

PROCEEDING
THE 9th HSCA
INTERNATIONAL CONFERENCE
On
RECENT TRENDS IN BIO AND MATERIALS SCIENCE
AT SARDAR PATEL UNIVERSITY, HIMACHAL PRADESH
ON OCTOBER 10-11, 2022

MESSAGES



**CHIEF MINISTER
HIMACHAL PRADESH
SHIMLA-171 002**

JAI RAM THAKUR

Message

It gives me immense pleasure to know that Him Science Congress Association, Himachal Pradesh is organising its 9th International Conference on the theme 'Recent Trends in Bio and Material Sciences' in collaboration with the Indian Science Congress Association, Shimla Chapter on 23rd and 24th September, 2022 at Sardar Patel University, Mandi.

The Him Science Congress Association during the last about 10 years has been contributing immensely in promoting excellence in science by bringing in pioneers of various scientific fields together to enlighten and motivate the young scholars of the region.

I am sure that the Conference will provide an apt platform for the delegates to exchange new research ideas, applications, research experiences and to find global partners for future collaboration.

I wish the conference a grand success.

(Jai Ram Thakur)

PLANARY SESSIONS

THE 9th HSCA

INTERNATIONAL CONFERENCE

On

RECENT TRENDS IN BIO AND MATERIALS SCIENCE

AT SARDAR PATEL UNIVERSITY, HIMACHAL PRADESH

ON OCTOBER 10-11, 2022

INVITED TALK
ABSTRACT NO - IT 101



Synthesis, characterization and properties of polystyrene-b-poly (vinylidipicolinic acid) pH-responsive core-shell nanoparticles

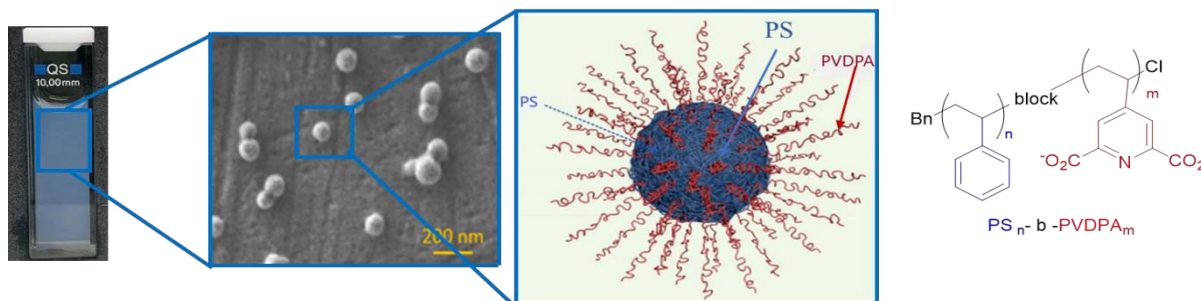
Abdel-wahab Mouhamad^{a,b}, Nadine Barroca-Aubry^b, Tamara Elzein^a, Philippe Roger^b

^aLebanese Atomic Energy Commission, National Council for Scientific Research, CNRS-L, Beirut, Lebanon.

^bInstitut de Chimie Moléculaire et des Matériaux d'Orsay (ICMMO), UMR 8182, Bâtiment 420, Université Paris-Saclay, Orsay, France.

Email: philippe.roger@universite-paris-saclay.fr

Abstract



In recent years, special attention has been dedicated to amphiphilic block copolymers, which undergo spontaneous self-assembly in hydrophobic or hydrophilic environments. In this context, the aim of this work is the synthesis of a new copolymer (polystyrene-block-poly(4-vinylidipicolinic acid) PS-b-PVDPA in order to create stable nanoparticles in aqueous media. The prepared nanoparticles have been envisioned to purify water from radioactive metals as it has been previously demonstrated in recent work of our group. Indeed, PVDPA homopolymers showed excellent chelating properties for lanthanides and actinides and in particular an excellent capacity for uranium harvesting from seawater. Supplemental Activation Reducing Agent - Atom Transfer Radical Polymerization (SARA-ATRP) was used to synthesize different copolymer compositions. The self-assembly behaviors have been studied in aqueous solution at different pH and temperatures using Dynamic Light Scattering (DLS), Fluorimetry, Scanning Electron Microscopy and Transmission Electron Microscopy.

INVITED TALK
ABSTRACT NO - IT 102



POLYMERIC MATERIALS FROM WOUNDCARE TO HUMAN ORGAN RECONSTRUCTION

Bhuvanesh Gupta, Samrat Mukhopadhyay, Chetna Verma, Ankita Sharma, Pratibha Singh, Manali Somani, Vandana Kumari, Rohini Verma, Vipula, Aishwarya Arvind, Surabhi Singh, Shamayita Patra

Bioengineering Laboratory, Department of Textile & Fibre Engineering

Indian Institute of Technology, New Delhi-110016

Email: bgupta@textile.iitd.ernet.in

Abstract

The polymeric materials have generated considerable interest as biomaterials in human healthcare where biomaterials represent the most innovative domain of medical science & technology. It is not only the structural aspect of the materials but also the innovations in the biomaterials that have created enormous interest of the scientific community in bringing in new generation products. The major requirement of the materials is the bioreceptivity and biocompatibility at the application site in human being. Our bioengineering group has been working in four domains: sutures, wound dressings, tissue engineering and nanobiotechnology.

We have been working on wound dressings based on biopolymers such as chitosan, dextran, chitosan and polyvinyl alcohol hydrogels so that a faster healing along with minimum scaring may be achieved. The efforts against infection have been the global initiative. This becomes particularly interesting when polymers are used as implants and a very precise biomaterial fabrication is needed to control the infection at the site. More recently we have expanded our studies on herbal systems as healthcare devices. A proper combination of the material with the proper choice of a bioactive agent would remain as the focus of biomaterial development. An overview on implants, wound care system and human organ reconstruction using tissue engineering has been explores in this presentation.

**INVITED TALK
ABSTRACT NO - IT 103**



DIVERSITY OF MICROLEPIDOPTERA MOTHS FROM INDIA AND ITS ECONOMIC IMPORTANCE

P.C. Pathania

Zoological Survey of India,

High Altitude Regional Centre, Saproon, Solan-173211, Himachal Pradesh, India.

E-mail: pathaniapc@yahoo.co.in

Abstract

Lepidoptera (moths, butterflies and skippers) are commonly known as scaly winged insects and is placed after the orders Coleoptera and Diptera in the class Insecta. On world basis, 158570 species of this order are present out of which, 138656 species are moths and the remaining butterflies (Zhang, 2011, 2013). 15000 species belonged to 82 families are represented in India, Out of which, 13359 species under 78 families are moths (88%) and the remaining butterflies (12%) (Chandra, 2011 & ZSI, 2011). Microlepidoptera are small primitive moths which forms an artificial division of the order Lepidoptera. On world basis, this group is represented by about 45735 species belonging to 4626 genera under to 73 families of 19 superfamilies present (Nieukerken et al., 2011). In India, about 2500 species belonging to 800 genera of 37 families under 13 Superfamilies are represented. From the literature it is clear that very scanty work has been done in India on the Microlepidoptera families. These are neglected due to their minute size, poor flight capacity and dispersal mechanism and difficult to study taxonomically. One of the priority gap of research on this group is on their biology and biosystematics. The economic importance of the Microlepidopteran species is due to their diversity and association with various types of vegetation in different climatic zones. More than 102 species larvae are associated and damaged/pests of various crops such as Cotton, , Indian bean, French bean, Cow pea, Onion, Garlic Garden pea, Sorghum, Drumstick, Sorghum, Coffee, Cacao, Common pea, Pigeon pea, Soybean, Guar, Sweet Potato, Rice, Maize, Okra, Tea, Groundnut, Soybean, Black gram, Cowpea, Garden pea, Peanuts and different fruit plants etc. are found throughout the year. The details aspects on the nomenclature and classification, diversity and distribution, host plants morphological and genitalic characters will be highlighted during presentation.

**INVITED TALK
ABSTRACT NO - IT 104**



Designing Multifunctional Polymer based Stimuli Responsive Nanomaterials for Cancer Therapy

Garima Agrawal*

School of Chemical Sciences, Indian Institute of Technology Mandi, Kamand, Mandi-175075, Himachal Pradesh, India

Email: garima@iitmandi.ac.in

Abstract

Cancer, one of the world's most catastrophic diseases, is accounting for almost 10 million deaths as reported in 2020. In quest of developing various technological solutions for fighting cancer, extensive efforts are being made by scientists all over the world. In recent years, polymer-based nanomaterials have emerged as a promising candidate for improving the quality of life of cancer patients. In this regard, both natural and synthetic polymers have been explored for designing nanomaterials with defined morphology, high porosity, adjustable dimensions, and stimuli responsive properties (sensitivity to T, pH, ionic strength and solvent quality) that can be explored for controlled drug delivery. In this presentation, designing and characterization of both natural and synthetic polymer based degradable nanomaterials for controlled delivery of anticancer drugs will be shown. In the first part, the fabrication of pH and temperature responsive biodegradable poly(N-vinylcaprolactam) based nanogels functionalized with itaconic acid (IA) units will be touched upon. These nanogel particles are able to effectively encapsulate doxorubicin (DOX) drug and exhibit low drug leakage under physiological conditions. Further, the nanogels can be degraded under acidic conditions leading to rapid DOX release at cancer site. In the second part, designing and characterization of natural polymer (xylan) based prodrug nanoparticles will be discussed for the controlled release of dual drugs namely DOX and curcumin. The results of the cytotoxicity assay display that the developed system exhibit effective antitumor activity against HeLa cells demonstrating their great potential as drug delivery carriers for cancer therapy. In the third part, fabrication of redox responsive chitosan/stearic acid nanoparticles, capable of dual drug delivery for colon cancer treatment, will be discussed.

**INVITED TALK
ABSTRACT NO - IT 105**



**Emerging Threats of Insect pests of Forests in NW Himalaya and their
Ecofriendly Management: Challenges and Opportunities**

Pawan Kumar

*Forest Protection Division, Himalayan Forest Research Institute, Shimla, H.P. India 171013, e-mail:
pawan_hfri@rediffmail.com*

Abstract

Insects are most diverse class of phylum Arthropoda. They have adapted to a wide range of environments, including the Arctic tundra, Alpine mountain peaks, tropical rainforests, and coastal mangrove swamps, and are able to withstand temperature and other climatic extremes. In High altitude transitional zones of Himachal Pradesh, forest are mainly affected by insect pest which may be seed borer, sap sucker, leaf defoliator etc. causing a serious damage to trees affecting ecosystem functions. Mostly the affected species of plants are *Betula*, *Acer*, *Salix* spp., *Quercus* spp., *Populus* spp., *Rhododendron*, *Prunus* spp. etc. Estimates of global species richness of insects vary from less than five million to as many as 80 million. Insects are critical natural resources in ecosystems, particularly those of forests. Since forest insect populations are impacted by environmental parameters, future climate change is expected to have a considerable impact on outbreak dynamics for some forest insect species. Larger and more frequent bug outbreaks may develop in some circumstances, while repeated outbreaks may be halted or reduced in others.

Forest insect population proliferation can be promoted by variations in temperature that directly affect insects, as well as decreasing host tree resistance caused by changes in precipitation. Alternatively, disruption of local adaptation to climate could result in localized population extirpation. Much is known about the influence of biotic and abiotic factors on some forest insect population eruptions. Insects are prominent disturbance agents in forest ecosystems, and thus play a significant part in their long-term dynamics. While most forest insect species live in low densities and go unnoticed, a few species have upwelling population dynamics and reach outbreak levels on a regular basis, producing widespread defoliation, overgrowth, or fatality in host trees. Insect infestations are predicted to increase with climate change and can cause rapid changes in vegetation with concomitant changes in microclimate. Due to the potential importance of the insect infestation, vegetation canopy change, microclimate change, ecosystem processes response chains, which are interrelated, the studies on changing forest insect-pest status under Stress Forest Ecosystem and their Mitigation will become more important in days to come.

INVITED TALK
ABSTRACT NO - IT 106

A study on free vibrations of viscothermoelastic cylinder using series of matrix Frobenius method

Dinesh Kumar Sharma

Department of Mathematics, School of Basic and Applied Science,

Maharaja Agrasen University, Baddi, Solan, H.P., India. 174103

Email: dksharma200513@gmail.com

Abstract

In this study we explore free vibrations of visco-thermoelastic solid cylinder in three dimensions, which has been considered at uniform temperature and un-deformed initially in the framework of generalized thermoelasticity. The problem has been formulated with the implementation of mechanical and thermal relaxation parameters. The series solution of Frobenius method has been implemented to solve the differential equations along with the evaluation of stresses, displacements, and temperature by applying stress-free, rigidly fixed, thermally insulated and isothermal boundary conditions. The relations of frequency equations for the existence of different modes of visco-thermoelastic solid cylinder have been developed in compact form using assumed boundary conditions. Thermoelastic damping and frequency shift are presented graphically from the data generated by computations and simulations of numerical results. Also, the natural frequencies have been represented in the form of tables which show that with an increase in the ratio of length to the radius and axial wave-number, the variation of vibrations goes on increasing.

**INVITED TALK
ABSTRACT NO - IT 107**

Ancient Science and Technology: Indian Knowledge System

Prof. B. C. Chauhan

Department of Physics & Astronomical Science,

School of Physical & Material Sciences,

Central University of Himachal Pradesh, Dharamshala, Kangra -176215 INDIA.

Abstract

We learn that the Europe laid down the foundation of modern scientific paradigm, and the recent trends in science and technology are by products of the groundwork done in the west. In the later developments in science and technology, the scientists from almost each and every corners of the world contributed significantly. As of today, it appears sensibly impossible to trust in the fact that during ancient days India was the epicentre of education, science and technology, and thus economical activities. In fact, it is advocated by several noted scholars that India was the origin of a large number of scientific inventions, discoveries and technological developments, which have been cornerstones for the edifice of modern science. Since time immemorial, the great Indian universities viz. Takshashila, Nalanda, Odantapuri, and Vikramashila etc. were the ancient learning centres of knowledge like science, mathematics and astronomy for the scholars worldwide. In this lecture, some light is being flashed on the Indian origin of most of scientific discoveries and inventions that have never been credited to the Indian scholars. These claims have been substantiated by the facts, findings and quotes of the various noted historians and scholars. As such, the contributions of the ancient Indians towards broadening the horizon of human consciousness is enormous, and quite legitimately all Indians must be proud of it.

ABSTRACT

THE 9th HSCA

INTERNATIONAL CONFERENCE

On

RECENT TRENDS IN BIO AND MATERIALS SCIENCE

AT SARDAR PATEL UNIVERSITY, HIMACHAL PRADESH

ON OCTOBER 10-11, 2022

Agriculture and Allied Sciences-Oral Paper Presentations

S. No.	Authors	Title	Institute
1	Samiksha Dhuria and R K Aulakh	Assessment of Earthworm species in organic fields of district Fazilka, Punjab, India	Punjab Agricultural University, Ludhiana
2	Pardeep Sharma	Pregnancy Toxaemia in Goats and its Effective Management	CSK HPKV Palampur HP
3	Isha Madaan, Geetika Sirhindi and Renu Bhardwaj	Plant steroids: A sustainable approach for reciprocating the deleterious effects of Pb toxicity in Mungbean.	Government College Of Education, Jalandhar
4	Neha Chauhan, N.K. Sankhyan, R.P. Sharma and Janardan Singh	Assessment of relationships of soil health parameters with wheat yield and quality traits in long-term fertilized acid Alfisol	KVK Mandi at Sundernagar, CSKHPKV Palampur, H.P. 176062
5	Brij Vanita, Rajesh Rajput, Virender Pathak and Ankaj Thakur	Developmental study on prenatal lungs of Gaddi sheep	CSKHPKV Palampur
6	Rishika Vij, Radha Yadav, Geetanjali Singh, Suman Kapila and Rajeev Kapila	Novel bioactive peptide enables bone vigor and ailment recoveries through metabolic interactive pathways.	DGCN COVAS, CSKHPKV Palampur
7	Manish Sharma and Rajesh Manhas	Biological applications of Streptomyces sp. M4 in the healthcare and agricultural industries	Chandigarh University
8	Sandeep Singh, Navneet Kaur Dhaliwal, Prakash Chand Pathania and Rk Sandhu	Recording of butterfly, <i>Leptotes plinius</i> Fabricius of family Lycaenidae (Lepidoptera) on ber plant in Punjab, India	Department of Fruit Science, Punjab Agricultural University, Ludhiana-141002, Punjab
9	Shanta Kumari and Jasleen Kaur Rapiyal	Status of livestock production in the economy of himachal pradesh	Eternal University, Baru Sahib, H.P.
10	Brij Vanita, Pankaj Sood, Rajesh Rajput, Ankaj Thakur, Dinesh Singh Yadav, Neha	Status of Lumpy skin disease and managemental interventions by Krishi Vigyan Kendra in Mandi district of Himachal Pradesh	CSKHPKV Palampur

	Chauhan and Shivani Thakur		
11	Gourav, Suman Kumar and Manpreet Kaur	Appraisal of Lentil Varieties for Better performance in Bilaspur District of HP	CSKHPKV Palampur
12	Chauhan, Suman Kumar and Manpreet Kaur	Appraisal of Lentil Varieties for Better performance in Bilaspur District of Himachal Pradesh	CSKHPKV Palampur
13	Neha Sharma and Pawan Kumar	Status of Lepidopteran infestation in Ban Oak (<i>Quercus oblongata</i>) forests of District Chamba, Himachal Pradesh	HFRI, Shimla

Agriculture and Allied Sciences-Poster Paper Presentations

14	Sunny Sharma, Vishal Singh Rana, Umesh Sharma, Vijay Kumar and Neerja Rana	Variation in accumulated growing degree days of different Kiwifruit cultivars at different elevations of N-W Himalayan Region	Dr Yashwant Singh Parmar University of Horticulture and Forestry,Nauni,Solan
15	Ankaj Thakur, Brij Vanita, Manoj Sharma and Neha Chauhan	Perception of Dairy farmers towards cattle welfare in livestock fair of Himachal Pradesh	CSKHPKV, Palampur
16	Sanjeev Kumar, T. K. Dutta, A. K. Samanta, Parimal Roychoudhury, P. K. Subudhi and Fatema Akter	In-vitro anti-quorum sensing activity of methanol extract of <i>Passion edulis</i> leaves, <i>Passion edulis</i> fruit, <i>Citrus maxima</i> leaves and <i>Ageratina adenophora</i> leaves from Mizoram	College of Veterinary Sciences and Animal Husbandry, CAU, Selesih, Aizawl, Mizoram
17	Swati Gautam, Satwinder Kaur Sohal, Samiksha Mahant, Saroj Arora and Swapandeep Singh Chimni	Toxic effects of purified phenolic compounds from <i>Acacia nilotica</i> against common cutworm	Saradr Patel University, Mandi, Himachal Pradesh
18	Mansi Jindal and Manoj Kumar	Habitat ecology of Asian Koel (<i>Eudynamys scolopaceus</i>) in agricultural landscape of Punjab	Punjab Agricultural University, Ludhiana
19	Umesh Sharma, H P Sankhyan, Anita Kumari, Shikha Thakur, Sunny Sharma and Shilpa Sharma	Genomic Selection as a Novel Tool for Forest Tree Breeding	Dr Yashwant Singh Parmar University of Horticulture and Forestry,Nauni,Solan

20	Shakuntla Rahi and Pankaj Sood	Assessment of high yielding parthenocarpic cucumber hybrids under protected environmental condition	CSKHPKV Palampur
----	--------------------------------	---	------------------

Biological Sciences-Oral Paper Presentations

21	Palvi Sharma, Ankita Rajput, Nitish Kumar, Sharabjit Singh, Sukhprit Singh and Saroj Arora	Evaluation of Hypoglycemic activity of Hibiscus rosa-sinensis L. flowers; In-vitro and In-silico studies	Guru Nanak Dev University, Amritsar
22	Surbhi Goyal and Jagdish Singh	Aqueous two-phase extraction of biosurfactant from Lactobacillus delbrueckii and its characterization	Punjabi University, Patiala
23	Kirti Sharma, J.I.S Khattar and D.P Singh	Tolerance mechanism in synechocystis sp. Pupccc 64 against pretilachlor toxicity	Department of botany punjabi university patiala
24	Amit Katewa and Prakash Chand Pathania	Moths of superfamily pyraloidea (lepidoptera) from western ghats (india)	Department of zoology, punjabi university, patiala, punjab
25	Avneet Kaur, Avneet Pal Singh and Saroj Arora	An analysis of apoptosis induction via ROS pathway in methanolic extract of Phellinus fastuosus	Department of Botany, Punjabi University, Patiala
26	Neha Chawariya and Jaya Prakash Yadav	The Effect of Phytohormones on Shoot Induction, Secondary Metabolites Production, and Antioxidant Potential of Micropropagated Withania somnifera	MDU Rohtak
27	Arneet Grewal and Farhana Majid	Cytomorphological evaluation in some members of genus mentha l.	Department of botany, punjabi university, patiala
28	Himshweta Guleria, Neelam Verma and Minni Singh	Synthesis and Characterization of Molecularly Imprinted Polymer using Dual Monomers for detection of Chlorogenic acid	Punjabi University Patiala
29	Shreya Agrawal and Pooja Saklani	Evaluation of the enzymatic antioxidants' activity and osmoprotectants content to study the cold stress adaptation of Picrorhiza kurroa leaves	H.N.B.G.U.
30	Damanjeet Kaur and Saurabh Gupta	Pseudomonas: A potential genus towards production of biofuels	Mata Gujri College
31	Rachita Pathania, H S Rose and Prakash Chand Pathania	Inventorization of moths of subfamily ennominae (lepidoptera) from north india	Guru Nanak Girls (PG) College, Model Town, Ludhiana

32	Sarika Thakur	Modern trends in Mushroom cultivation in biological sciences	GGSDRAJPUR
33	Ankita Rajput, Palvi Sharma, Nitish Kumar, Sarabjit Kaur and Saroj Arora	Characterization and Evaluation of Cholesterol-like Moiety from <i>Grewia tiliaefolia</i> : In vitro and In silico study	Guru Nanak Dev University
34	Shazia Bajaj and Navdeep Kaur	Oxidative stress in uterus caused due to combination of chlorantraniliprole and arsenic in female albino rats and its amelioration with wheatgrass juice	Punjab Agricultural University, Ludhiana, Punjab
35	Rinku Sharma, Gorakh Mal and Birbal Singh	Lantana camara toxicity and its amelioration using herbal plants	ICAR-IVRI Regional Station, Palampur
36	Babita Rana and Gopal Krishna Joshi	Microbiome analysis of inoculum (Keem) used for making traditional alcoholic beverages in tribal region of Uttarakhand	Hnb Garhwal University
37	Sharabjit Singh, Gurdeep Singh, Shivani Attri, Prabhjot Kaur and Saroj Arora	Preparation and characterization of cubosomes nanoparticles for co-delivery of 5-Fluorouracil and Erucin, A synergistic approach	Guru Nanak Dev University, Amritsar
38	Mohit Pun and Nisha Vashishat	Effect of quineestrol on qualitative and quantitative changes in sperm proteins in male albino rats	Punjab agricultural university, ludhiana, punjab
39	Arneet Grewal, M.I.S Saggoo and Hardeesh Kaur	Male meiotic studies in opuntia mill. From north-west india	Department of botany, punjabi university, patiala, punjab, iindia
40	Shammi Sharma and Jaya Prakash Yadav	In vitro isolation, identification of bioactive molecules from <i>Nyctanthes arbortritis</i> leaf, and evaluation of their antioxidant potential.	MDU Rohtak
41	Sarita Kumari	Physico-chemical and Biological Studies of a Pond for Pisciculture	Sardar Patel University Mandi
42	Pratibha Singh, Chetna Verma, Amlan Gupta, Samrat Mukhopadhyay and Bhuvanesh Gupta	Flexible Carrageenan-PEG-Lecithin Hydrogel Membrane for Wound Management	IIT delhi
43	Minakshi Devi, D.P. Singh and J.I.S Khattar	Relevance of antioxidant defence system for the management of lead caused oxidative stress in the cyanobacterium <i>Desmonostoc muscorum</i>	Department of botany punjabi university patiala, india.
44	Smita Dangwal	Breeding ecology of <i>Laudakia tuberculata</i> gray, 1827 in garhwal region of north-	Hnbgu srt campus tehri

		western himalaya	garhwal
45	Narender Sharma	Satyrids (Lepidoptera: Nymphalidae: Satyrinae) of the Indian Himalaya with comments on dry and wet season forms	Zoological Survey of India, Northern Regional Centre, 218 Kaulagarh Road Dehradun-248 195
46	Nanamika Thakur, Sanjana Mehrotra and Rajeev Kumar Pandey	Neuroprotective effect possess by Interleukin-6 against cobalt chloride mimetic hypoxic cell death on R28 cells mediated by Signal transducer and activator of transcription-3	Guru Nanak Dev University
47	Surbhi Sharma, Jatinder Katnoria and Shalini Bahel	Oxidative Stress and Genotoxicity Studies of 900 MHz Electromagnetic Radiations Using Trigonella foenum-graecum Test System	Guru Nanak Dev University, Amritsar, Punjab 143005
48	Shivani Sharma, Gaurav Sharma and Namita Joshi	Species Diversity of the Apidae (Insecta:Apoidea: Hymenoptera) their seasonal variations with special reference to floral preference in District Dehradun, Uttarakhand, India	Zoological Survey of India (MoEFCC), Northern Regional Centre, Dehradun-248195, Uttarakhand, India.
49	Maneesha Kohli	Conservation and sustainable utilization of medicinal plant resources of Himachal Pradesh	Centre of Excellence GC Sanjauli Shimla
50	Ramovatar Meena and Ashapura Khatua	Green nanotechnology and its applications of in cancer therapy and remediation of environmental pollutants	Jawaharlal Nehru University
51	Jagdeep Verma and Kranti Thakur	Distribution Of Cymbidium Macrorhizon Lindl. (Orchidaceae) In The Western Himalaya	SPU Mandi
52	Chanchal Sharma	Quantification Of Total Phenolic And Flavonoid Content In Fruit Extract Of Cucumis Melo Var. Agrestis	Punjabi University Patiala
53	Kulwinder Singh and Rajesh Kumar Singh	Metabolic engineering strategies for the production of Terpenes	Sanmati Govt. College of Science Education and Research, Jagraon, Punjab University, Chandigarh, Punjab, India
54	Manjinder Kaur	Evaluation of integrated bird pest management methods and assessment of seedlings damage in maize crop at sowing-seedling stage	PAU Ludhiana

Biological Sciences-Poster Paper Presentations

55	Deepak Khatak, Annesha Roy and Ramovatar Meena	Evaluation of anti-Microbial potential of fabricated cerium-doped magnesium oxide nanoparticles and its permeability in membrane model	Jawaharlal Nehru University
56	Diksha Garg, Neelam Verma and Minni Singh	Preparation and evaluation of sol-gel molecularly imprinted polymers for the selective recognition and adsorption of hypoxanthine.	Punjabi University, Patiala
57	Nidhi	Evaluation of Phytochemical, Anti-oxidant and Pharmacological Profile of Colebrookea oppositifolia Smith	Shoolini University, Solan
58	Kalpana Thakur, Mamta Devi, Deeksha Kumari and Arvind Kumar Bhatt	Comparative Analysis Of Seasonal Variations In Antimicrobial Potential Of Rabdosia Coetsa Leaf Extracts	Himachal Pradesh University
59	Kushal Thakur and Rakesh Kumar	Current Status Of Fish Diversity And Their Population Dynamics In Pong Reservoir	Central University of Himachal Pradesh
60	Taslma Sheikh and Prakash Chand Pathania	Diversity of moth fauna in Jammu and Kashmir Union Territory, India: an overview	Sunrise university Alwar Rajasthan
61	Tanmayi Sharma and Badaruddoza	Association of single nucleotide polymorphisms in leptin gene rs2167270 and rs7799039 with obesity in North Indian Punjabi Population	Guru Nanak Dev University Amritsar Punjab
62	Sukanya Thakur	Molecular mechanism of changes in gene expression of cytosolic Cu/Zn SOD and lipid peroxidation during experimental fluorosis	Department of Zoology and Environmental Sciences, Punjabi University, Patiala
63	Taslma Sheikh and Saurabh Mishra	Diversity of Butterflies in Jammu and Kashmir Union Territory India : overview	Sunrise university Alwar Rajasthan
64	Priya Daroch, Baljinder Kaur and Alka Sehgal	Insights to the Microbial world of Female Reproductive Tract through Metagenomics Approach	Punjabi University, Patiala
65	Deeksha Kumari, Mamta Devi, Kalpana Thakur and Arvind Kumar Bhatt	Antibacterial potential and phytochemical analysis of leaf extract of Holoptelea integrifolia	Himachal Pradesh University Shimla-05

66	Upasna Sharma, Sangeeta Gupta and Praveen Kumar Gupta	Radial Variation In Growth Ring Widths With Reference To Age From Juvenile Wood To Mature Wood Of Five Selected Indian Woods	Forest Research Institute Dehradun
67	Kiran Siwach and Minakshi Vashist	Detection and typing of HPV in various cervical lesions by HPV PCR Test.	MDU Rohtak
68	Dr. Monika Panchani and Dr. Suman Sharma	Post Covid Impact On Health Of Youth & Awareness About Immune System	Vgcmandi
69	Rajni Devi and Dr. Jaspreet Kaur	Antioxidant Potential and Phytochemical analysis of the Medicinal Mushroom <i>Porodaedalea pini</i> (Brot.) from District Mandi, Himachal Pradesh	Sri Guru Granth Sahib World University Fatehgarh Sahib, Punjab, India, 140407
70	Deepti Garima, Simarjit Kaur and Manpreet Singh Pandher	Species composition and distribution of Trichoptera along the altitude gradient in Indian Himalaya	Calcutta University, Kolkata
71	Ankit Langyan and Sandeep Singh	The green synthesis of nanoceria and effects on antioxidants system.	MDU Rohtak
72	Gurvarinder Kaur and Geetika Sirhindi	28-Homobrassinolide Reinstates Growth In Brassica Juncea Seedlings Under Cadmium Toxicity	Punjabi University, Patiala
73	Shruti Kaushik, Geetika Sirhindi and Anil Kumar Singh	Methyl Jasmonate Modulation Of ROS Scavenging Machinery For Cadmium Tolerance In <i>Cajanus Cajan</i>	Punjabi University, Patiala
74	Viveka Nand Sharma and Prakash Chand Pathania	Inventory on the moths of family sphingidae (lepidoptera) from tehsil dharampur of himachal pradesh, india	Rabindranath Tagore Govt. Degree College, Sarkaghat, Dist.Mandi-175024, HP
75	Shailza Dogra and Duni Chand	Production of lactic acid bacteria (LAB) derived paraprobiotic product and its application in food system	Department of Biotechnology Himachal Pradesh University Summerhill Shimla
76	Dr. Rakesh Kumar, Bhavna, Sonia Gandhi and Kushal Thakur	Histopathological study on the gills of <i>Xenentodon cancila</i> infected by <i>Eustrongylides excisus</i>	Central University of Himachal Pradesh, Dharamshala
77	Neetu Pathania, Dr Varsha Choudhary and Dr Rajib Biswas	Consumption pattern of different unhealthy food items by the adolescent boys and girls of Himachal Pradesh	Ph.D. Scholar, Pacific Academy of Higher Education and Research (PAHER), Pacific Hills, Udaipur, Rajasthan, India

78	Mamta Devi, Deeksha Kumari, Kalpana Thakur and Arvind Kumar Bhatt	Evaluation of antibacterial and phytochemical analysis of <i>Dodonaea viscosa</i> Jacq. leaf extract against selected pathogenic isolates	Himachal Pradesh University, Summer Hill, Shimla-05
79	Shashi Uniyal and Rahul Kunwar Singh	Screening of indigenous cyanobacteria as biofertilizer for Radish cultivation	Hemvati Nandan Bahuguna Garhwal University Srinagar Garhwal
80	Neetika Kimta and Amita Kumari	Evaluation of phytochemical and antioxidant potential of an ethno-pharmacological plant <i>Adiantum venustum</i> D. Don in different solvents	Shoolini University of Biotechnology and Bussiness Management
81	Navneet Kaur and Manish Kapoor	Quantification of active phenols from <i>Citrullus colocynthis</i>	Punjabi University Patiala
82	Damnita Singh, Neelam Verma and Ranjeeta Bhari	Fabrication of electrochemical sensor based on molecularly imprinted polymers for monitoring chlorpyrifos in real samples	Biosensor Laboratory Technology, Department of Biotechnology, Punjabi University, Patiala, Punjab
83	Ekta Arya, Duni Chand and Ekta Arya	Large scale production and optimization of rifamycin oxidase from novel fungal isolate	Department of Biotechnology, HPU, Shimla
84	Kamal Vatika and Dr Navdeep Kaur	Curcumin (<i>Curcuma longa</i>) and Ascorbic acid combined protective effect against heavy metal toxicity in male albino rats	Punjab Agricultural University Ludhiana
85	Neha and Geetika Sirhindi	Brassinosteroids Induced Temperature Stress tolerance in <i>Brassica juncea</i> Seedlings by Modulating the ROS Scavenging Machinery	Punjabi University Patiala
86	Anmol Sidhu and Geetika Sirhindi	Augmentation of morphological parameters of glycine max seedlings by jasmonic acid treatment under dual stress of drought and sodicity	Punjabi University Patiala
87	Rsm Shamsudeen and Prakash Chand Pathania	Diversity of Lepidoptera along altitudinal gradient in Shola forest of Kerala, India	Department of Zoology, Sir Syed College, Taliparamba-670142, Kerala,
88	Akash Ajay, Tina Begum, Krishan Kumar and Shandar Ahmad	The spontaneous base substitution rate is directly proportional to the Genomic repeat content	Jawaharlal Nehru University
89	Shanta Kumari and Kajal Choudhary	Socio-Economic Status of the Farmers of District Sirmour of Himachal Pradesh	Eternal University, Baru Sahib, H.P.

90	Vanshika Sharma, Anuradha Sourirajan, Kamal Dev, Ritu Kulshreshtha and Anuja Sharma	Cytotoxic effects of North-Western aromatic Himalayan plants towards Glioblastoma	Shoolini University
----	---	--	---------------------

Chemical Sciences-Oral Paper Presentations

91	Jagriti Behal and Ranjan Khunt	Sonochemical Synthesis, characterization and mordant dye application of Rod like nano- sized cobaltamine complexes.	Sri Sai University, Palampur, Himachal Pradesh
92	Riddima Singh, Parveen Saini, Harminder Singh and Jandeep Singh	Synthesis and characterization of anthraquinone based 1,2,3-triazole linker via 'CuAAC' methodology for selective detection of Fe (II) ions	Lovely Professional University
93	Partibha Tyagi and Krishan Kumar	Thermodynamic description of interaction between the binary mixtures of Ethylenediamine with acetic acid pentyl ester at 313.15K for post combustion of CO ₂ capture	PIET
94	Amit Kumar Sharma	Polymer Based Engineered Materials for Sustainable Agriculture	Dr BR Ambedkar National Institute of Technology, Jalandhar
95	Asha Joshi	Pd(II)–Catalyzed Non–Directed Benzylic C(sp ³)–H Activation: Cascade C(sp ³)–S Bond Cleavage to Access Benzaldehydes from Benzylphenyl Sulfides and Sulfoxides	NIT Uttarakhand
96	Dr. Raj Kumar Thakur	Acrylamide polymerization using phase transfer catalysis in aqueous toluene system	Vallabh Govt. College Mandi, H.P.
97	Anita Kumari and Swadeep Sood	Ciprofloxacin remediation from water system using biochar (Murraya Koenigii leaves) encapsulated lanthanum ferrite magnetic bio nanocomposite.	Govt. College Dhaliara
98	Chetna Verma	Functional Designing of Biopolymer Based Nanomaterial For Biomedical Applications	IIT Delhi
99	Nisha Sharma and Akhil Chaudhary	Assessment of Leaching Potential of Glyphosate by Spectrophotometry	HPU Shimla
100	Ankita Dhiman and Garima Agrawal	Natural Polymer Based pH and Redox Responsive Nanoparticles for Controlled Agrochemicals Delivery	IIT Mandi

101	Manish Arora, Alpna Bisht and Chetna Hemrajani	Hydrogel composite containing azelaic acid and tea tree essential oil as a therapeutic strategy for Propionibacterium	Shoolini University
102	Dilip Vasava	The Study And Characterization On Encapsulation Of Cu-Nanoparticles In Modified Poly-Styrene Resin Metrix And Its Catalytic Valuation In Mwa-Sonogashira Coupling	Gujarat University, Ahmedabad
103	Seema Kumari, Asha Kumari and Rahul Sharma	Nickel ferrite magnetic nanoparticles: synthesis, characterization and environmental applications	Career Point University Hamirpur Himachal Pradesh
104	Priyanka Negi and Ashish Kumar Panda	Advances and strategies in Green Chromatography	Chandigarh university
105	Dilip Vasava	Carboxyl graphene reinforced melamine-based polyamide nanocomposites	Gujarat University, Ahmedabad
106	Gurleen Singh and Dr. Jandeep Singh	CuAAC based 1,2,3-triazole 'click' derivative as selective chemosensor for Cr(III) and Pb(II)	Lovely Professional University
107	Ravi Kumar, Kuldeep Kumar and Naveen Thakur	Environmental friendly synthesis of Cu/ZnO nanocomposites for enhancing the anti-bacterial activity using Ipomoea carnea leaf extract	Career Point University, Hamirpur (H.P.), 176041 INDIA
108	Kashama Sharma, Asha Kumari and Rahul Sharma	XRD characterization of synthesized NiO NPs by green method	Career Point University Himachal Pradesh
109	Lalit Kumar Guleria	Synthesis and photocatalytic activities of tragacanth-based nanocomposite material Lalit K Gularia Department of Chemistry, Government PG College Solan, Himachal Pradesh, India	Govt college Solan HP
110	Anita Kumari	Organocatalytic Diastereoselective and Enantioselective Decarboxylative Addition of β -Ketoacids to Methyleneindolinones Derivatives	GGSD COLLEGE RAJPUR (PALAMPUR)
111	Ajay Sharma and Manita Thakur	Green synthesis of Locust Bean Gum/Zirconium (IV) Selenophosphate nanoparticles for photodegradation of Fast sulphon black and Crystal Violet	IEC University
112	Varun Aggarwal and Dr. Praveen Kumar Verma	Exploration of Ammonia as a Challenging Nitrogen Source for Various Amination Reactions in Organic Synthesis	Shoolini University of Biotechnology and Management Sciences,

			Solan, HP, India
113	Savita Soni, Sonika Kumari and Ajay Sharma	Synthesis and characterization of layered double hydroxide (LDHs) for photocatalytic degradation of Eosin Y dye	Career Point University, Bhoranj (Tikker-kharwarian), MDR 35, Hamirpur, Himachal Pradesh 176041 INDIA
114	Aastha Gupta, Ankur Sood and Garima Agrawal	Biodegradable Disulfide Crosslinked Chitosan/Stearic Acid Nanoparticles for Dual Drug Delivery for Colorectal Cancer	IIT Mandi
115	Jagriti Gupta, Jaydeep Bhattacharya and Paulraj Rajamani	An Electrochemical approach for the Quantification of the Interaction Parameters of Mercaptopropionic acid (MPA) capped CdSe QDs and Chitosan for the Fabrication of Biocompatible Theranostic Nanoprobe	Jawaharlal Nehru University
116	Ms. Vipula, Chetna Verma, Samrat Mukhopadhyay, Amlan Gupta and Bhuvanesh Gupta	Surface Modification of Polypropylene by RF Plasma	IITD
117	Neha Sen	Synthesis and Characterization of transition metal Complex Containing 2-{N-(2 & 3 aminoalkyl) benzimidoyl}-6-benzoyl-4-methylphenol Schiff base Ligand	mlsm college
118	Sheetal Sharma and Pardeep Singh	Engineering double Z-scheme CQDs mediated heterostructure for excellent photocatalytic degradation of Rhodamine B	Lovely Professional University
119	Susheel Kalia	Enzymatic biografting of antibacterial natural molecules on plant-based natural fibers	IMA Dehradun
120	Chetan Chauhan	Electrochemical investigation under the controlled applied potential during the copper–thiophanate methyl reaction and development of voltammetric method for thiophanate-methyl in its fungicide formulation (topsin M) and agricultural produces.	Sardar Patel university, Mandi, H.P, INDIA
121	Rishu Katwal	Synthesis of guar gum/copper oxide nanocomposite for efficient removal of malachite green dye	Sri Sai University, Palampur
122	Sunil Kumar, Atul Soni and Pooja Kumari	Synthesis, characterization, and optical properties of ZnO and Fe-doped ZnO	H. P. U. Shimla

Chemical Sciences-Poster Paper Presentations

123	Ankita Sharma and Dr. Manita Thakur	Fabrication of Zn/Cu/Mn nanoparticles using amla seed extract and their applications.	IEC University
124	Amit Kumar Sharma and Balbir Singh Kaith	Hydrogel based fluorescent sensor for the selective detection of copper and nickel ions	Dr BR Ambedkar National Institute of Technology, Jalandhar
125	Parul Chauhan, Vineet Kumar Choudhary and Neeraj Sharma	Synthesis, characterization and antifungal study of newly synthesized copper(II) 3-nitrobenzohydroxamate	IEC University Baddi, Himachal Pradesh
126	Dr. Ramesh Kumar	Improved Sensing and Photocatalytic Properties of Cadmium-doped Zinc Oxide Nanostructures	Government Degree College Solan-173212, Himachal Pradesh, India
127	Richa Sharma, Kuldeep Kumar and Suvarcha Chauhan	Role of anti-HIV drugs in the aggregation behavior of anionic surfactant sodium dodecyl sulphate(SDS) at different temperatures	Career Point University, Hamirpur(H.P)
128	Subhamkumar G. Patel and Hitendra M. Patel	Synthesis, crystal structure, DFT, Hirshfeld surface analysis and molecular docking studies of novel 2,4-dimethoxy-tetrahydropyrimido[4,5-b]quinolin-6(7H)-one	Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar-388120, Anand, Gujarat
129	Vandana Kumari, Samrat Mukhopadhyay and Bhuvanesh Gupta	Development of T.arjuna Incorporated Antimicrobial Polycaprolactone Nanofiber for Wound Healing Applications	IIT Delhi
130	Rohit Kumar and Pardeep Singh	Graphitic carbon nitride based adsorbent and magnetic material for photocatalytic degradation of tetracycline antibiotics	Shoolini University Of Biotechnology And Management Sciences, Solan
131	Dr. Rojila Puri	Thermoanalytical behaviour of carbodithioate and its oxovanadium(iv) and chromium(iii) complexes	Govt. College Bassa , Mandi, H.P.,
132	Divya Gautam, Yogesh Kumar Walia, Vishal Rana and Saurabh Sharma	A review on biopolymer hemicellulose and its application	career point university hamirpur H.P
133	Kanika Mandhan, Vineet Kumar Choudhary and Neeraj	Titanium(IV) 2-chlorophenylacetohydroxamate as prospective antimicrobials: synthesis,	IEC University Baddi, Himachal Pradesh

	Sharma	characterization and biological study	
134	Abhay M. Agola and Manish K. Mishra	Catalytic activity of silica-supported sulfonic acid for longifolene isomerisation	Department of Chemistry, Sardar Patel University, Vallabh Vidyanagar
135	Poonam Chaudhary, Suvarcha Chauhan and Vivek Sharma	Temperature Dependent Aggregation behavior and Interface Activity of Cationic Surfactants in Presence of Amikacin Sulphate	Vallabh Government College, Mandi (H.P.)
136	Palak Ahir and Sunil Kumar	Flower mediated Green Synthesis and Characterization of Bare and Doped ZnO Nanoparticles	himachal pradesh university
137	Vineet Kumar Choudhary, Vandna Sharma and Neeraj Sharma	Thermal and molecular docking study of biologically active dimethyltin(IV) complex of indole-3-acetohydroxamic acid	IEC University Baddi, Himachal Pradesh
138	Suman Kumari and Ajay Kumar	Self-assembly of Magnetic Cu ₂ O/CoFe ₂ O ₄ photocatalyst supported on bio-waste derived hydrochar for the adsorption and photocatalytic removal of Bis-phenol A	School of Basic and Applied Sciences [Maharaja Agrasen University Baddi]
139	Yogesh Kumar, Shilpa Patial, Pankaj Raizada, Rajinder Kashyap and Pardeep Singh	Modification of ZnIn ₂ S ₄ to construct a dual S-scheme heterojunction for facile magnetic separation and enhanced photocatalytic activity	Shoolini University of Biotechnology and Management Sciences, Solan-173212
140	Anjali and Punita Sharma	Green Synthesis Of Nanoparticles Using Plant Extracts: A Review	MAHARAJA Agrasen University Himachal Pradesh Baddi
141	Meena Kumari	Synthesis, Structural Characterization and Evaluation of Antibacterial Activity of Oxovanadium(IV) Hydroxamate Complexes	Department of Chemistry, Himachal Pradesh University, Summer Hill, Shimla-5 (H.P.)
142	Paras Patel and Hitendra Patel	Meldrum's acid derived new spiroquinolines : Design, Single-step eco-compatible synthesis, characterization, and antioxidant properties	Department of Chemistry, Sardar Patel University, Anand, Gujarat.
143	Shruti Namdev and Chetan Chauhan	Moringa Species the Potential Candidate for Traditional and Future Applications: A Review	Chandigarh University
144	Sonika Sharma and Neeraj Sharma	Synthesis, characterization, electrochemistry and biological evaluation of tris(4-nitrocinnamohydroxamato)vanadium(III) complex	Himachal Pradesh University

145	Inesh Kumar and Dr. Shashi Kant Lomesh	Ultrasonic and conductance studies of Metformin hydrochloride in water and in aqueous glucose solution at different temperatures	Himachal Pradesh University Shimla-171005
146	Manjula Sharma	Thermal decomposition of $[\text{LiNb}(\text{OC}_6\text{H}_3\text{Me}_2-2,4)_6]$ as potential single source molecular precursor LiNbO_3 nanopowder: Structural and dielectric studies	Sardar Patel University Mandi
147	Nirantak Kumar and Dr. Anita Rani	Green route of fabrication of dimetal nanoparticles by using leaf extract of <i>Ficus Benjamina</i>	IEC University, Baddi
148	Ashish Kumar, Yash Singla, Manisha Sharma, Akhil Bhardwaj and Venkata Krishnan	Two Dimensional S-Scheme $\text{Bi}_2\text{WO}_6\text{-TiO}_2\text{-Ti}_3\text{C}_2$ Nanocomposites for Efficient Degradation of Organic Pollutants under Natural Sunlight	Sardar Patel University Mandi
149	Dimpal Chauhan	Green Synthesis of Pure and doped Magnesium Oxide nanoparticles	Career Point University, Hamirpur

Environmental Sciences-Oral Paper Presentations

150	Ankit Tandon and Chhabeel Kumar	Deciphering the long-term trends in tropospheric ozone over India: Role of changes in precursors' concentration and climate change	Central University of Himachal Pradesh
151	Sonia Rani, Sweety Dahiya, Sachin Sheoran and Sudesh Chaudhary	Removal of brilliant green dye by low cost adsorbent: kinetic and thermodynamic studies	DCRSUT, MURTHAL
152	Sunaina Thakur	Impacts of heavy metals on fish reproduction	G.G.D.S.D college rajpur (Palampur)
153	Vandana Sethi and Yogesh Kumar Walia	Study of water pollution in terms of water quality index (WQI) in Riverine of Baddi Area of Himachal Pradesh	MLSM College Sundernagar
154	Ritika Sharma and Dilbag Singh	Highly Sensitive rGO@MoS_2 Nanocomposite for the Electrochemical Detection of para Nitrophenol	Central University of Himachal Pradesh
155	Sarita Bamotra, Shweta Yadav and Ankit Tandon	Dynamics in the carbonaceous aerosols at Jammu in the North-Western Himalayan Region	Central University of Jammu

156	Dipakshi Sharma, Dinesh Kumar and Satwinderjeet Kaur	Assessment of Paddy (<i>Oryza sativa</i> L.) and wheat (<i>Triticum aestivum</i> L.) straw biochars for their sorption potential to remove Cd (II) ions from simulated wastewater	Guru Nanak Dev University, Amritsar
157	Vibhu Vaid and Nisha Vashishat	Acute toxic effects of untreated sewage water on <i>Cyprinus carpio</i> L.	Punjab Agricultural University, Ludhiana
158	Pardeep Kumar, Saumitra Mukherjee and Garima Singh	Land use land cover classification and change detection in middle Andaman using Support Vector Machine	Jawaharlal Nehru University, New Delhi
159	Savita Kalshan, Manju Desondia and Rajesh Dhankhar	Performance evaluation of removal microplastic from industrial wastewater in Haryana.	M.D.U. Rohtak
160	Renu Narang, Sunil Chhikara and Geeta Kaushik	Removal of Phosphate from aqueous solution using acid treated fly ash: Kinetics, equilibrium and thermodynamics	Maharshi Dayanand University, Rohtak, Haryana
161	Rohit Sharma, Sanjay Kr. Uniyal and Shalinder Kaur	Phenological Characterization of <i>Betula utilis</i> Using Digital Imagery in Western Himalaya	1.CSIR-IHBT, Palampur; 2. Department of Environment Studies, Panjab University, Chandigarh
162	Prashant Balodi	Modernization of environmental sciences increases to wellness tourism	Career Point University, Hamirpur
163	Rahil Dutta, Jaswinder Singh and Adarsh Pal Vig	Vermiremediation of Milk industry sludge amended with cattle dung employing <i>Eisenia fetida</i>	Guru Nanak Dev University
164	Saurav Chauhan and Rachna Verma	Modeling the distribution of <i>Taxus contorta</i> Griff. in Shimla district with MaxEnt modeling	Shoolini University of Biotechnology and Management Sciences
165	Divya Tandon, Amrita Sharma and Anjali Kumari	Isolation and Screening of Plastic Degrading Microorganisms from Dumped Waste Soil Samples of HP.	SILB, Solan
166	Sunil Kumar Chhikara	Synthesis of yeast based magnetic adsorbent for bioremediation of Cr (VI) ions from industrial effluent	University Institute of Engg. & Technology, Maharshi Dayanand University, Rohtak, Haryana-124001
167	Akshay Thakur	Home stay scheme and its environmental and sustainable approach to rural development	Career Point University, Hamirpur

168	Ram Rattan	Environmental and Ecological Implications of Hydropower Projects in Chamba District of Himachal Pradesh	HPURC Dharamshala
169	Sahil Mahajan	Going Green in Business -A new road towards Corporate Environment	SCVB Govt. Degree College Palampur
170	Diksha Rana, S K Bhardwaj and Gourav	Assessment of environmental sustainability using ecological footprint in urban ecosystems of North Western Himalayas	Sardar Patel University, Mandi HP
171	Arun Chander	Corporate Social Responsibility and Environmental Management	SCVB Govt. Degree College Palampur
172	Neetika Sharma	Ecotourism and biodiversity	SCVB Govt. Degree College Palampur
173	Amit Katewa, Prakash Chand Pathania	Moths of superfamily pyraloidea (lepidoptera) from western ghats (india)	Department of Zoology, Punjabi University, Patiala, Punjab
174	Kiran Devi	Impact of Kashang Hydro power project on Socio :Economic and Environmental status of Pangri Village in Himachal Pradesh	Govt College Ghumarwin

Environmental Sciences-Poster Paper Presentations

175	Kalpna Sharma	Climate Change: Major Issues of Concern to Himachal Pradesh	G.G.D.S.D college Rajpur (Palampur)
176	Isha Chawla	Allelopathy : current trends and future goals	GGDSD college rajpur Palampur
177	Shivani Narwal and Rajesh Dhankhar	Advance contemporary developments in Polyhydroxyalkanoates (PHAs) production – A review	Maharshi Dayanand University, Rohtak
178	Deepa Thakur, Viswanath Balakrishnan, Rahul Vaish and Moolchand Sharma	Reusable piezocatalytic water disinfection activity of CVD-grown few-layer WS2 on sapphire substrate	Indian Institute of Technology Mandi
179	Vaibhav Raheja, Tina	Assessment of water quality status of freshwater bodies of Chandigarh (UT) and Mohali (Punjab) using molluscan faunal diversity as index	DAV PG College Sector 10 Chandigarh

180	Babita Yadav	Pollution assessment of the Sirsa River (Baddi, Himachal Pradesh) Using Macro-benthic (Molluscs) Faunal Diversity as Index	DAV PG College Sector 10 Chandigarh
181	Aishwarya Sharma and Shailja Kumari	Potential of ecosystem engineers in waste remediation	Career Point University, Hamirpur (H.P.)
182	Gulshan Kumar, Mukesh Kumar, Punam Kumari and Arvind Kumar	A review of Fault Delineation studies with special reference to radon-thoron anomalies in NW- Himalayas, Himachal Pradesh, India	Govt. College Baldwara, Mandi, Himachal Pradesh, India-175033
183	Vishal Panghal and Sunil Kumar	Rural wastewater treatment through biochar amended constructed wetland: A case study of Jhajjar district, Haryana	Maharshi Dayanand University, Rohtak

Physical Sciences-Oral Paper Presentations

184	Rahul Singh and Noor Jahan	Ferrofluids of magical control: Kerosene based Fe ₃ O ₄ ferrofluid's rheological study and applications	Central University of Himachal Pradesh
185	Pankaj Agrawal, Pradeep Sharma and Ashutosh Mishra	X-Ray Absorption Fine Structure Study of Schiff Base Cobalt (II) Complex of 5,5-dimethyl-(2-(4-methylphenyl)hydrazono)cyclohexane-1,3-dione	School of Physics, DAVV, Indore, MP
186	Narinder Singh, Manish Taunk and Rajesh Kumar	Sonochemical Synthesis, Structural, Morphological and Electrical Properties of Cu Nanocrystals	Maharaja Agarsen University, Baddi, Solan, Himachal Pradesh, India
187	Manjot Kaur and Akshay Kumar	WSe ₂ /MoS ₂ nanocomposite thin films: Deposition, characterization, carrier transport and photoconductivity studies	Sardar Patel University Mandi
188	Dinesh Kumar and Prakash Chand	First principles study of optical and thermoelectric properties of Half Heusler alloys KXSb (X = Be, Mg, Ca and Sr)	National Institute of Technology, Kurukshetra
189	Sunita Negi and Sandeep Kumar	Simulation Studies between Protein and Carbon nanotube for drug delivery purposes	G. D Goenka University
190	Dr Monika Sharma	Simulation study of chalcopyrite CuAlS ₂ compound	Sardar Patel University, Mandi (H.P)
191	Simran Arora and Bhag	W-Boson Mass Anomaly, Muon (m_{μ}) and Neutrino Masses in $U(1)_{L_{\mu}}$	Central University Of

	Chand Chauhan	L_{τ} Scotogenic Model	Himachal Pradesh
192	Rishu Verma and B.C. Chauhan	Rotation Curve Fitting of Spiral Galaxies	Central University of Himachal Pradesh
193	Shobhna Chaudhary and Vir Singh Rangra	Variation in AC conducting properties of a-Se-Sn-Ge glassy system with addition of Sb.	Sardar Patel University, Mandi (H.P.)
194	Prianka Sharma, Ashish Sharma and Akshay Thakur	Enhanced Photocatalytic Activity of Plasmonic Au nanoparticles Incorporated MoS ₂ Nanosheets for Degradation of Organic Dyes	Maharaja Agarsen University, Baddi (H.P)
195	Sonu Sharma	The Structural, Electronic and Magnetic Properties of Cubic perovskite SrMnO ₃	MLSM College Sunder Nagar
196	Dr. Sandeep Gupta and Dr. Sandeep Sharma	Gamma Ray Interaction Studies In Bio-Composites And Hybrid Bio Materials Based On Calcium Orthophosphates	Punjabi University College, Ghudda (Bathinda) Punjab, India
197	Swaranpreet Kaur, Surinder Singh and M.M. Sinha	Effect Of Dielectric Material On Design Of Microstriop Patch Antenna Sensor	SLIET Longowal
198	Urvashi Verma, Vikas Thakur and Manjula Sharma	Recent progress in perovskite solar cells: challenges from efficiency to stability	Sardar Patel University, Mandi
199	Dr. Vikas Thakur, Dr. Urvashi Verma, Dr. Rajesh Kumar Sharma and Dr. Deepak Pathania	Recent Advances in Sb ₂ Se ₃ Solar Cell Absorber Material and Devices	Sardar Patel University, Mandi

Physical Sciences-Poster Paper Presentations

200	Kiran Kiran, Sanjeev Kumar and Nagesh Thakur	Structural, electrical, and dielectric properties of MnFe ₂ O ₄ -graphene oxide composites	Department of Physics, Himachal Pradesh University Summer Hill Shimla-5
201	Jyotsna Musafir and Dr. Rajender Kumar	X-Ray Diffraction Study of Pulsed Laser Deposited Yttrium Oxide (Y ₂ O ₃) Thin Film on Silicon Substrate	Career Point University Hamirpur
202	Shilpa Thakur and Rajender Kumar	X-Ray diffraction study of synthesized Nickel Oxide(NiO) nanoparticles by Coprecipitation method with variation in calcination temperature.	Career Point University, Bhoranj (Tikker - kharwarian), Hamirpur ,MDR 35, Himachal Pradesh 176041,India

203	Vivek Singh, Ishant Chauhan, Aniket Negi and Deepak Joshi	Fabrication and analysis of hybrid composites	DIT UNIVERSITY
204	Ashwani Kumar	The structural and electrical study of Ni/n-TiO ₂ /p-Si/Al heterojunction	Government College Sujampur, District Hamirpur (H.P.)
205	Pankaj Kumar and Naveen Thakur	Study of Fe ₂ O ₃ NPs synthesized by green method through co-precipitation method for photocatalytic activity	Career Point University, Himachal Pradesh
206	Sachin Kumar and Dilbag Singh	A adrenaline electrochemical sensor based on a Molybdenum disulfide-multiwall carbon nanotubes heterostructure modified electrode	Central University of Himachal Pradesh
207	Neha Sharma and Nagesh Thakur	On the Dielectric Study and AC Conductivity Measurements of Quaternary Se-Te-Ge-Pb Nano-chalcogenide Alloys	Sardar Patel University, Mandi
208	Gurmeet Singh and Rabindra Nath Mahato	Structural and Magnetic Properties of Pr _{0.6} Y _{0.1} Ba _{0.3} MnO ₃ Polycrystalline Synthesized by Sol-gel route.	School of Physical Sciences (SPS), Jawaharlal Nehru University (JNU) New Delhi-110067, India
209	Sweta Singh, Vineet Sharma and Rajesh Kumar	Tuning of structural properties of cobalt ferrite films under the influence of magnetic field	JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, SOLAN (H.P.)
210	Bandna Bharti, Rajesh Kumar, Hanliang Li, Feng Ouyang and Xiaoxiong Zha	Modification of FS-TiO ₂ Photocatalyst for the Photodegradation of Acrylonitrile	DAV University, Jalandhar
211	Kulwinder Singh, Anup Thakur and Akshay Kumar	Electrical Properties of Boron Nitride/Nickel Oxide Films	Sardar Patel University
212	Ishant Chauhan, Manjot Kaur and Akshay Kumar	Photodetection studies of WTe ₂ /FeS ₂ nanocomposite thin film	Sardar Patel University Mandi
213	Jagdish Chand and Satish Kumar	Electric and Dielectric Properties of Gd ³⁺ Doped Mg Ferrite Processed by Solid State Reaction Technique	Department of Higher Education Shimla (H.P) India

Mathematics Sciences-Oral Paper Presentations

214	Dr Sheenu Nayyar and Dr Kulbhushan Agnihotri	A Predator (bird) –Prey (fish) Optimal Quadratic Harvesting Model with Reserved and Unreserved Area	JPS Institute of Technical and Vocational studies, Jalandhar
215	Manju Rani and Naveen Kumar	Backstepping control for electrically powered robotic systems using a hybrid neural network	Piet Samalakra Panipat Haryana
216	Shweta Pathania and Vijayata Pathania	Wave motion in a cylindrical poro-thermoelastic plate loaded with liquid	Himachal Pradesh University Regional Centre Dharamshala
217	Sunil Bidarkar	Series Solutions Near Regular Singular Points Using Method of Frobenius	Shri Muktanand College, Gangapur District Aurangabad (MS)
218	Dr. Satish Kumar	On Set Of (Cbibd) Complementary Balanced Incomplete Block Designs For The Rhotrices Of Different Order	Department of Higher Education Shimla (H.P) India
219	Dr Amit Sharma	A Mathematical Model And Analysis For The COVID-19 Virus	JC DAV College Dasuya, Punjab (India)
220	Rajni Bala	g-H-Separation Axioms for Hereditary Generalized Topological Spaces	Department of Mathematics, Punjabi University, Patiala, Punjab, India
221	Sita Ram Sharma and Madhu Gupta	Analysis of Sierpinski Triangle	Chitkara University, Himachal Pradesh
222	Shallu Sharma	A Brief on s-Topological Vector Spaces	University of Jammu
223	Anita Devi	Analysis of Vibrations in a Rigidly Fixed Surface of a Piezothermoelastic Continuum	Vallabh Govt. College Mandi (Himachal Pradesh), India
224	Mohd Iqbal Bhat	Graph convergence and generalized Cayley operator with an application to a system of Cayley inclusions	University of Kashmir South Campus

Mathematics Sciences-Poster Paper Presentations

225	Manju Desondia and Savita Kalshan	Mathematical modelling on wastewater treatment technology for removing COVID-19 Virus in India.	M.D.U
226	Shallu Sharma, Tsering Landol and Sahil Billawria	On Characterization of δ -Topological Vector Space	University of Jammu

227	Shallu Sharma, Tsering Landol and Sahil Billawria	Applications of β -open sets	University of Jammu
228	Kamal Choudhary, Vinod Rathore, Netram Kaurav and Rc Dixit	Optimization of thermoelectric properties of Bi ₂ Te ₃ by tuning the size of nanoparticles	Indian Military Academy
229	Hemlata Nanda, Dr Vikas Siwach and Harkesh Sehrawat	A Literature Study on Efficient Framework to Perform Document Clustering	Uiet, Maharashi Dayanand University Rohtak
230	Shilpa Sharma, P K Mahajan, R K Gupta and Ashu Chandel	Volume table construction of Toona ciliata: a Statistical approach	Dr Yashwant Singh Parmar University of Horticulture and Forestry,Nauni,Solan
231	Shilpa Sharma, P K Mahajan, R K Gupta and Ashu Chandel	Volume table construction of Toona ciliata: a Statistical approach	Dr Yashwant Singh Parmar University of Horticulture and Forestry

हमारा साझा विज़न:

2023 तक 5000 मेगावाट, 2030 तक 25000 मेगावाट तथा 2040 तक 50000 मेगावाट

एसजेवीएन हरित-समृद्धि को ऊर्जावान करने में तत्पर



जल विद्युत



पवन विद्युत



ताप विद्युत



सौर विद्युत



विद्युत पारेषण



प्रचालनाधीन परियोजनाएं:

- 1500 मेगावाट नाथपा झाकड़ी जल विद्युत स्टेशन
- 412 मेगावाट रामपुर जल विद्युत स्टेशन
- 47.6 मेगावाट खिरवीरे पवन विद्युत स्टेशन
- 5.6 मेगावाट चारंका सौर पीवी विद्युत स्टेशन
- 50 मेगावाट साडला पवन विद्युत स्टेशन
- एनजेएचपीएस में 1.31 मेगावाट ग्रिड कनेक्टिड सौर विद्युत स्टेशन
- 400 केवी, डी/सी क्रॉस बार्डर ट्रांसमिशन लाईन (भारतीय हिस्सा)

विकासाधीन परियोजनाएं:

- हिमाचल प्रदेश में 11 जल विद्युत परियोजनाएं
- उत्तराखंड में 3 जल विद्युत परियोजनाएं
- अरुणाचल प्रदेश में 5 जल विद्युत परियोजनाएं
- भूटान में 1 जल विद्युत परियोजना
- नेपाल में 3 जल विद्युत परियोजनाएं
- बिहार में 1 ताप विद्युत परियोजना
- हिमाचल प्रदेश, पंजाब, गुजरात, उत्तर प्रदेश, बिहार, राजस्थान एवं मध्य प्रदेश में सौर विद्युत परियोजनाएं
- ट्रांसमिशन लाइनों का निष्पादन