directorate, Chandigarh, and Shri Kulwinder Singh, Asst. Director, Youth Services, Bathinda, administered Swachhta Pledge and Unity Day Pledge to students. After this, the NSS Volunteers along

with CUP faculty and students participated in the cleanliness drive.



CUPB students taking Swachhta Pledge and National Unity Day Pledge during the programme

November 26, 2021: 'Constitution Day 2021' celebrated at Central University of Punjab

To mark the anniversary of the adoption of the Constitution of India, the Central University of Punjab, Bathinda (CUPB) celebrated the Constitution Day (Sanvidhan Diwas) by organizing a Preamble Reading Programme.



CUPB students under the leadership of Vice Chancellor participating in Preamble Reading Programme

The NSS Cell of the university under the guidance of Prof. Raghavendra P. Tiwari, the Vice Chancellor, conducted this programme during which CUPB officers, faculty, and students read the preamble of the Indian Constitution in

10 different languages to promote constitutional values among citizens. The preamble of the Constitution of India was read in English and nine Indian languages such as Dogri, Urdu, Assamese, Punjabi, Malayalam, Bangla, Odia, Hindi, and Telugu languages. More than 120 students participated in this programme.

In his presidential address, Prof. Raghavendra P. Tiwari, the Vice Chancellor, outlined the values of the Indian Constitution and encouraged students to inculcate the true values of the Constitution in them. Prof. Vinod Kumar Garg, Dean Students Welfare, motivated the students to act as responsible citizens of India by following the fundamental duties.

Dr. Deepak Chauhan, NSS Coordinator, thanked the participants for their active participation and complimented all the five NSS programme officers, Dr. Jyoti Prakash, Dr. K. Milankumar Sharma, Dr. Pritam Chand, Dr. Sabyasachi Senapati, Dr. Preeti Khetarpal, and NSS office staff, Mr. Sukhnaib Singh, for the smooth execution of the programme.

November 28, 2021: Central University of Punjab organized a special lecture on 'Nadi ko Jano'

Owing to its commitment to work towards preserving the environment, the NSS Cell at the Central University of Punjab, Bathinda (CUPB) organized a special lecture on 'Know the River (Nadi ko Jano)'. The keynote speaker of this programme was Shri Uma Shankar Pachauri, All India General Secretary, Bharatiya Shikshan Mandal.

While addressing the participants Shri Uma Shankar Pachauri highlighted the deteriorating state of water bodies which are



Shri Uma Shankar Pachauri

the main source of development of any area. He underlined that youngsters should be aware of the neighbourhood water canals/rivers that were in existence a few decades ago but got destroyed or turned into a drain due to the rapid industrialization and urbanisation. Shri Pachauri talked about ‘Nadi Ko Jano’ nationwide digital campaign initiated by Research for Resurgence Foundation (RFRF) in collaboration with UGC, AICTE and NBA. In this campaign, youngsters can get information about the major rivers of India and can update the data of their nearby water channels along with its photos by registering on <https://conferencebsm.com/nkj>. He also encouraged participants to must take part in the ‘Nadi Ko Jano Competition’ which will continue till November 30, 2021, to win prizes of up to one lakh. He enthusiastically shared that more than 25 thousand students, teachers, officers and employees of 2203 institutions of 29 states and 9 union territories of the country are participating in the campaign. He appealed to the participants to join

the initiative as this will help in actualizing the aim of bringing public awareness towards rivers, their conservation, connecting youth power with the environment.

In his presidential address the Vice Chancellor, Prof. Raghavendra P. Tiwari, appreciated the efforts of the Research for Resurgence Foundation to take care of our rivers with a novel initiative. He stated that the ‘Nadi ko Jano’ campaign will surely motivate everyone to work towards the conservation of our neighbourhood water bodies which are our lifeline.

At the start, Dr. Deepak Kumar Chauhan, NSS Coordinator, delivered the welcome address. Towards the end, Dr. Jyoti Prakash gave a formal vote of thanks. Faculty, research scholars and students from different departments participated in this programme.

Activities organized by IIC/IPR Cell

November 12, 2021: Session on IPR and Process of IP Filing organized at Central University of Punjab

Under the Patronage of Hon’ble Vice-Chancellor, Prof. Raghavendra P. Tiwari, the Institution’s Innovation Council (IIC) and Intellectual Property Rights Cell (IPR Cell) of the Central University of Punjab organized an "Online Orientation Session on IPR and Process of IP filings" with an objective to motivate researchers for innovation. The invited speakers of this programme were experts from Innovation-Technology Transfer Office (i-TTO) Ms. Reema Sahni, Senior Project Manager, i-TTO and Ms. Pragti Aggarwal, Sr. Project Officer (IP), i-TTO.



Ms Reema Sahni

In the first session, Ms Reema Sahni, Senior Project Manager, iTTO discussed the nuances of IPR (Different forms of IPRs, protection criteria with small examples.). She also explained that the culture of innovation and registration for protection IPs is helpful in building brand value of an institution,

motivates researchers and opens source of earning. It is very important that prior to starting any research work, assess novelty. There is a need to find solutions to various societal problems. Patent should not be filed

only for the purpose of increasing registered IP number but serious effort must be made to generate revenue. She also explained the non-patentable subject matters in detail.

This was followed with an expert talk on ‘How to file IP’ by Ms Pragati Aggarwal, Senior Project Manager, iTTO. She shared the processes to be followed by innovators of Central University of Punjab if they wish to avail services of iTTO. She emphasized the fact to avoid the urge of sharing innovative ideas without non-disclosure agreement as the professionals from iTTO are bound to maintain confidentiality as per MoU agreement.



Ms Pragati Aggarwal

At the start, Prof Anjana Munshi, Dean Research welcomed all the participants and inaugurated the programme. Towards the end, Prof Monisha Dhiman, President, IIC gave a vote of thanks. Dr. K.N. Yogalakshmi, Associate Professor, Dr. Kiran K. Singh, Assistant Professor and Dr Preeti Khetarpal, Assistant Professor overall coordinated the event.

Vigilance Awareness Week Celebrations

October 26, 2021: Vigilance Awareness Week Celebrations commenced with a Integrity Pledge Ceremony and Speech Competition



Vice Chancellor Prof. R.P. Tiwari administering Integrity Pledge to faculty and students

The Central University of Punjab under the patronage of Vice Chancellor Prof. Raghavendra P. Tiwari celebrated the Vigilance Awareness Week from 26th October 2021

to 1st November 2021. The commencement of Vigilance Week on "Self Reliance and Integrity" took place on Tuesday with a Pledge Ceremony and Speech Competition.

At the onset of the inaugural session, CUPB Vice Chancellor Prof. Raghavendra P. Tiwari along with Vigilance Officer Prof. Anjana Munshi and Dean Incharge Academics Prof. R.K. Wusirika administered Integrity Pledge to CUPB faculty, non-teaching staff, and students of the university.

During the speech competition, students and faculty members shared their views on the topic "Self Reliance with Integrity" and inspired everyone to 'Be the Change' in the society by setting the highest standards of honesty and integrity at all times and supporting the fight against corruption.

October 27, 2021: Poster making and slogan writing competition organized at Central University of Punjab

On the second day of Vigilance Awareness Week Celebrations (26th October to 1st November), the students of the Central University exhibited colorful posters and creative slogans during Poster Making and Slogan Writing Competition. The participants highlighted the fact that Integrity and Self Reliance can pave the way to the nation's success.

During the programme, CUPB students displayed creative posters and slogans on the theme of "Self Reliance with Integrity".



CUPB students displaying creative posters and slogans on the theme of Self Reliance with Integrity

October 29, 2021: Nukkad Natak on Self Reliance with Integrity organized at Central University of Punjab



CUPB students performing Nukkad Natak

On the fourth day of the Vigilance Awareness Week Celebrations, the students performed a Nukkad Natak at the university campus on October 29, 2021 to spread the message of Self Reliance with Integrity and Stop Corruption among youngsters.

The performance of the CUPB students in the Nukkad Natak was well-appreciated by the participants.

November 1, 2021: Awareness Walk conducted on the closing ceremony of Vigilance Awareness Week Celebrations

The Central University of Punjab celebrated Vigilance Awareness Week from 26th October 2021 to 1st November 2021 with great enthusiasm. The celebrations commenced with the Integrity Pledge. Various activities including Speech Competition, Poster Making and Slogan Writing Competition, Quiz Competition, and Nukkad Natak were conducted during this week. On the last day of the Vigilance Awareness Week 2021, the faculty and students of the University conducted an Awareness Walk and displayed posters/slogans to spread the message of 'Self Reliance with Integrity'.



CUPB students displaying posters and slogans during the awareness walk for Self Reliance with Integrity

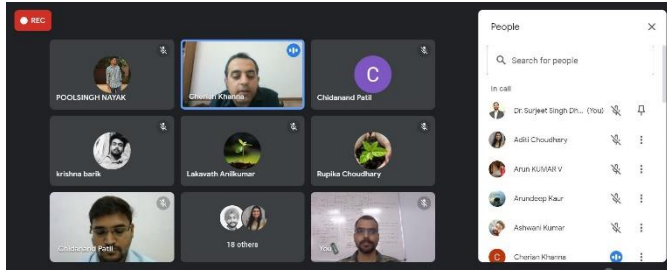
Webinars / Invited Lectures & other Activities

October 7, 2021: Central University of Punjab organized a Webinar on “Functioning of Regulated APMCs under the New Digital Agricultural Marketing Reforms Era: A Case of e-NAM (Electronic National Agriculture Market)”

The Department of Applied Agriculture, Central University of Punjab, Bathinda (CUPB), under the patronage of Vice Chancellor Prof. Raghavendra P. Tiwari organized an online webinar on "Functioning of Regulated APMCs under the New Digital Agricultural Marketing Reforms Era: A Case of e-NAM (Electronic National Agriculture Market)" on Thursday. Mr. Cherian Khanna, Zonal Head – North, Nagarjuna Chemicals and Fertilizers Limited was the invited speaker for the webinar.

In his keynote address, Mr. Cherian Khanna informed that through eNAM platform, farmers can sell their produce in any mandi across India and traders can purchase the agricultural commodities from any of the Agricultural Produce Market Committee (APMCs). He emphasized that eNAM will help in reducing the transaction costs and farmers can get payments directly into their bank accounts. Mr. Khanna explained in detail about current status and progress of eNAM in India, new features of eNAM, price discovery mechanism, its

benefits to the stakeholders involved [APMCs, Farmers, Farmer Producer Organisations (FPOs), Traders and



Screenshot of the programme

Mandi Boards], the role and responsibilities of mandi boards, the process flow of eNAM, and the features of eNAM mobile application. He also discussed about the list of commodities, commodity quality, assaying, registration process on eNAM, payment & trade related incentives and the grievance redressal mechanism.

During the programme, Mr. Khanna interacted with participants and answered their queries.

At the onset, Prof. Anjana Munshi, Dean Research and HOD, Department of Applied Agriculture, while delivering the welcome address mentioned that eNAM will help in enhancing the accessibility of farmers via digital platform to the multiple buyers, bring transparency in trade transactions, improve the price discovery mechanism, and develop the concept of one nation one market for agricultural commodities. Dr. Chidanand Patil introduced the keynote speaker. Towards the end, Dr. Surjeet Singh Dhaka delivered the formal vote of thanks. Faculty, research scholars and students from different departments of the university attended this programme.

October 11, 2021: Central University of Punjab observed Mental Health Day

The Department of Psychology, Central University of Punjab under the patronage of Vice Chancellor Prof. Raghavendra P. Tiwari observed the Mental Health Day in the University campus.

On the occasion, the Department put up an exhibition of posters prepared by students highlighting various aspects of Mental Health. Faculty, research scholars and students of the Department answered the queries of the visitors and spread awareness regarding Mental Health.

Dr. Anugraha Ranjan, Incharge, Department of Psychology, stated that mental health has become more important during the Covid-19 pandemic and there is an urgent need to pay attention to both physical health and mental health of each other.

Students made posters related to various inequalities faced and how it is affecting mental health, commonly seen psychological disorders, various psychological therapies, stigma related to taking psychological help, whom to approach during crisis, and tips to improve mental health.



Group Photograph of CUPB students and faculty during the Poster Exhibition

In continuation with the celebrations, students also organized an Open Mic on Mental Health where the faculty members and students of the department shared their thoughts, personal experiences, anecdotes, songs and poems related to mental health.

Mental Health Day is observed all over the world on 10 October every year and this year the theme was 'Mental Health in an Unequal World'. The World Health Organisation observes it to create awareness and support for mental health every year.

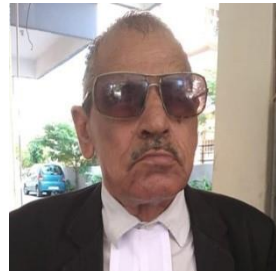
October 15, 2021: Central University of Punjab organized a Webinar on “Socio-legal Aspects Related to Differently Aabled Persons”

To commemorate the White Cane Safety Day, the Central University of Punjab, Bathinda (CUPB) under the patronage of Hon’ble Vice Chancellor Prof. Raghavendra P. Tiwari organized a special lecture on “Socio-legal Aspects Related to Differently Aabled Persons” on Friday. The keynote speaker of this event was Adv. Phool Chand Yadav, Former State Commissioner for Persons with Disabilities, Haryana.

At the outset of the programme, Dr. Pardeep Kumar welcomed the participants and Prof. Ramakrishna Wusirika, DIA, Central University of Punjab introduced the keynote speaker and highlighted the history and importance of the White Cane Safety Day.

While addressing the participants Adv. Phool Chand Yadav stated that the White Cane Safety Day is observed to celebrate the achievements of differently abled persons (blind/ visually impaired) and threw light on the contribution of differently abled persons in performing arts, literature, science and other fields. He mentioned that the Chief Architect of the Indian Constitution, Shri Babasaheb Bhimrao Ambedkar with his concept of social justice has empowered differently abled persons with several constitutional rights such as Equal Opportunities, Full Participation etc. which were strictly enforced & strengthened through the Persons with Disabilities Act, 1995 and the UN Convention on the Rights of Persons with Disabilities, 2006. He underlined

that after the introduction of the Rights of Persons with Disabilities Act, 2016 (which covers 21 types of disabilities and guarantees a 4% reservation quota in Government Jobs), the socio-economic status of differently abled persons was further improved.



Adv. Phool Chand Yadav

Adv. Phool Chand Yadav asserted that despite these attempts, millions of differently abled persons are debarred from full participation in families and society. To ensure social equality and inclusive development, differently abled persons should be encouraged to get their rights and provided with enough opportunities to work as per their capabilities in the government and private sector.

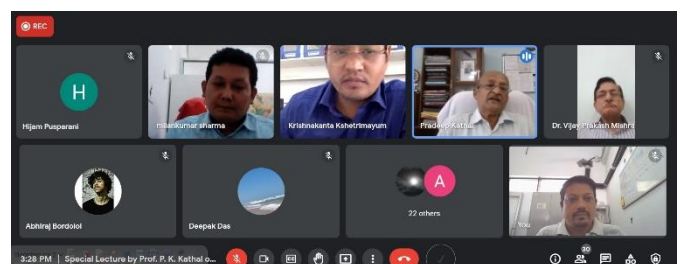
Prof. Monisha Dhiman, Director IQAC, briefed about the facilities being provided at the University level to differently abled students and stated that CUPB has taken all steps to ensure inclusive education. In the end, Prof. Tarun Arora gave a formal vote of thanks. Faculty, non-teaching staff, research scholars and students of the University attended this programme.

October 21, 2021: Central University of Punjab organized celebrated International Fossil Day 2021

The Central University of Punjab, Bathinda (CUPB) under the patronage of Vice Chancellor Prof. Raghavendra P. Tiwari organized a special lecture on “Microfossil groups: their utilities in geological studies” to celebrate the International Fossil Day, 2021. The Department of Geology, School of Environment and Earth Sciences, Central University of Punjab and Paleontological Society of India (PSI), Lucknow jointly organized the event. The distinguished resource person was Prof. P. K. Kathal, Department of Applied Geology, Director Institute of Distance Education, Dr. H. S. Gour University, Sagar, MP.

In the special lecture, Prof. P. K. Kathal highlighted the major applications of microfossils in the field of oil exploration, paleoclimate, paleo-environment, ocean evolution, sequence stratigraphy and forensic studies. He narrated about the role of microfossils in various

ongoing Ocean Drilling Program (ODP), Deep Sea Drilling Project (DSDP), etc. In his lecture, Prof. P. K. Kathal also explained the different groups of microfossils, their habitats, characteristics and applications in geological studies. Furthermore, the interrelationship of climate change with the palynological records was discussed.



Prof. P. K. Kathal addressing the participants

The program started with a welcome address by Dr. Jitendra Kumar Pattanaik, Head, Department of Geology. Dr. V. P. Mishra, Secretary, PSI, and former DDG, GSI, briefed about the International Fossil Day celebration. In his speech, he emphasized on the preservation and protection of fossil sites in India for future generations. Dr. K. Milankumar Sharma, introduced the distinguished resource person and Dr. K.

Krishnakanta Singh, Department of Geology proposed the formal vote of thanks. Several faculty members, research scholars and students of CUPB and other institutions across the country attended the virtual meet.

October 21, 2021: Central University of Punjab organized an Invited lecture on “Universal Human Values”

The Internal Quality Assurance Cell (IQAC) of the Central University of Punjab, Bathinda (CUPB) under the patronage of Hon’ble Vice Chancellor Prof. Raghavendra P. Tiwari organized a special lecture on “Universal Human Values”. The keynote speaker of this event was Prof. Rajneesh Arora, Chairman, National Coordination Committee for Induction Programme, AICTE and Former Vice Chancellor, IK Gujral Punjab Technical University, Kapurthala.

While addressing the participants Prof. Rajneesh Arora mentioned that the National Education Policy-2020 (NEP-2020) has clearly defined that education is fundamental for achieving full human potential, developing an equitable and just society, and promoting national development. He emphasized that the above aspirations articulated in NEP-2020 can be achieved with the incorporation of value education which will develop the right understanding, scientific temperament, teamwork, and fearlessness; and promote the values of truth, love, compassion; and co-existence among citizens. He underlined that the two most important components of Human Education i.e. Human World Vision and Human Values are missing in present-day education which needs to be addressed through the incorporation of Universal Human Values (UHV) in the present curricula.

During his lecture, Prof. Rajneesh Arora highlighted the role of UHV in the Holistic Value Based Education System and asserted that the 40 years of experimentation journey of the introduction of UHV in mainstream education at various HEIs have given encouraging results at the individual and institutional level. He exhorted those eminent personalities including Dr. APJ Abdul Kalam, Former President of India; Prof. Anil D Sahastrabudha, Chairman AICTE and others have also advocated for the inclusion of UHV in the education system. He also shared his academic experiences to underline that UHV can be



Prof. Rajneesh Arora

taught at the Higher Education level for the creation of an Equitable Society. He urged the CUPB authorities to incorporate the UHV programme in the core curriculum of the university.



CUPB Vice Chancellor Prof. RP Tiwari and CUPB Officials presenting memento to Prof. Rajneesh Arora

In his presidential address, Prof. Raghavendra P. Tiwari, the Vice Chancellor, stated that the Indian Knowledge System is well aligned to UHV and our bhartiya philosophy of Sarve Bhavantu Sukhinah and Sarbat da Bhala has inspired our ancestors to live in harmony with nature. He asserted that the modern education system and our fast-paced lifestyle has detached us from our traditional values, and in consideration of this various transformative educational reforms including multidisciplinary education and others, has been introduced under NEP-2020 focused to provide value education to youngsters for the creation of an equitable human society. He inspired the students of higher education to learn and practice UHV by following the ‘learn, unlearn and relearn’ approach.

At the onset of the programme, Prof. Monisha Dhiman, Director IQAC, welcomed the participants and introduced the keynote speaker. Prof. Tarun Arora moderated the event. Towards the end, Shri Kanwal Pal Singh Mundra, the Registrar, gave the formal vote of thanks. Faculty, non-teaching staff, research scholars and students of the University attended this programme.

October 23, 2021: Central University of Punjab organized an expert lecture on Pre-natal and Post-natal diagnosis of Genetic disorders

The Department of Human Genetics and Molecular Medicine of the Central University of Punjab, Bathinda (CUPB) under the Patronage of Hon'ble Vice-Chancellor, Prof. Raghavendra P. Tiwari, organized an expert lecture on "Pre-natal and Post-natal diagnosis of Genetic disorders". The invited speaker of this programme was Prof. Inusha Panigrahi, Department of Paediatric Medicine, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh.



Prof. Inusha Panigrahi addressing the participants

During her lecture, Prof Panigrahi elaborated various molecular genetic techniques like Whole Exome sequencing, Multiplex-ligation dependent probe amplification (MLPA), and Chromosomal microarray. She emphasized that the molecular diagnosis of genetic disorders at the prenatal stage is important for prevention, and valuable to the high-risk couples. She informed that antenatal ultrasonography is now being routinely used for fetal biophysical profile to look for malformations and soft markers of chromosomal disorders. Couples are counselled before and after the test. The tests must be supported with Genetic counselling. She also emphasized the fact that folic acid supplementation alone could reduce the incidence of Neural tube defects upto 70%.

At the onset of the programme, Dr Jasvinder Singh Bhatti welcomed the distinguished guests along with faculty, research scholars and students. Dr Sabyasachi Senapati moderated the session. Towards the end, Dr Preeti Khetarpal gave a vote of thanks.

November 19, 2021: Central University of Punjab organised special lecture on "Guru Nanak Bani: Spiritual-Ethical Concerns"

To commemorate 552nd Prakash Purab of Sri Guru Nanak Dev Ji, the Central University of Punjab, Bathinda (CUPB) organized a special online lecture on "Guru Nanak Bani: Spiritual-Ethical Concerns". The keynote speaker of this programme was Prof. Paramvir Singh, Professor Harbans Singh Department of Encyclopaedia and Sikhism, Punjabi University, Patiala.

While addressing the participants, Prof. Paramvir Singh mentioned that the teachings of Sri Guru Nanak Dev Ji, founder of Sikhism, has made a widespread impact on the masses irrespective of socio-religious backgrounds. Guru Nanak's message of Kirat Karo (earning our livelihood honestly), Naam Japo (meditating the God's Name), and Vand Chhako (helping those who are in need), would always be considered as the basic principle to live a peaceful life. Prof. Paramvir Singh referred to Bhai Gurdas Varan to shed light on the religious divide, diminishing spiritual values and hate feeling in society during the 15th century. Baba Nanak identified the root cause of the social divide and advised the people to

follow a value-oriented lifestyle as mentioned in religious scriptures right from the beginning as a way of life to remain fearless. During his lecture, Prof. Paramvir Singh highlighted various incidents of the life of Sri Guru Nanak including the Udasis of Guru Nanak, where Baba Nanak travelled in all directions and visited various places in Asia to promote the real message of 'Ek Onkar (ੴ)'.



Prof. Paramvir Singh

The Vice Chancellor Prof. Raghavendra P. Tiwari envisioned the programme and presided over the session. Dr. Ramanpreet Kaur stated that the preaching of Baba Nanak is relevant at all times. She highlighted that Sri Guru Nanak Dev Ji inspired us to walk on the path of truth, equality, love, compassion, and harmony for the welfare of humanity by giving us the message of 'One God'. She emphasized on the need to assimilate Baba Nanak's teachings into our life for inner peace. The

programme was coordinated by Dr. Vinod Arya. Faculty, research scholars and students of the university participated in this programme.

November 26, 2021: पंजाब केंद्रीय विश्वविद्यालय बठिंडा में स्वाधीनता आंदोलन और आधुनिक हिंदी कविता विषयक विशिष्ट व्याख्यान का आयोजन

पंजाब केंद्रीय विश्वविद्यालय बठिंडा के हिंदी विभाग द्वारा स्वतंत्रता के 75वें वर्ष में आयोजित होने वाले आज़ादी के अमृत महोत्सव को समर्पित स्वाधीनता आंदोलन और आधुनिक हिंदी कविता विषयक विशिष्ट व्याख्यान का आयोजन आभासी पटल के माध्यम से संविधान दिवस की पूर्व संध्या पर दिनांक 25 नवंबर 2021 को किया गया। इस अवसर पर मुम्बई विश्वविद्यालय के हिंदी विभाग के पूर्व अध्यक्ष आचार्य करुणाशंकर उपाध्याय जी मुख्य वक्ता के रूप में उपस्थित रहे। कार्यक्रम का औपचारिक आरम्भ विश्वविद्यालय के कुलगीत के साथ हुआ। मुख्य वक्ता के रूप में उपस्थित आचार्य करुणाशंकर उपाध्याय जी के व्यक्तित्व एवं कृतित्व का संक्षिप्त परिचय सहायक आचार्य डॉ० दीपक कुमार पाण्डेय जी ने प्रस्तुत किया।

अपने वक्तव्य में आचार्य करुणाशंकर जी ने खड़ी बोली हिंदी का विकास आधुनिक हिंदी कविता और स्वतंत्रता आंदोलन को साथ-साथ चलने वाला बताया। उन्होंने कहा कि 1857 से 1947 तक जैसे-जैसे देश की सामाजिक, सांस्कृतिक, राजनीतिक चेतना बदलती है वैसे-वैसे हिंदी साहित्य का स्वर भी बदलता है। उन्होंने यह भी बताया कि नवजागरण काल के बुद्धिजीवियों का संकल्प एक रचनात्मक और सृजनशील समाज बनाने का है। 1857 की क्रांति के कारण कम्पनी के शासन की समाप्ति के बाद विक्टोरिया घोषणा पत्र के कुछ बिंदु तो हिंदी रचनाकारों को स्वीकार थे इसलिए उन्होंने कहा।

अंग्रेज़ राज सुख साज सजे सब भारी

लेकिन हमारी आर्थिक स्थिति दिनों दिन खराब होती जा रही थी इसलिए उन्होंने लिखा।

पै धन विदेश चलिजात इहै अति ख्वारी

यानी एक साथ स्वीकार और नकार दोनों ही भाव हैं। प्रेमघन के स्वर को जहाँ उन्होंने आक्रामक कहा वहीं प्रतापनारायण मिश्र की पंक्ति 'भारत भाग सरिस कोउ नाही' को उद्धृत करते हुए उन्हें प्राचीन भारत के गौरव का बोध कराने वाला रचनाकार कहा। द्विवेदी युग के प्रतिनिधि कवि मैथिलीशरण गुप्त की 'भारत भारती' को उन्होंने स्वतंत्रता आंदोलन में अमृत मन्त्र फूँकने वाली कृति बताया। उनके अनुसार यह रचना भारतीयों के मुरझाये मुख पर पानी के छींटे मारती है उन्हें होश में लाती है और भविष्य के भारत का निर्देश करती है। वे अपनी अन्य कृतियों यथा, यशोधर साकेत आदि के माध्यम से पराजय भाव को छिन्न-भिन्न करते हैं और आत्मविश्वास आत्मगौरव का भाव देशवासियों में

भरते हैं। उनके अनुसार साकेत में उर्मिला का अयोध्यावासियों को संबोधित करने वाला दृश्य भारतमाता का देशवासियों को किया गया सम्बोधन लगता है।

छायावादी स्तम्भ जयशंकर प्रसाद को उन्होंने सांस्कृतिक चेतना सम्पन्न कवि के रूप में याद किया और उनके सम्पूर्ण साहित्य को देश भक्ति का साहित्य कहा। उन्होंने संकेत किया कि जिस प्रकार 'हिन्द स्वराज' में गांधी जी पश्चिमी सभ्यता की कटु आलोचना करते हैं ठीक वही कार्य प्रसाद ने 'कामायनी' में किया है। प्रसाद द्वारा रचे गए नाटकों और उनमें आये गीतों को उद्धृत करते हुए उपाध्याय जी ने कहा ये गीत राष्ट्र-जागरण के गीत हैं जो स्वाधीनता आंदोलन में क्रांतिकारियों का कंठ-हार बन गये थे। साथ ही हमारे इतिहास के साथ अंग्रेजों ने किस प्रकार छेड़छाड़ की और जयशंकर प्रसाद ने कैसे उसका प्रत्याख्यान रचा इस ओर भी आचार्य करुणाशंकर जी ने संकेत किया।

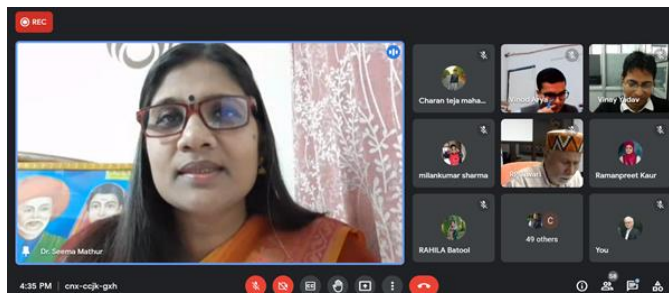
अपने वक्तव्य के अंतिम चरण में उन्होंने रामनरेश त्रिपाठी, अयोध्या सिंह उपाध्याय, हरिऔध, माखनलाल चतुर्वेदी, भगवतीचरण वर्मा, सुभद्राकुमारी चौहान, दिनकर और गिरिजाकुमार माथुर को उनकी काव्य पंक्तियों के माध्यम से याद किया और कहा कि ये सब कवि अपनी लेखनी से आम जनमानस में स्वतंत्रता की चाह को उसकी तड़प को बनाये हुए थे। इन कवियों ने दासता की निरंतर निंदा की और स्वातंत्र्य चेतना को जगाये रखा। इस कालखण्ड की कविताओं को उन्होंने भारतीय अस्मिता का मौलिक अन्वेषण करने वाली कविता कहा।

उनके वक्तव्य की भूरि-भूरि प्रशंसा करते हुये हिंदी विभाग के अध्यक्ष डॉ० राजेन्द्र कुमार सेन जी ने कहा कि इस वक्तव्य से हम और हमारे शोधार्थी, विद्यार्थी समृद्ध हुये हैं। डॉ० राजेन्द्र जी ने यह भी कहा कि स्वतंत्रता आंदोलन में हिंदी भाषा का दायित्व बड़ा था और उसने अपने दायित्व को निभाया भी। इसके बाद डॉ० सेन जी ने कार्यक्रम के मुख्य वक्ता आचार्य करुणाशंकर उपाध्याय, आयोजकों सहयोगियों और श्रोताओं के प्रति धन्यवाद ज्ञापित किया। कार्यक्रम का समापन राष्ट्रगान के साथ किया गया। कार्यक्रम का सुरुचिपूर्ण संचालन हिन्दी विभाग के सहायक आचार्य डॉ० कुलभूषण शर्मा जी ने किया।

कार्यक्रम में विभिन्न विश्वविद्यालयों के शोधार्थियों और विद्यार्थियों की उपस्थिति सराहनीय रही।

November 29, 2021: A special lecture on ‘Jyotiba Phule’s contribution to Social Reforms and Women Empowerment’ held at Central University of Punjab

To commemorate the death anniversary of one of the great social reformer Mahatma Jyotirao Phule, Central University of Punjab, Bathinda (CUPB) organized a special lecture on the theme ‘Jyotiba Phule’s Contribution to Social Reforms and Women Empowerment’. The keynote speaker of this programme was Dr. Seema Mathur, Department of Political Science, Kalindi College, Delhi University.



Dr Seema Mathur delivering keynote address

While addressing the participants, Dr. Seema Mathur presented the detailed biographical and social work profile of Mahatma Phule. She mentioned that Jyotirao Govindrao Phule was one of the greatest social reformer, thinker, writer, and philanthropist. Jyotirao Phule’s struggle to attain education and his rejoining of educational training at Scottish Mission High School was also detailed to the participants. The speaker stated that despite of the constraint of belonging to one of the backward communities, Jyotiba Phule kept the torch high for social equality and worked for the eradication of social evils like untouchability, sati system, and the caste system.

It was also shared that, Mahatma Phule was also a strong believer of gender equality, which is visible in the

efforts through which he made it possible for his wife Savitribai Phule to attain education and become the first female teacher in India. Savitribai Phule who became the champion of modern education in India, also worked hand-in-hands with Mahatma Phule for ensuring education to women and oppressed caste people by opening several schools. Dr. Seema Mathur highlighted that Jyotiba Phule was a champion of widow remarriage and contributed towards women empowerment. He established an orphanage to reduce the rate of infanticide (killing of unwanted children). Phule also established the Satyashodhak Samaj (Society of Seekers of Truth) in 1873 to liberate the depressed groups and promote rational thinking in the society. For his works and social reforms even Gandhi Ji called him a true Mahatama.

In his presidential address, Prof. Raghavendra P. Tiwari, the Vice Chancellor of Central University of Punjab, stated that the views of Jyotiba Phule inspired many including Dr. B.R. Ambedkar, the nation builder and the chief architect of the Indian Constitution, to work towards ensuring equal opportunities and social justice to all. He appealed to the youngsters to learn from the philosophy of great social thinkers and create an equitable and inclusive society based on reason and rationality to contribute towards the goals of Vishwa Bandhutva and Sarve Bhavantu Sukhinah.

Dr. Vinod Arya, the programme coordinator, expressed his gratitude towards the esteemed speaker and gave a formal vote of thanks. Faculty, scholars, and students from different states and educational institutions participated in this programme.

Invited Lectures (In brief)

Eminent academicians enlightened students during Invited Lectures organized by CUPB



Prof. Badri Narayan

October 2, 2021: To commemorate the 152nd birth anniversary of Mahatma Gandhi, Central University of Punjab under the patronage of Vice Chancellor Prof. Raghavendra P. Tiwari organized an invited lecture on “Gandhi and National Values”. The keynote speaker of this programme was Prof. Badri Narayan, Director, GB Pant Institute of Social Science, Allahabad (U.P.). The programme was coordinated by Dr. Vinod Arya.

November 26, 2021: The Department of Microbiology of the Central University of Punjab organized a webinar on 'Emergency and Trauma Care'. The invited speaker of this programme was Dr. Varun Garg, MS (General Surgery), DNB (Neurosurgery), Consultant Neurosurgeon, IVY Hospital, Bathinda. During this programme Dr. Varun Garg shared that the emergency and trauma care facilitate the management of medical emergencies, including injuries, heart attacks and strokes. Prioritizing an integrated approach to early recognition and resuscitation can reduce the impact of these conditions.

STUDENT ACHIEVEMENTS

The List of students defended Ph.D. Thesis (August 2021 to September 2021)

Sr. No.	Registration Number	Name	Department	Viva held date
1	15phdchs01	Pavneet Kaur	Chemical Sciences	04.10.2021
2	17phdpls01	Mohd Saba Rahim	Plant Science	12.10.2021
3	CUPB/MPh-PhD/SEES/EVS/2013-14/06	Amit Kumar Chauhan	Environment Science and Technology	26.10.2021

Sr. No.	Name	Achievements
1	Ravi Prakash Yadav, PhD scholar, Dept. of Microbiology	Best position in Poster Presentation in HEALTH 2021 Virtual Conference on “Cancer Biology: Advances and Challenges” in the International Conference held from November 11th -13th 2021 organized by Delhi University.
2	Ms. Adithya Aneesh, Dept. of Psychology	Aneesh, A. (October, 2021). Fear of Missing Out, Subjective Well-being, and fear of negative evaluation: In the light of problematic digital media use on Generation Z. Paper presented at National e-conference on Mental health in an unequal world organized by School of Behavioural Science (SBS), National Forensic University (NFSU), Gandhinagar, Gujarat
3.	Deepanshu Kharol M.Sc Physics Batch 2018-20 (Alumni Achievement)	Passed Rajasthan TET 2021 (Alumni Achievement), Level-II TET

RESEARCH PUBLICATIONS

List of Research Publications

- Ahmed, I., Biswas, R., Patil, R. A., Halder, K. K., Singh, H., Banerjee, B., Kumar, B., Ma, Y.-R., & Haldar, K. K. (2021). Graphitic Carbon Nitride Composites with MoO₃-Decorated Co₃O₄ Nanorods as Catalysts for Oxygen and Hydrogen Evolution. *ACS Applied Nano Materials*, 4(11), 12672–12681. <https://doi.org/10.1021/acsanm.1c03238>
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