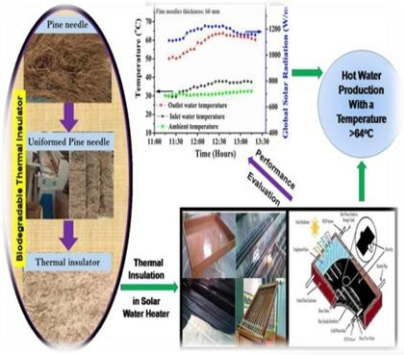
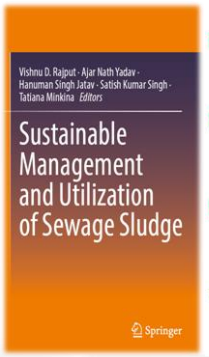
EU- Research Newsletter

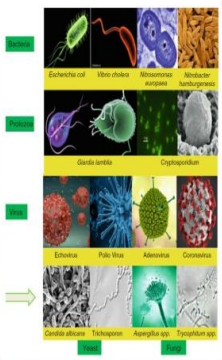
(Quarterly)

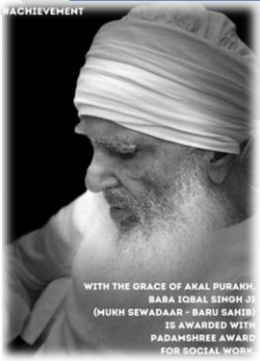
Major Highlights in this Issue

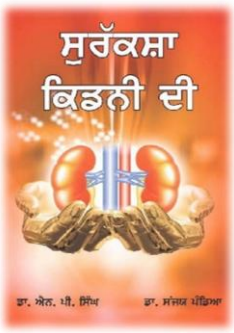
Volume 02 (Issue 01)
April 2022











World Peace Through Value Based Education

Eternal University, Baru Sahib, Via Rajgarh, District: Sirmour, HP (India)- 173101

CONTENTS

Edited and Designed by:

Dr. Puneet Negi
Mr. T. Muthukumaran

Editorial

Ethics in Research

Introduction:

Maintaining and rational practice of ethics in research is of utmost importance in every university. Development and implementation of suitable guidelines in the practice of publication of biomedical/scientific data and results, and making them available in the public domain and in the scientific administration at all levels has become a necessity and now is being mandated by various regulating and scientific bodies like CSIR, ICMR, and Even UGC.

Our luminaries like Baba Iqbal Singh Ji and Baba Dr Davinder Singh ji have laid down clear-cut goals for the University scholar when they state in their vision document" Its graduates engrossed with holistic development, human values, professional ethics and skills, and entrepreneurship will adapt and earn a comfortable livelihood and serve the mankind with love and devotion for its inclusive and sustainable development as our ambassadors of universal brotherhood for world peace". This write-up is just a reminder for our enthusiastic researcher as to how not to fall prey to unethical practices while conducting quality research.

Herewith, we highlight the fundamental factors that persuade for attempting short cuts in publications including a) increased reliance on quantification of the value of a scientific paper such as H-index, impact factor, citations, that increase the recognition of the author for career advancement/awards and honors, etc.; b). as per the requirement of the institutions that a researcher/student must publish a minimum quantity of publications for awards of Ph.D. degrees, and promotions.

Scientific misconduct:

Scientific misconduct is the violation of ethical behavior and standard codes of scholarly conduct in scientific research publications. It involved all activities from initiation of idea or findings, its methodological verification, and data accuracy, without resorting to any malpractice. The present-day compulsion of publishing has only increased scientific misconduct viz. data fabrication (making up of one's findings, usually involving construction and/or addition of data), data falsification (manipulating research data), and plagiarism (copying one's ideas or findings without acknowledgement and presenting as one's own). Scientific misconduct can be categorized into the following:

Embezzlement of ideas: Claiming an idea of others (while reviewing manuscripts, or participating in lectures and personal discussion and publications) and presenting it as one's own by slight changes of words, illustrations, and phrases.

Plagiarism: The WAME defines plagiarism as "the use of other's published and unpublished ideas or words (or other intellectual property) without acknowledgement or permission and

presenting them as new and original rather than derived from an existing source". Three components are involved such as copying or taking someone else's idea/concept/processes/facts/findings/results. Copying of the idea or information is done without attributing it to the author or the source. It also includes using one's own published work (known as self-plagiarism) without appropriate citations. There are several types of plagiarism which include plagiarism of idea, cut and paste plagiarism or verbatim plagiarism or word-to-word plagiarism, mosaic or patchwork plagiarism, paraphrasing, unintentional plagiarism, data plagiarism, image plagiarism, and self-plagiarism.

Falsification: Data manipulation, misrepresentation, or addition/suppression of a data set to generate a misleading outcome. Manipulating research materials, equipment, or processes, changing or omitting data, and manipulation of images, all this being done with the intention of giving a false impression.

Fabrication: Usually it involves the construction/addition of data and reporting of findings that were never executed.

Fraud: Inappropriately claim originality and intentionally suppressing of published work and/or avoiding citation of previously published work

Non-compliance of Regulatory Guidelines: Intentionally violation and/or non-adherence to ethical guidelines/regulations which are prepared for animal and human research. It also includes inappropriate use of research grants.

Inappropriate Authorship: Excluding actual contributors from authorship or claiming authorship without significant contribution. In the case of publication of Ph.D. thesis work, the contribution of students is neither diluted nor exaggerated.

With holding data from Validation: Not present research data to the journal/institution for verification purposes.

Laboratory Records: It is essential to keep proper records of experimental findings, analysis, and other relevant materials. Laboratory reports, graphs, and printouts from the instruments should be appropriately arranged and records should be kept for archival as per institutional guidelines and there must be provision for retrieval procedure whenever required. Name, version, and other relevant information should be recorded in case of software used for analyzing the experimental data. Due permission/acknowledgment of the researchers is mandatory at all times.

Collaborative studies: The role of each collaborator should be decided and accepted by the collaborator and must be formally recorded. Patent rights should be decided and the benefit that accrues to each researcher's institutes should also be agreed upon ahead of time.

Authorship: in a multi-authored paper, the contribution of each author should be reflected in the acknowledgment section of the manuscript. There should be no ghost or honorary

authorship. Offer of such authorship is an unethical practice and scientific misconduct. Details on each author's contribution must be provided and consent of each author should be obtained. The Source of funding for the study and any research material received as a goodwill gesture from other institutions should also acknowledged.

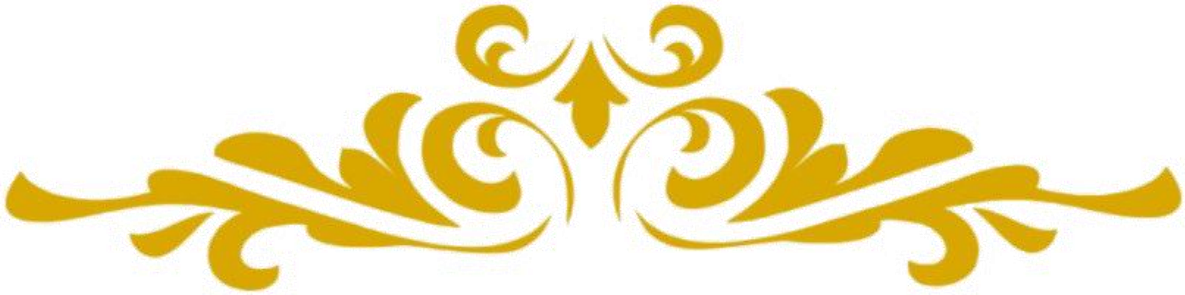
Redundant or segmented or salami Publications: refers to publishing two or more papers from a single work. This is common but needs to be discouraged as it is a serious act of misconduct. Well designed study has one or two primary objectives, and the whole sample size and methodology are devised to achieve that particular primary objective only; then there ought to be one paper highlighting the results related to the primary objective.

Research on humans and human biological materials: The union health ministry has issued stringent guidelines on human participants and biological material in clinical trials. Clinical trials should be conducted as per regulatory guidelines prior to permission of competent agencies such as the institutional ethics committee, and applicable regulatory agencies. Inform consent should be obtained from the individual participants before the commencement of participation in the study. Scientific misconduct should be investigated by a scientific investigation board comprising scientific/or technical experts to investigate the findings and take necessary action.

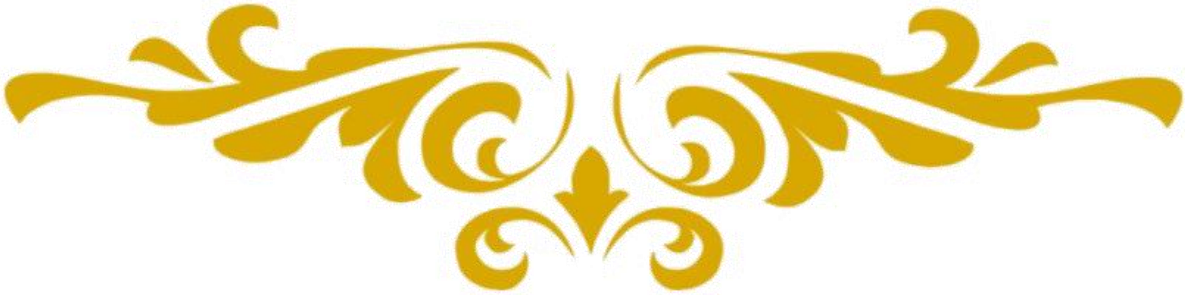
Recommended readings:

- Masic I. Plagiarism in scientific publishing. Acta Inform Med. 2012; 20:208-13.
- University Grants Commission (Promotion of Academic Institution and Prevention of Plagiarism in Higher Educational Institutions) Regulation, 2018.The Gazette of India, Extraordinary, Part III-Section 4, July 31, 2018.
- "Ethical guidelines for biomedical research in human participants", Indian Council of Medical Research, India, 2017.
- "Draft National Policy on Academic Ethics", Office of the Principal Scientific Advisor to the Government of India, 11-6-2019.
- Ethics in Science Education, Research and Governance", Eds. K. Muralidhar, A. Ghosh, A. K. Singhvi; Indian National Science Academy, New Delhi, India, 2019.

By: Dr. N.P. Singh
Chairman, SRIC



Research Articles



Utilization of Biodegradable Novel Insulating Materials for Developing Indigenous SolarWater Heater for Hill Climates

Kaur S, Konwar RJ, **Negi P**, Dhar S, Singh K, Chandel SS

Energy Sustain Dev 67: 21- 28.

https://doi.org/10.1016/j.esd.2022.01.001

Impact Factor (Thomson Reuters): **5.655**

Publisher: *Elsevier,* **Available Online:** *22 January 2022*

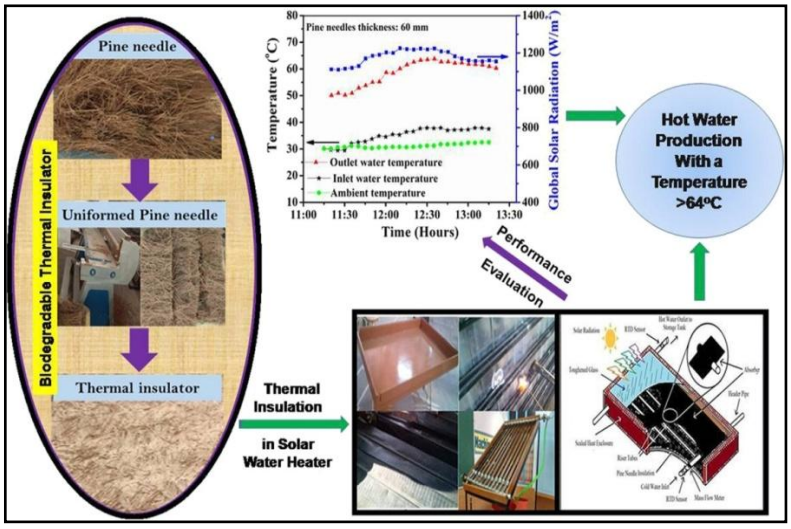
Department: Physics

Dr. Puneet Negi

Abstract: Conventional flat plate collector based solar water heating systems use glass or ceramic wool as insulating materials to minimize the heat losses. The utilization of these inorganic insulating materials is associated with risk in the industrial workplace activities, manufacturing, and installation depending on the exposure to the material. Thus, it is important to use and develop biodegradable organic insulating materials which are easily available, low cost and environment friendly. This study presents the design and fabrication of a flat plate collector solar water heating system using biodegradable forest and agriculture wastes as insulating material. The utilization of pine needles and rice husk as thermal insulation for the fabrication of solar water heaters is the novelty of the study. The innovative solar water heater is tested under different outdoor climatic conditions. Maximum hot water temperatures between 52 °C and 55 °C were observed with an average efficiency of 52% and 57% with rice husk and pine needles as insulating materials respectively. Experimental analysis is performed using 40 mm, 60 mm and 80 mm pine needle insulation. The optimum pine needles insulation thickness is found to be 60 mm with a maximum hot water temperature of 64 °C for the indigenously developed flat plate collector based solar water heater for hill climates. Follow-up research areas are also identified.

Er. Sarbjeet Kaur

Er. Kuldeep Singh



Dr. Ruhit Jyoti Konwar

Dr. Sashi Dhar

1,3,4-Tri substituted Pyrazoles: Synthesis, Antimicrobial Evaluation, and Time Resolved Studies

Kumar P, Sood S, **Kumar A**, Verma A, Kumar L, Kumar S, Kumar V, Kumar A, Singh K *Polycyclic Aromatic Compounds* https://doi.org/10.1080/10406638.2022.2058968

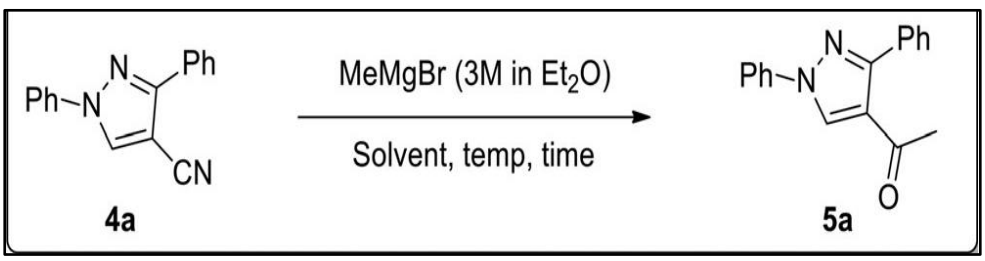
Impact Factor (Thomson Reuters): 3.440

Publisher: *Taylor Francis*, **Available Online:** *20 March, 2022*

Department: Chemistry and Biochemistry

Dr. Anil Kumar

Abstract: In this article, an efficient and practicable synthesis of 1,3,4-trisubstituted pyrazoles with an acyl functionality attached on the 4-position of the pyrazoles caffolds is reported. The precursor 4-cyanopyrazoles used for the fabrication of target compounds were synthesized from 4-formylpyrazoles via oxime formation followed by reaction with Vilsmeier–Haack reagent. The reaction of 4-cyanopyrazoles with various Grignard reagents afforded the corresponding 1,3,4-trisubstituted pyrazoles in 71–88% yield. The operational simplicity, economical starting materials, and high efficiency compared to reported methods are the advantages of this approach. All the pyrazole derivatives have been screened for antimicrobial activity and some of the derivatives exhibit significant activity against bacterial and fungal isolates. Further, time resolved photoluminescence studies for 5d,5h, & 5o were carried out using pulsed nitrogen laser as the source with a pulse width of few nanoseconds and wavelength of 337 nm. The spectrum was observed in microsecond time domain in all the cases, however, fluorescent lifetime is found to higher in 5d & 5h.



Dr. Sumit Sood

Endophytic fungal communities and their biotechnological implications for agro-environmental sustainability

Yadav AN, Kour D, **Kaur T, Devi R**, Yadav A

Folia Microbiol 67:203-232;
https://doi.org/10.1007/s12223-021-00939-0;
Impact Factor (Thomson Reuters): 2.629,
Publisher: Springer, **Available online:***4 February 2022*
Department: Biotechnology and Microbiology

Dr. Ajar Nath Yadav

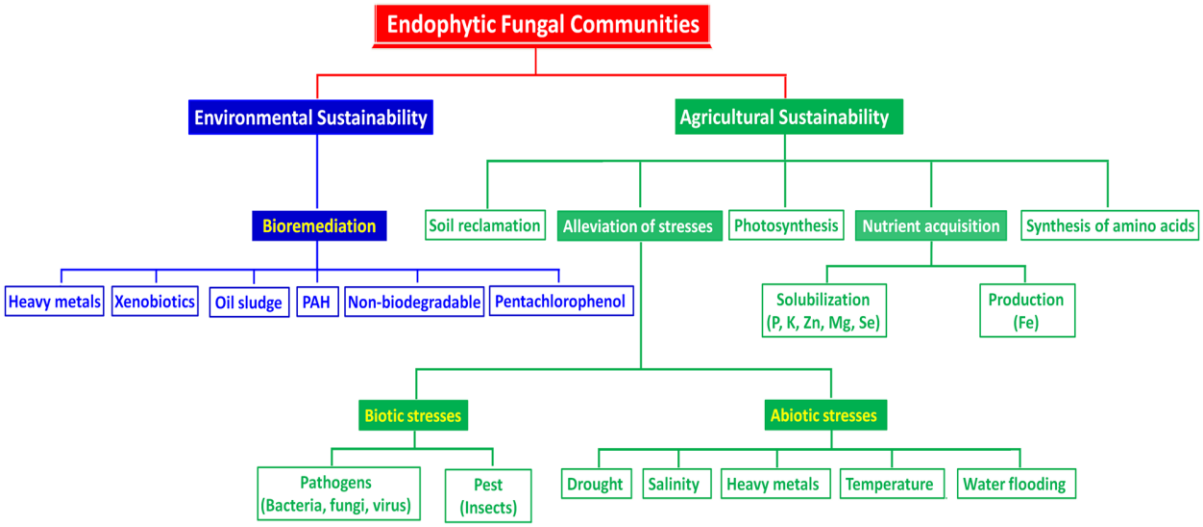
Dr. Divjot Kour

Tanvir Kaur

Rubee Devi

Abstract: Endophytic fungal communities have attracted a great attention to chemists, ecologists, and microbiologists as a treasure trove of biological resource. Endophytic fungi play incredible roles in the ecosystem including abiotic and biotic stress tolerance, eco-adaptation, enhancing growth and development, and maintaining the health of their host. In recent times, endophytic fungi have drawn a special focus owing to their indispensable diversity, unique distribution, and unparalleled metabolic pathways. The endophytic fungal communities belong to three phyla, namely Mucoromycota, Basidiomycota, and Ascomycota with seven predominant classes Agaricomycetes, Dothideomycetes, Eurotiomycetes, Mortierellomycotina, Mucoromycotina, Saccharomycetes, and Sordariomycetes. In a review of a huge number of research finding, it was found that endophytic fungal communities ofgenera *Aspergillus*, *Chaetomium*, *Fusarium*, *Gaeumannomyces*, *Metarhizium*, *Microsphaeropsi,Paecilomyces*, *Penicillium*, *Piriformospora*, *Talaromyces*, *Trichoderma*, *Verticillium*,and *Xylaria* have been sorted out and well characterized for diverse biotechnological applications for future development. Furthermore, these communities are remarkable source of novel bioactive compounds with amazing biological activity for use in agriculture, food, and pharmaceutical industry. Endophytes are endowed with a broad range of structurally unique bioactive natural products, including alkaloids, benzopyranones, chinones, flavonoids, phenolic acids, and quinines. Subsequently, there is still an excellent opportunity to explore novel compounds from endophytic fungi among numerous plants inhabiting different niches. Furthermore, high-throughput sequencing could be a tool to study

interaction between plants and endophytic fungi which may provide further opportunities to reveal unknown functions of endophytic fungal communities. The present review deals with the biodiversity of endophytic fungal communities and their biotechnological implications for agro-environmental sustainability.



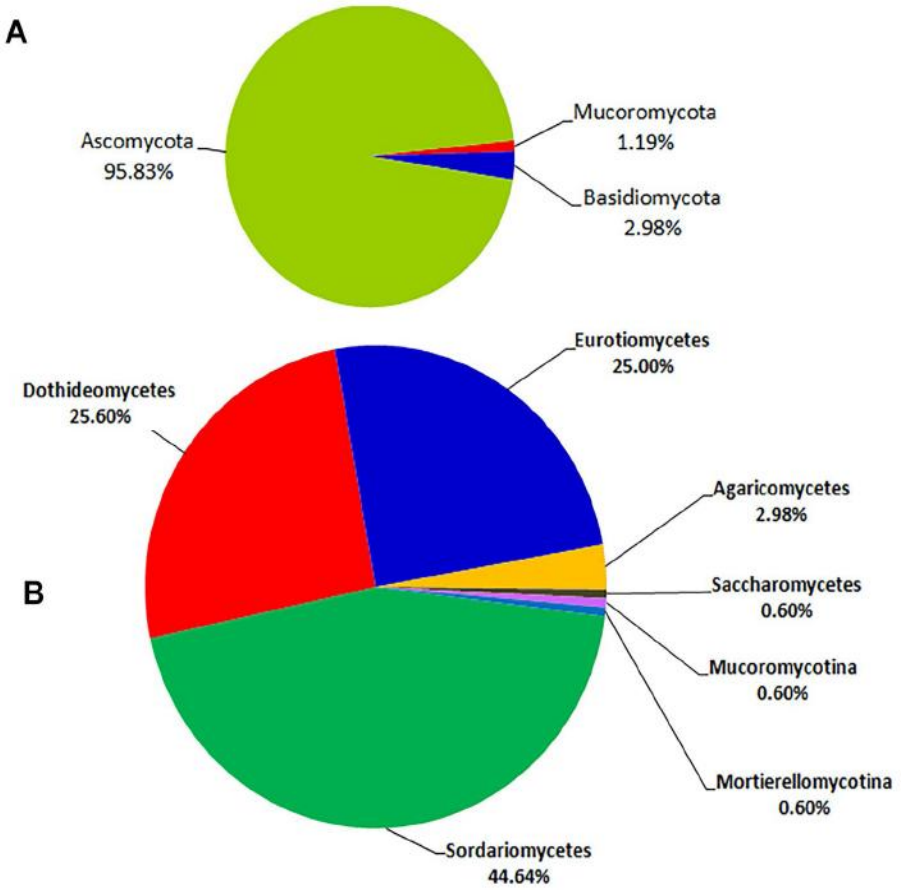


Fig. Abundance of endophytic fungal communities belonging to diverse phylum and class

Book Chapters

Optimizing chaperone removal strategy from over-expressed recombinant proteins: GNE, a case study

Sharma S, **Bora RS,** Saini KS and Arya RIn: Garcia Fruitós E, Arís Giralt A (Eds) Insoluble Proteins. Methods in Molecular Biology, Vol. 2406, 339-358.

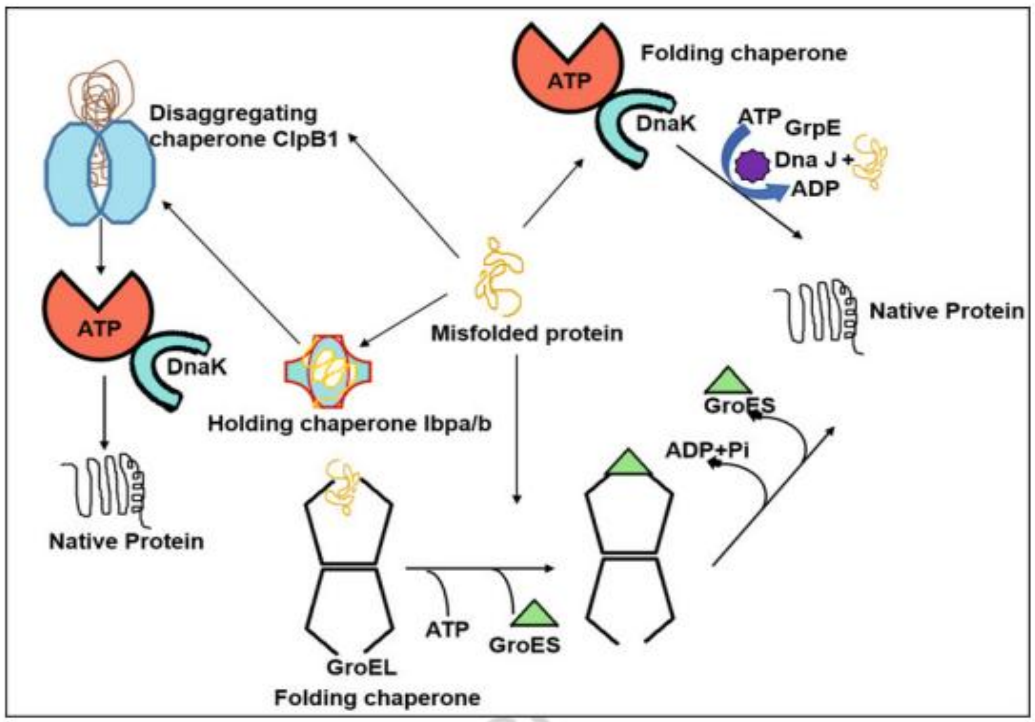
https://link.springer.com/protocol/10.1007/978-1-0716-1859-2_20

Publisher: Springer; **Available Online:** *28 January 2022*

Department: Biotechnology

Dr. Roop Singh Bora

Abstract: In the last two decades, numerous innovative advances, strategies and protocols have been developed and optimized to improve the quality and quantity of soluble recombinant protein production in *E. coli*. One of the major challenges being the coelution of chaperone proteins along with desired recombinant protein of interest. The removal of chaperones is important for protein yield, structural determination, optimal activity, and desired function of the recombinant protein. In this chapter, we outline various strategies for removal of chaperone contaminants from oligomeric proteins, with the ultimate objective of ameliorating the quality and proper folding of recombinant proteins. We have discussed in detail the purification and expression of full-length protein, GNE (UDP-N-acetylglucosamine 2-epimerase/ N-acetylmannosamine kinase), as a case study for chaperone removal.



Emerging Nutrient Recovery Technologies in Sewage Sludge Management

Sagar L, Maitra S, Hossain A, **Yadav AN**, Singh S, Kumar D, Praharaj S, Shanka T, Pramanick B(2022) In: Rajput VD, Yadav AN, Jatav HS, Singh SK, Minkina T (Eds) Sustainable Management and Utilization of Sewage Sludge, Springer, Switzerland, pp 125-145.

https://link.springer.com/chapter/10.1007/978-3-030-85226-9_6

Dr. Ajar Nath Yadav

Publisher: Springer, **Available Online:***01 January 2022*

Department: Biotechnology

Abstract: Sewage and sludge constitute liquid and solid fractions of the city sewerage system. The raw sewage usually consists of water carrying various solids partly in solution and partly in suspension. Sewage is a rich source of plant nutrients and in addition, contains suspended solids in the form of solid organic matter. Sewage has been used in agriculture from the beginning of civilization but due to less industrialization in the past, the contamination of sewage with heavy metals and other toxic materials is limited. But rapid industrialization resulted in building up of toxic substances like heavy metals and pathogens in sewage and further accompanied with population expansion made its disposal to be a major global concern. Direct landfilling of sludge along with heavy metal pollutes the soil and water consequently. Hence, adoption of right nutrient recovery technology based on feasibility after analysing the pros and cons of the technology is need of the hour for safe management of sewage and subsequent usage in agriculture. The chapter mentioned different nutrient recovery technologies available in a systematic manner characterizing the technologies under three steps of nutrient recovery and thus provided a complete overview of processes involved their advantages and limitations; thereby widening the scope of nutrient recovery from sewage and sludge for future research and adoption.

Bioleaching Approach for Enhancing Sewage Sludge Dewaterability

Dr. Ajar Nath Yadav

Praharaj S, Maitra S, Hossain A, Sagar L, **Yadav AN**, Das U, Shankar T, Pramanick B, Gaikwad D (2022) In: Rajput VD, Yadav AN, Jatav HS, Singh SK, Minkina T (Eds) Sustainable Management and Utilization of Sewage Sludge, Springer, Switzerland, pp 51-69

https://link.springer.com/chapter/10.1007/978-3-030-85226-9_3

Publisher: Springer**, Available Online:***01 January 2022*

Department: Biotechnology

Abstract: Sewage sludge is an unavoidable byproduct of the wastewater treatment course. Rising population, and growing urbanization contributes to a sizeable quantity of sewage sludge production. Disposal of such a huge amount of waste requires environmentally safe and economically viable options. Though the applications of sludge to the agricultural field can help recycling in nutrients and organic matter, the heavy metal in sewage sludge, various toxic substances and pathogens often make it unfit for direct agricultural application without any treatment. Moreover, the sewage sludge is very bulky and hence the cost of transport and/or subsequent processing/treatment becomes difficult. Dewatering of sewage sludge can help in reducing sludge volume, facilitates easy transport, increases the calorific value and can decrease leachate output in the landfill site. The strong interaction between solids and water in sewage sludge makes it difficult to remove water. Conditioning of sludge by physical and chemical methods has been successful improvement of the dewaterability of sludge, however, these practices are limited by high cost, high energy requirement, and use of non-green chemicals. Bioleaching, a bio-acidification strategy widely discussed for heavy metal decontamination, is operative in improvement of the dewaterability of sludge and gives many benefits over other methods. In the present chapter, the process of bioleaching, its process and mechanism and role in improving the dewaterability of sludge have been discussed.

Denaturing Gradient Gel Electrophoresis (DGGE) Analysis of the Fungi Involved in Biodegradation

Kumar S, Joshi D, Debbarma P, Singh M, **Yadav AN**, **Singh N**, **Suyal DC**, Soni R, Goel R(2022) In: Udayanga D, Bhatt P, Manamgoda D, Saez JM (eds) Mycoremediation Protocols. Springer US, New York, NY, pp 93-100

https://link.springer.com/protocol/10.1007/978-1-0716-2006-9_8

Publisher: Springer;**Available Online:***05 March 2022*

Department: Biotechnology and Microbiology

Dr. Ajar Nath Yadav

Dr. Nasib Singh

Dr. Deep Chandra Suyal

Abstract: Tracing fungal communities through denaturing gradient gel electrophoresis (DGGE) is an incredibly affordable, exploratory, and qualitative molecular approach in a complex ecosystem. Microbial community structure can be tremendously affected in such an ecosystem due to intense biotic and abiotic influences. This technique allows biologists to fingerprint the fungal diversity in a degrading environment based on differences in DNA sequence composition of double-stranded nucleic acids among fungal communities. This protocol gives insights into the detailed process of fungal DNA isolation, 18S or 28S ribosomal DNA, nuclear internal transcribed spacers 1 and 2 with 5.8S (ITS) gene amplification by PCR, gel electrophoresis, staining, and visualization. In addition to the process involved in community assessment, it also emphasizes important dos and don'ts, which further reduce the possibilities of errors enabling DGGE more efficient for the analysis.

Book

Sustainable Management and Utilization of Sewage Sludge

Dr. Ajar Nath Yadav

Rajput VD, **Yadav AN**, Jatav HS, Singh SK, Minkina T (2022) (Eds) Sustainable Management and Utilization of Sewage Sludge, Springer, Switzerland, ISNB: 9783030852269

https://link.springer.com/book/10.1007/978-3-030-85226-9

Publisher: Springer; **Available Online:** *01 January 2022*

Department: Biotechnology

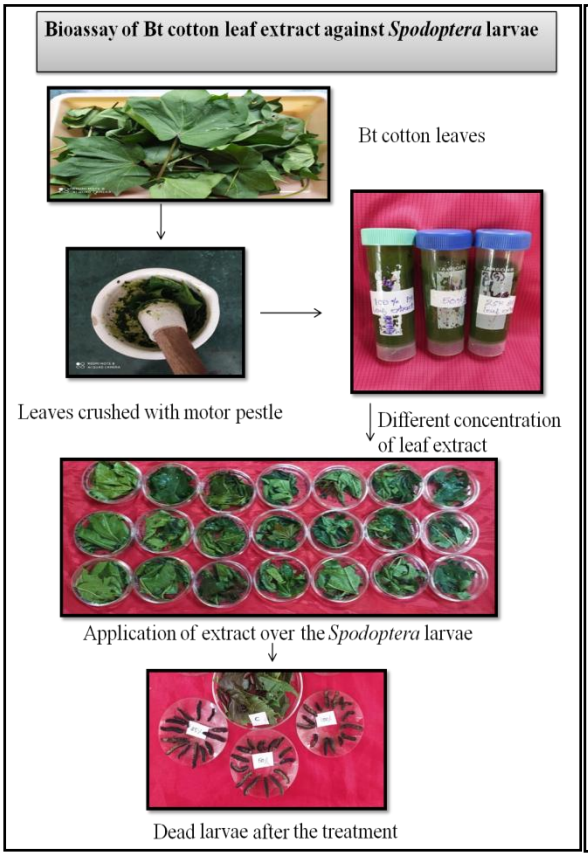
Introduction: This book is devoted to sewage sludge, its sustainable management, and its use and implications on soil fertility and crop production. The book traces the main chemical and biological properties of sewage sludge, and covers topics such as sewage sludge biostabilization and detoxification, biological and thermochemical treatment technologies, emerging nutrient recovery technologies, the role of microorganisms in sewage sludge management, and the sustainable use of sewage sludge as fertilizer in agriculture. The book offers a valuable asset for researchers, scholars and policymakers alike.

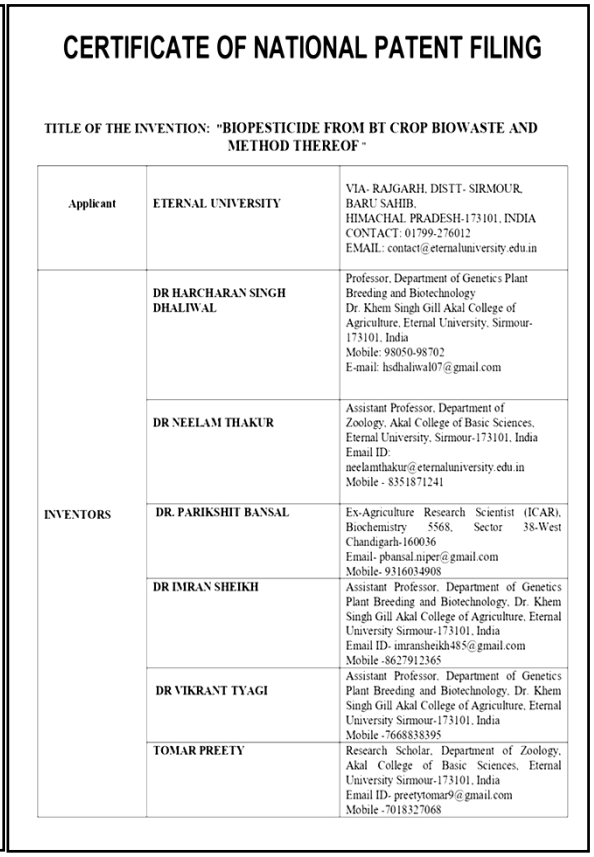
Fig. The most important microorganisms in wastewater and sewage waste in urban areas

Patent

BIOPESTICIDE FROM BT CROP BIOWASTE AND METHOD THEREOF

The inventors came up with a unique solution of a very low cost bio pesticide developed in form of standardized stable aqueous extract of fresh bio waste of BT crops. The same is highly potent, easy to produce and quite stable being a synergistic combination of phytomolecules present in concentrated liquid form or even powder form. Transgenic crops contain Bt gene for producing the toxic proteins which kill the pests. BT crops already being cultivated in several countries are cotton, maize, tomato, brinjal, soybean etc. After harvesting useful part of Bt crop e.g. cotton part, corn cob, tomato fruit, brinjal fruit, soybean seeds etc. the remaining part of the plant represents 'bio waste' which contains significant quantity of BT gene toxic protein (CRY protein). However, till date there is no report of any efforts made for utilization of BT crop bio waste for commercial scale production of Btbiopesticides. So, this invention offered the advantage of Utilization of Bt crop biowaste for bio pesticide production. Additionally, it provides income to farmers. It is eco-friendly, economic and does not contaminate land or groundwater.

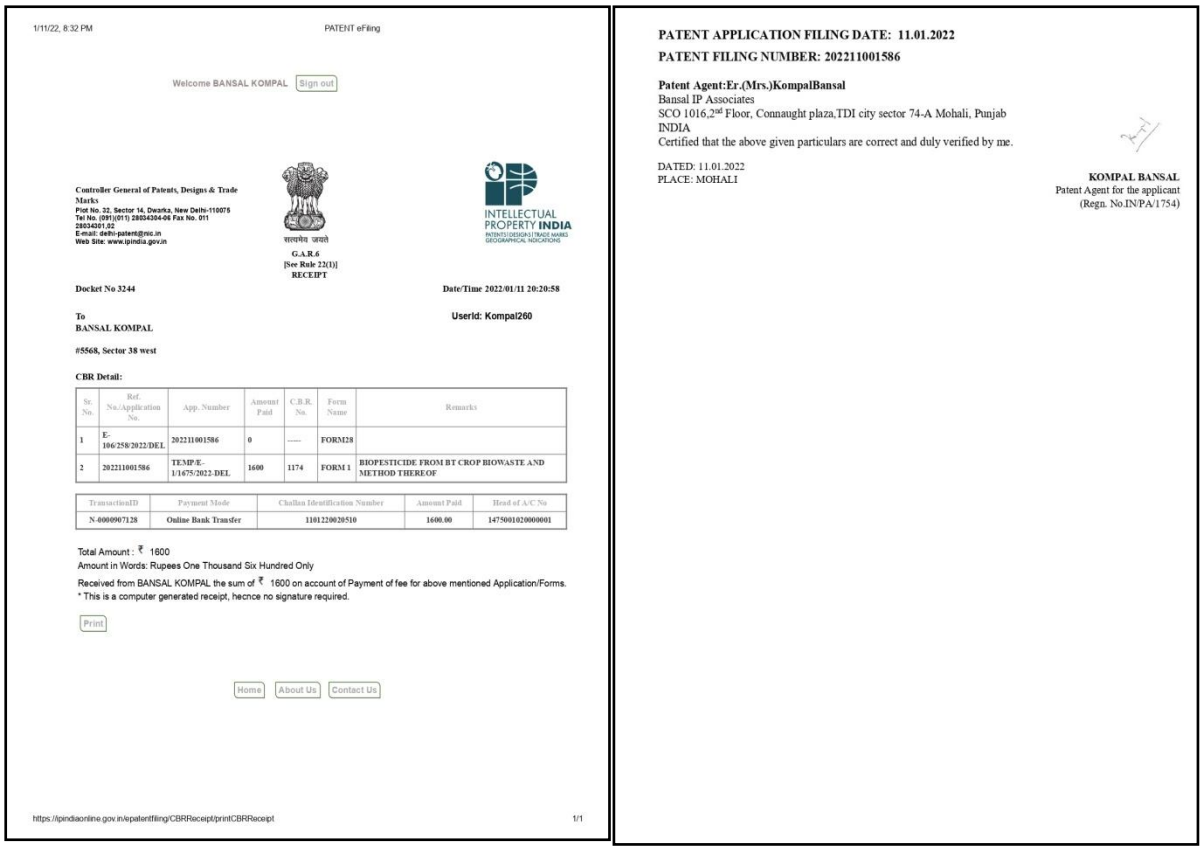




CERTIFICATE OF NATIONAL PATENT FILING

TITLE OF THE INVENTION: "BIOPESTICIDE FROM BT CROP BIOWASTE AND METHOD THEREOF "

Applicant	**ETERNAL UNIVERSITY**	VIA- RAJGARH, DISTT- SIRMOUR, BARU SAHIB, HIMACHAL PRADESH-173101, INDIA CONTACT: 01799-276012 EMAIL: contact@eternaluniversity.edu.in
INVENTORS	**DR HARCHARAN SINGH DHALIWAL**	Professor, Department of Genetics Plant Breeding and Biotechnology Dr. Khem Singh Gill Akal College of Agriculture, Eternal University, Sirmour-173101, India Mobile: 98050-98702 E-mail: hsdhaliwal07@gmail.com
	DR NEELAM THAKUR	Assistant Professor, Department of Zoology, Akal College of Basic Sciences, Eternal University, Sirmour-173101, India Email ID: neelamthakur@eternaluniversity.edu.in Mobile - 8351871241
	DR. PARIKSHIT BANSAL	Ex-Agriculture Research Scientist (ICAR), Biochemistry 5568, Sector 38-West Chandigarh-160036 Email- pbansal.niper@gmail.com Mobile- 9316034908
	DR IMRAN SHEIKH	Assistant Professor, Department of Genetics Plant Breeding and Biotechnology, Dr. Khem Singh Gill Akal College of Agriculture, Eternal University Sirmour-173101, India Email ID- imransheikh485@gmail.com Mobile -8627912365
	DR VIKRANT TYAGI	Assistant Professor, Department of Genetics Plant Breeding and Biotechnology, Dr. Khem Singh Gill Akal College of Agriculture, Eternal University Sirmour-173101, India Mobile -7668838395
	TOMAR PREETY	Research Scholar, Department of Zoology, Akal College of Basic Sciences, Eternal University Sirmour-173101, India Email ID- preetytomar9@gmail.com Mobile -7018327068



1/11/22, 8:32 PM PATENT eFiling

Welcome BANSAL KOMPAL Sign out

Controller General of Patents, Designs & Trade Marks
Plot No. 32, Sector 14, Dwarka, New Delhi-110075
Tel No. (091)(011) 28034304-06 Fax No. 011 28034301,02
E-mail: delhi-patent@nic.in
Web Site: www.ipindia.gov.in

सत्यमेव जयते

G.A.R.6
[See Rule 22(1)]
RECEIPT

INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS | GEOGRAPHICAL INDICATIONS

Docket No 3244

Date/Time 2022/01/11 20:20:58

To
BANSAL KOMPAL

UserId: Kompal260

#5568, Sector 38 west

CBR Detail:

Sr. No.	Ref. No./Application No.	App. Number	Amount Paid	C.B.R. No.	Form Name	Remarks
1	E-106/258/2022/DEL	202211001586	0	-----	FORM28	
2	202211001586	TEMP/E-1/1675/2022-DEL	1600	1174	FORM 1	BIOPESTICIDE FROM BT CROP BIOWASTE AND METHOD THEREOF

TransactionID	Payment Mode	Challan Identification Number	Amount Paid	Head of A/C No
N-0000907128	Online Bank Transfer	1101220020510	1600.00	1475001020000001

Total Amount : ₹ 1600
Amount in Words: Rupees One Thousand Six Hundred Only
Received from BANSAL KOMPAL the sum of ₹ 1600 on account of Payment of fee for above mentioned Application/Forms.
* This is a computer generated receipt, hecnce no signature required.

Print

Home About Us Contact Us

https://ipindiaonline.gov.in/epatentfiling/CBRReceipt/printCBRReceipt 1/1

PATENT APPLICATION FILING DATE: 11.01.2022

PATENT FILING NUMBER: 202211001586

Patent Agent:Er.(Mrs.)KompalBansal
Bansal IP Associates
SCO 1016,2nd Floor, Connaught plaza,TDI city sector 74-A Mohali, Punjab
INDIA
Certified that the above given particulars are correct and duly verified by me.

DATED: 11.01.2022
PLACE: MOHALI

KOMPAL BANSAL
Patent Agent for the applicant
(Regn. No.IN/PA/1754)

Prof. H.S. Dhaliwal

Dr. Neelam Thakur

Dr. Imran Sheikh

Dr. Vikrant Tyagi

Ms. PreetyTomar

Sustainable Development Activities

WORLD KIDNEY DAY- 2022

SDG Goal 3: Good Health and Wellbeing.

Awareness Activity: Rally, Role Play, Health Check-up, Lecture on CKD

Date:10th March 2022 **Time:**9.30amto5:00 pm

Venue: Baru sahib, Shimla & Amritsar

Akal College of Health and Allied Sciences as a part of SDG 3: Good Health and Wellbeing organized World Kidney Day at Eternal University on 10/03/2022. World Kidney Day is a **global campaign** aimed at raising awareness of the importance of our kidneys. During this day we do it all to create awareness about preventive behaviours, risk factors and how to live with a kidney disease.

MISSION:

"To raise awareness of the importance of our kidneys to our overall health and to reduce the frequency and impact of kidney disease and its associated health problems worldwide"

Events are planned at three places as follow

1. Baru Sahib – Eternal University
2. Shimla – IGMC&H and KNH
3. Amritsar – Trillium Mall

I. EVENTS AT BARUSAHIB

On 10/03/2022the inauguration of World Kidney Day was started at 9.00 am Mrs. Uma, Professor, HOD Department of Medical and Surgical Nursing, hosted a Master of Ceremony.

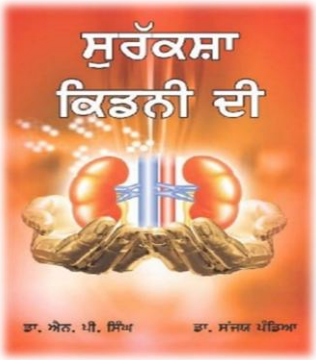
Welcome note was given by Dr. Anupama K, Ph.D. (N), Principal, Akal College of Nursing.

Dr. Narinder Pal Singh, Dean Research (Volunteer), Eternal University, unfolded the Theme on World Kidney Day.

Dr.Neelam Kaur, Senior Advisor, Health and Education, Kalgidhar Trust, her divinepersonality and simplicity always keep influencing us. She made everyone realized the importance of World Kidney Day

Celebration for bringing the future generation with good health.

Dr. Amrik Singh Ahluwalia, Pro Vice Chancellor, Eternal University who stressed great importance on innovative ideas can be brought by conducting these type of events to create awareness among the public.



BOOK RELEASE: Punjabi Book on "SAFETY KIDNEY"

All Dignitaries on the program are joined together to released the Book of **"Safety Kidney" which is authored by Dr.Narinder Pal Singh, Dean Research (Volunteer), EU.** It is available for the Public to access free download from www.KidneyEducation.com

AWARENESS RALLY

At 9.30 am awareness rally was commenced from Eternal University. Rally took the march through Bhai Gurdaas Hall, New Girls Hostel, Akal Academy, Gurduwara, Nurses Hostel, Sangat Building, IB School and same way return back to Eternal University. students were created public awareness by using various Placard and Slogans.

STREET PLAY

Street play was performed by the students regarding Human Kidney – Importance, Risk factors, prevention and treatment. B.Sc. Psychology and M.Sc. Psychology students, Akal College of Arts and Social Sciences have performed in regional language.

LECTURE PRESENTATION

Lecture Presentation on **How well you know your kidney?** was conducted for the different group of people in respective time schedule.

BLOOD SUGAR AND BLOOD PRESSURE MONITORING

Medical camp was organized during the World Kidney Day in view of screening and monitoring the Blood Glucose and Blood Pressure among the people residing at Barusahib. Three different locations canopy was placed, Blood Glucose and Blood Pressure was

monitored for all the people on voluntary basis. People are shown more enthusiasm to check their BP & Blood Sugar. Staff Nurse form Akal Charitable Hospital were involved for the clinical parameter monitoring including BMI and MPH students were involved for the basic History collection regarding the History of Substance Abuse, Cardio Vascular Diseases, Chronic Kidney Diseases and Diabetes.

EVENTS AT SHIMLA – IGMC&H

Akal College of Nursing, B.Sc.(N) 2nd year students and faculty have organize World Kidney Celebration at IGMC&H, Shimla. In this regard permission was obtained from the Nursing superintendent.

In two areas i.e OPD near emergency department and Nephrology unit. Nursing Superintendent Mrs. Premlata, HOD of Nephrology department Dr. Ashish, Ward sister Mrs. Promil and staff nurses Mrs. Bhavna, Mrs. Sarika, Ms. Ayushi and Ms. Jyoti were participated and motivated the students.

Health education was given through Skit, Posters exhibition, Health Talk by M.Sc. (N) 2nd year and B.Sc. (N) year 2nd year along with teachers Mrs. BabitaKumari and Ms. Lovpreet Kaur. The queries of patients was cleared by the students as well as teachers.

EVENTS AT SHIMLA – KAMAL NEHRU HOSPITAL (KNH)

Akal College of Nursing, B.Sc.(N) 2nd year students and faculty have organize World Kidney Celebration at KNH, Shimla. In this regard permission was obtained from the Medical Superintendent. Dr. Ravinder S. Mokta, Medical Superintendent, Nursing Superintendent and All Matron ma'am were participated and motivated the students for the various performance

to create awareness such as Skit, Posters exhibition, Health Talk among the public and nearly about 40 people were benefited out of it.

EVENTS AT AMRITSAR:

World Kidney Day was celebrated in front of Trillium Mall, Amritsar in the public gathering from 5pm-6pm. B.Sc. Nursing 3rd year B.Sc. (N) students has performed street play and charts to aware the public regarding kidney problems, its prevention and kidney donation. 2nd year M.Sc.(N) & 3rd year B.Sc.(N) students were created awareness among around 50 members regarding Kidney health and prevention of disease.

CONCLUSION:

The program was much appreciated by everyone who witnessed the event and it was effective, doubts raised by the public were cleared. We got feedback from the public that the programme was good and more informative and created awareness. We take this opportunity to thank Kalgidhar Trust for their support towards this Programme.

WORLD TUBERCULOSIS DAY

SDG Goal 3: Good Health and Wellbeing.

Awareness Activity – Role Play, Distribution of Pamphlets

Date: 24th March 2022 **Time:**10:00 am to1:00 pm

Venue: Shimla, IGMC

Coordinator: Mrs. Babita Kumari, Ms. Lovepreet Kaur, Ms Beant Kaur

Each year, we commemorate World Tuberculosis (TB) Day on March 24 to raise public awareness about the devastating health, social and economic consequences of TB, and to step up efforts to end the global TB epidemic. This time we have celebrated world

Tuberculosis in IGMCH and Ridge to aware the patient and common people through Health education and Role play we gave message to people regarding prevention and treatment of tuberculosis.

TUBERCULOSIS DURING PREGNANCY

SDG GOAL 3: Good Health and Wellbeing.

Date: 24th March 2022

Time: 10:00 to1:00 P.M

Venue: Shimla, KNH

Coordinator: Mrs. Jaswinder Kaur

Activity: On the occasion of "World Tuberculosis Day", Akal College of Nursing held a role play and health education session at Kamala Nehru State Hospital in Shimla. B.Sc. (N) 4th year students and M.Sc. (N) 2nd year OBG speciality students attended, accompanied by Akal College of Nursing faculty. At 2:30 p.m., the role play began.

First, we told patients and their relatives about the event, which was held on the ground floor and raised awareness about tuberculosis during pregnancy. The students had planned out where they would be setting up. There were more than 40 persons in attendance to hear the viewpoints. Mrs Jaswinder Kaur began the programme with a "welcome message" and a quick introduction on the theme "Invest to End TB" Save People's Lives.

Role play: The skit was done by B.Sc. students at 2.40 p.m. They told the account of a family member who had tuberculosis and had infected a pregnant woman with the disease. None of them were aware of the risk to a newborn baby, which was demonstrated to them through the use of nurses, doctors, and community health workers to promote awareness of the medical condition.

Health education: The disease state was discussed and described by Ms. Kajal and Ms. Lakshita (M.Sc. students) provided information on tuberculosis during pregnancy, its signs and symptoms, who was at risk, prevention, treatment regimens, DOTS, and its consequence to the newborn foetus through charts. This took about 20 minutes to complete.

Slogan: The following slogan were raised

Closing ceremony: The came to end around 3:30 pm followed by Vote of thanks by Mrs. Jaswinder Kaur (Assistant professor) to NS of Kamla Nehru hospital for permission granted in conduction of

activity. She thanks to audience for being a part of activity by she also encouraged to our students and appreciated their participation .the participants were presented with token of love.

YOUTH MENTAL HEALTH AND WELLBEING

Department of Mental Health Nursing ACN,EU organized an extension programme at Akal College of Education, Baru Sahib for B.Ed. students on 26-03-2022. The program was conducted under the guidance of Dr. Anupama K (Vice Principal, ACN), Ms. Manisha (Nursing Tutor) and Dr. Raina Bhatia (Principal, Akal College of Education). Theme of this programme was “Youth Mental health and Wellbeing”.

Theme: Youth mental health and wellbeing

The objectives of this program were to:

1. Create awareness among students regarding mental health and mental illness.
2. Promote positive attitude towards mental health.
3. Sensitize students regarding early signs of mental illness.
4. Promote relaxation with the help of guided imagery

Lecture included topics such as

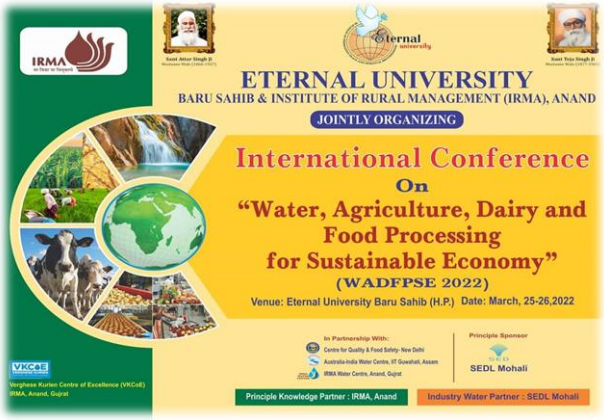
- Mental health and Mental illness,
- Characteristics of Mentally healthy person,
- Strategies to improve mental health
- Measure to improve sleep and promote relaxation.

The guided imagery session was followed by lecture which helped the students to relax and relieve stress.

A group of 40 students along with Dr. Raina Bhatia were present at the time of programme. We were introduced to the group by Dr. Raina Bhatia and then we started with the session. Doubts and questions of the students were entertained during the session. All the students participated actively and showed interest in lecture as well as activities.

Recapitalization was done at the end of the session and vote of thanks was delivered by B.Ed. student.

Campus News



Eternal University &Institute of Rural Management (IRMA) jointly Organizing International Conference on "Water, Agriculture, Dairy and Food Processing for sustainable Economy" on 25th and 26th March 2022 at Eternal University Baru Sahib, Himachal Pradesh under Kalgidhar Trust Baru Sahib, District Sirmaur, Himachal Pradesh.

Industry experts, Researchers, Scholars and Scientists shared their domain specific valuable knowledge and experience on the subject.

The Dr. Punjab Singh (Chancellor, Rani Laxmibai Central University; Former Secretary DARE & DG, ICAR, GOI, MoAFW) was the Chief Guest in this conference. Dr. Ashok Pandey (BRSI Distinguished Fellow, HTBS National Innovation Chair, Distinguished Scientist-Center for Innovation and Translational Research, CSIR-Indian Institute of Toxicology Research, Lucknow) was the Guest of Honour of the event. The keynote address was delivered by Mr. Dipankar Saha (Ex-member, CGWB and Member Secretary, Central Ground Water Authority, Chair Prof, Manav Rachna University, Faridabad).

Ms. Deepika Gabba (M.Sc. Microbiology) secured 1st rank in Poster Presentation during International Conference on “Water Agriculture and Food Processing for Sustainable Economy (WADFPSE-2022)” held on March 25-26, 2022 at Eternal University, Baru Sahib.

कृषि विकास दुनिया को बचा सकता है भुखमरी से

संवाद न्यूज एजेंसी

राजगढ़ (सिरमौर)। इटरनल विवि बड़ूसाहिब में सतत अर्थव्यवस्था के लिए जल, कृषि, डेयरी और खाद्य प्रसंस्करण विषय पर अंतरराष्ट्रीय सम्मेलन हुआ। समारोह के दौरान पद्मश्री ब्रह्म सिंह ने मिट्टी रहित फसलों की खेती की ओर बढ़ने और उत्पादन के लिए अक्रिय पदार्थ का उपयोग करने को ही सतत कृषि का भविष्य बताया।

उन्होंने कहा कि हमें प्राकृतिक संसाधनों का कम उपयोग करके अधिक उत्पादन प्राप्त करने का लक्ष्य रखना चाहिए। न्यूयॉर्क के डॉ. राज भंडारी और ऑस्ट्रेलिया के प्रो. जोआना ने दैनिक भोजन की खपत के प्रमुख घटक के रूप में बाजरा के

Amar Ujalal

27-03-2022

सिरमौर के बड़ू साहिब में अंतरराष्ट्रीय सम्मेलन के दौरान अपना वक्तव्य रखते शिक्षाविद और वैज्ञानिक। संवाद

उपयोग पर जोर दिया।

उन्होंने कहा कि बाजरा पारिस्थितिक तंत्र को संतुलित करने में मदद करता है। बाजरा उत्पादन के लिए धान के लिए दो हजार मिलीलीटर की तुलना में केवल 300 मिलीमीटर पानी की आवश्यकता होती है। बाजरा एकमात्र ऐसा अनाज है जो लोगों और किसानों के लिए सर्वश्रेष्ठ है। डॉ. दीप्ति गुलाटी ने कहा कि भारत की 26 प्रतिशत आबादी खाद्य असुरक्षित है, जो न्यूनतम ऊर्जा आवश्यकता के 80 प्रतिशत से कम की खपत करती है। कलगीधर ट्रस्ट के अध्यक्ष और इटरनल विवि के उपकुलपति वाइस डॉ. देवेंद्र सिंह ने कहा कि इस सम्मेलन का उद्देश्य पानी, डेयरी, कृषि और खाद्य प्रसंस्करण से संबंधित समस्याओं के बड़े पहलुओं के व्यावहारिक समाधान को एक साथ लाना था ताकि सम्मेलन की ओर से सरकार के स्तर पर कुछ नीतिगत बदलाव लाए जा सकें।

वैज्ञानिकों और शोधकर्ताओं ने मिट्टी रहित फसलों को बताया भविष्य

कार्यक्रम में विवि और अन्य निजी संस्थानों के छात्र-छात्राओं को बता पाए कि पानी, डेरी, कृषि और खाद्य प्रसंस्करण का सतत विकास ही दुनिया को भुखमरी से बचा सकता है।

इस दो दिवसीय सम्मेलन में दिल्ली, हरियाणा, हिमाचल, गुजरात, कोयंबटूर, पंजाब, नागालैंड, चंडीगढ़, तेलंगाना, दुबई, मैक्सिको के निजी कृषि विश्वविद्यालयों और संस्थानों के छात्रों ने हिस्सा लिया। जबकि सम्मेलन में भारत, ऑस्ट्रेलिया, डेनमार्क, मोरक्को, अमेरिका के प्रख्यात वैज्ञानिक, शोधकर्ता व शिक्षाविदों ने अपने विचार साझा किए।

जानकारी

इटरनल यूनिवर्सिटी मे अंतरराष्ट्रीय काफ्रेस में वैज्ञानिक डॉ अशोक पांडे बोले, देश में 70 प्रतिशत पानी दूषित

आबादी 16 फीसदी, पानी 4 प्रतिशत

स्टाफ रिपोर्टर -राजगढ़

इटरनल विश्वविद्यालय बड़ू साहिब के डॉ खेम सिंह गिल कॉलेज ऑफ एग्रीकल्चर द्वारा दो दिवसीय अंतरराष्ट्रीय कांफ्रेंस का आयोजन किया गया। सम्मेलन का शुभारंभ शब्द कीर्तन के साथ हुआ । तत्पश्चात प्रो वाइस चांसलर डॉ अमरीक सिंह अहलुवालिया ने सतत अर्थव्यवस्था के लिए जल, कृषि, डेयरी और खाद्य प्रसंस्करण अंतरराष्ट्रीय कांफ्रेंस का आयोजन किया गया। डॉ अशोक पांडे, प्रतिष्ठित वैज्ञानिक, सेंटर फॉर इनोवेशन एंड ट्रांसलेशनल रिसर्च सीएसआईआर इंडियन इंस्टीच्यूट ऑफ टॉक्सिकोलॉजी रिसर्च

लखनऊ ने भारत में पानी की स्थिति के बारे में कुछ उल्लेखनीय तथ्य साझा किए। भारत दुनिया के सबसे अधिक जल संकट वाले देशों में से एक है, जिसका अर्थ है कि देश की दो- तिहाई आबादी के पास संयुक्त राष्ट्र के अनुसार पीने का पानी नहीं है। हमारे देश में दुनिया की 16 प्रतिशत आबादी है और केवल 4 प्रतिशत पानी की उपलब्धता है। हम दुनिया में भूजल की सबसे बड़ी मात्रा निकालने वाले देश हैं। हमारा 70 प्रतिशत पानी दूषित है और प्रदूषण के कारण हमारी सभी नदियां सूख रही हैं। भारत में सतत कृषि की समस्या के चार मुख्य समाधान हैं। पहला हमें कृषि उत्पादन से प्राकृतिक संसाधनों के संरक्षण पर ध्यान केंद्रित करना चाहिए। दूसराए हमें मिट्टी, पानी की गुणवत्ता सुनिश्चित करनी चाहिए। तीसरा नयी टेक्नोलॉजी सेंसर, ड्रोन आदि का इस्तेमाल कृषि उत्पादन में करना चाहिए और आखरीए हमे ज़ादा से ज़ादा युवा जोडने चाहिए और कृषि इंस्टीटूट्स खोलने पर ध्यान देना चाहिए। विशिष्ट अतिथि डॉ स्वरूप के चक्रवर्ती कुलपांत ने भी उपयोगी टिप्स दिए।

इटरनल यूनिवर्सिटी बड़ू साहिब में अंतरराष्ट्रीय सम्मेलन में महामंथन

स्टाफ रिपोर्टर-राजगढ़

मिट्टी रहित फसलों की खेती की ओर बढ़ना और उत्पादन के लिए अक्रिय पदार्थ का उपयोग करना सतत् कृषि का भविष्य है। पद्मश्री अवार्डी ब्रह्म सिंह (वर्टीकल फार्मर ने कहा कि हमें प्राकृतिक संसाधनों का कम उपयोग करके अधिक उत्पादन प्राप्त करने का लक्ष्य रखना चाहिए जो स्थायी जल, कृषि, डेयरी और खाद्य पर अंतरराष्ट्रीय सम्मेलन के अंतिम दिन प्रमुख वक्ताओं में से एक रहे।

न्यूयॉर्क के डा. राज भंडारी और ऑस्ट्रेलिया के प्रोफेसर जोआना ने दैनिक भोजन की खपत के प्रमुख घटक के रूप में बाजरा के उपयोग पर जोर दिया, क्योंकि बाजरा पारिस्थितिक तंत्र को संतुलित करने में मदद करता है। बाजरा उत्पादन के लिए धान की तुलना में केवल 300 मिलीमीटर पानी की आवश्यकता होती है, जबकि धान की खेती के लिए लगभग 2000 एकमात्र ऐसा अनाज है जो लोगों के लिए, किसानों के लिए और ग्रह के लिए सर्वश्रेष्ठ है। डा. दीप्ति गुलाटी, इंडस्ट्री न्यूट्रास्यूटिकल्स एंड फोर्टिफिकेशन, निफ्टेम, सोनीपत, हरियाणा द्वारा सांझा किए गए तथ्यों के अनुसार एक तरफ तो भारतीय बच्चों में कुपोषण दुनिया में सबसे ज्यादा है और दूसरी ओर मोटापा या अधिक पोषण एक बड़ी समस्या के रूप में उभर रहा है। उन्होंने यह भी सांझा किया कि भारत की 26 प्रतिशत आबादी खाद्य असुरक्षित है जो न्यूनतम ऊर्जा आवश्यकता के 80 प्रतिशत से कम की खपत करती है।

कलगीधर ट्रस्ट के अध्यक्ष और इटरनल यूनिवर्सिटी के वाईस चांसलर डा. दविंद्र सिंह ने कहा कि इस कान्फ्रेंस के साथ हमारा उद्देश्य पानी, डेयरी, कृषि और खाद्य प्रसंस्करण से संबंधित समस्याओं के बड़े पहलुओं के व्यावहारिक समाधान को एक साथ लाना है। हमें उम्मीद है कि ऐसे सम्मेलन के द्वारा

इटरनल यूनिवर्सिटी बड़ू साहिब में छात्राओं को सम्मान

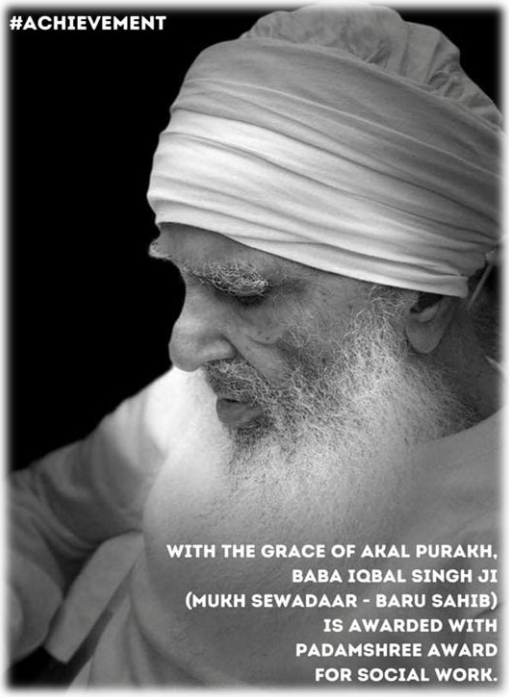
राष्ट्रीय विज्ञान दिवस के मौके पर क्विज-डिबेट, पोस्टर मेकिंग के साथ सजी सांस्कृतिक प्रतियोगिताएं

स्टाफ रिपोर्टर- राजगढ़

इटरनल यूनिवर्सिटी बड़ू साहिब द्वारा राष्ट्रीय विज्ञान दिवस बड़े ही उत्साह के साथ मनाया गया। कार्यक्रम का शुभारंभ विधिवत द्वीप प्रज्वलन से किया गया। कार्यक्रम के चीफ गेस्ट डा. अमरीक सिंह अहलुवालिया सहायक वाईस चांसलर इटरनल यूनिवर्सिटी द्वारा भौतिक विज्ञानी चंद्रशेखर वेंकट रमन के बारे में विस्तारपूर्वक जानकारी सभी छात्राओं के साथ साझा की। उन्होंने बताया कि राष्ट्रीय विज्ञान दिवस हर साल 28 फरवरी को देश के विकास में वैज्ञानिकों के योगदान को चिन्हित करने और पहचानने के लिए मनाया जाता है। इस दिन, 1928 में भारतीय भौतिक विज्ञानी चंद्रशेखर वेंकट रमन ने स्पेक्ट्रोस्कोपी के क्षेत्र में एक महत्त्वपूर्ण खोज की, जिसे रमन प्रभाव कहा जाता है। यह दिन रमन प्रभाव की खोज को समर्पित है। सीवी रमन को उनके काम के लिए 1930 में भौतिकी में प्रतिष्ठित नोबेल पुरस्कार से सम्मानित किया गया था। कार्यक्रम के दौरान विभिन्न प्रतियोगिताएं भी आयोजित की गई, जिसमें क्विज कंपीटीशन, पोस्टर मेकिंग, सांस्कृतिक प्रतियोगिता, डिबेट कंपीटीशन आदि प्रतियोगिताएं शामिल थी। इस दौरान 100 से अधिक छात्राओं ने पास के सरकारी स्कूल से भी कार्यक्रम में भाग लिया। प्रतियोगिता में जीतने वाली छात्राओं को कार्यक्रम के चीफ गेस्ट डा. अमरीक सिंह अहलुवालिया, सहायक वाइस चांसलर इटरनल यूनिवर्सिटी द्वारा सम्मानित भी किया गया। इस पूरे कार्यक्रम का आयोजन अकाल कालेज ऑफ बेसिक साईंसेज द्वारा किया गया था। डा. संदीपन गुप्ता डीन अकाल कालेज ऑफ बेसिक साईंसेज ने सभी प्रतिभागियों का धन्यवाद किया और जीतने वाली छात्राओं को शुभकामनाएं दी। कलगीधर ट्रस्ट बड़ू साहिब से डा. नरिंद्र पाल सिंह पूर्व सेवानिवृत्त आईपीएस पंजाब मुख्य सेवादार ने भी अपनी उपस्थिति कार्यक्रम के दौरान दर्ज करवाई।

दिव्य हिमाचल Tue, 01 March 2022
https://epaper.divyahimachal.com/c/66544439

Vidya Martand Shiromani Panth Ratan Sant Baba Iqbal Singh Ji awarded Padma Shri Posthumously



Vidya Martand Shiromani Panth Ratan Sant Baba Iqbal Singh Ji, former President of The Kalgidhar Trust, Baru Sahib received the Padma Shri award posthumously on March 28. This national award was received by Dr. Davinder Singh, President of The Kalgidhar Trust Baru Sahib. Sant Baba Iqbal Singh ji was nominated for the Padma Shri award for his social service, but only three days after this announcement, he merged with the divine light. Sant Baba Iqbal Singh Ji ignited the torch of rural education with only 5 students at Baru Sahib in 1986. Today, this tree of Akal Academies has grown up to 129 Academies spread over 5 states of Himachal Pradesh, Punjab, Haryana, Uttar Pradesh and Rajasthan in northern India, wherein 70 thousand children are receiving values-based modern scientific education. These Academies have become the torchbearer of imparting values-based quality education to the rural students at their doorstep. The Trust is also running two universities successfully as well as many Teacher Training Centers to provide rural women with higher education and employment. Apart from this, social work is being done through drug de-addiction centers to prevent the youth from getting addicted to drugs.

Baba Iqbal Singh Ji spent most of his time at Baru Sahib in Himachal Pradesh. He worked in the Agriculture Department of Himachal Pradesh for several decades and retired in the year 1986 as Director, Agriculture. After his retirement, he dedicated his entire life to rural education, spirituality and social service.

ਸੱਚਖੰਡ ਵਾਸੀ ਬਾਬਾ ਇਕਬਾਲ ਸਿੰਘ ਬੜੂ ਸਾਹਿਬ ਵਾਲਿਆਂ ਨੂੰ ਦੁਬਈ ਵਿਖੇ 'ਸੇਵਾ ਐਵਾਰਡ ਸੰਸਥਾ' ਵਲੋਂ 'ਲਾਈਫ ਟਾਈਮ ਅਚੀਵਮੈਂਟ ਐਵਾਰਡ'

ਕਲਗੀਧਰ ਟਰੱਸਟ ਬੜੂ ਸਾਹਿਬ ਦੇ ਪ੍ਰਧਾਨ ਬਾਬਾ (ਡਾ.) ਦਵਿੰਦਰ ਸਿੰਘ ਨੇ ਪ੍ਰਾਪਤ ਕੀਤਾ ਐਵਾਰਡ

ਸੰਗਰੂਰ, 20 ਮਾਰਚ (ਸਟਾਫ ਰਿਪੋਰਟਰ) - ਸ੍ਰੋਮਣੀ ਪੰਥ ਰਤਨ, ਵਿੱਦਿਆ ਮਾਰਤੰਡ, ਪਦਮ ਸ੍ਰੀ ਬਾਬਾ ਇਕਬਾਲ ਸਿੰਘ ਬੜੂ ਸਾਹਿਬ ਵਾਲਿਆਂ ਨੂੰ 'ਸੇਵਾ ਐਵਾਰਡ ਸੰਸਥਾ' ਵਲੋਂ 'ਲਾਈਫ ਟਾਈਮ ਅਚੀਵਮੈਂਟ ਅਵਾਰਡ' ਦਿੱਤਾ ਜਾਣਾ ਸੀ ਜੋ ਕਿ ਬਾਬਾ ਜੀ ਦੇ ਅਕਾਲ ਚਲਾਣਾ ਕਰ ਜਾਣ ਤੋਂ ਬਾਅਦ ਹੁਣ ਦੁਬਈ ਵਿਖੇ ਪੀ.ਟੀ.ਸੀ. ਨੈੱਟਵਰਕ ਦੇ ਸਹਿਯੋਗ ਨਾਲ '28ਬੀ ਇਨੋਵੇਸਨਜ' ਅਤੇ 'ਡੀ.ਸੀ.ਓ.ਐਮ. ਡਿਜਾਈਨ' ਦੁਆਰਾ ਆਯੋਜਿਤ ਸੇਵਾ ਅਵਾਰਡਾਂ ਦੁਆਰਾ ਇਹ 'ਲਾਈਫ ਟਾਈਮ ਅਚੀਵਮੈਂਟ ਅਵਾਰਡ' ਕਲਗੀਧਰ ਟਰੱਸਟ ਬੜੂ ਸਾਹਿਬ ਦੇ ਪ੍ਰਧਾਨ ਬਾਬਾ (ਡਾ.) ਦਵਿੰਦਰ ਸਿੰਘ ਬੜੂ ਸਾਹਿਬ ਵਾਲਿਆਂ ਨੇ ਪ੍ਰਾਪਤ ਕੀਤਾ । ਇਹ ਪੁਰਸਕਾਰ ਕਲਗੀਧਰ ਟਰੱਸਟ ਦੇ ਪ੍ਰਧਾਨ ਬਾਬਾ ਇਕਬਾਲ ਸਿੰਘ

ਵੱਲੋਂ ਮਿਆਰੀ ਸਿੱਖਿਆ ਪ੍ਰਦਾਨ ਕਰਨ ਅਤੇ ਨਸ਼ਿਆਂ ਦੀ ਦੁਰਵਰਤੋਂ ਦੇ ਚਿੰਤਾਜਨਕ ਵਾਧੇ ਵਿਰੁੱਧ ਲੜਾਈ ਲਈ ਕੀਤੇ ਗਏ ਅਣਥੱਕ ਯਤਨਾਂ ਤੋਂ ਇਲਾਵਾ ਉੱਤਰੀ ਭਾਰਤ ਦੇ ਦੂਰ-ਦੁਰਾਡੇ ਦੇ ਪੇਂਡੂ ਖੇਤਰਾਂ 'ਚ ਔਰਤਾਂ ਦੇ ਸਸਕਤੀਕਰਨ, ਸਿਹਤ ਸੰਭਾਲ, ਸਮਾਜ ਭਲਾਈ, ਸਮਾਜਿਕ-ਆਰਥਿਕ ਉੱਨਤੀ ਦੇ ਮੱਦੇ ਪ੍ਰਦਾਨ ਕਰਨ ਲਈ ਦਿੱਤਾ ਗਿਆ । ਇਸ ਸਮਾਗਮ ਦਾ ਆਯੋਜਨ ਦਿਲਦੀਪ ਸਿੰਘ ਨੇ ਕੀਤਾ ਜੋ ਕਿ ਯੂ.ਏ.ਈ.'ਚ ਟੂ ਥੀ ਇਨੋਵੇਸਨਜ ਦੇ ਸਹਿ-ਸੰਸਥਾਪਕ ਅਤੇ ਨਿਰਦੇਸਕ ਹਨ ਅਤੇ ਵੀਟਰਨਲ ਯੂਨੀਵਰਸਿਟੀ ਬੜੂ ਸਾਹਿਬ ਦੇ ਸਾਬਕਾ ਵਿਦਿਆਰਥੀ ਵੀ ਹਨ । ਕਲਗੀਧਰ ਟਰੱਸਟ ਬੜੂ ਸਾਹਿਬ ਅਤੇ ਬੜੂ ਸਾਹਿਬ ਦੀਆਂ ਸ਼ਰਧਾਲੂ ਸੰਗਤਾਂ ਵਲੋਂ ਸੇਵਾ ਐਵਾਰਡ ਸੰਸਥਾ, ਪੀ.ਟੀ.ਸੀ. ਨੈੱਟਵਰਕ, '28ਬੀ ਇਨੋਵੇਸਨਜ' ਅਤੇ 'ਡੀ.ਸੀ.ਓ.ਐਮ. ਡਿਜਾਈਨ' ਦਾ ਬਾਬਾ ਜੀ ਨੂੰ ਇਹ ਅਵਾਰਡ ਦੇਣ ਲਈ ਧੰਨਵਾਦ ਕੀਤਾ ਗਿਆ ।

SachkhandwasiSant Baba Iqbal Singh Ji (Baru sahib waley) got the prestigious Life Time Achievement award at the SEWA Awards organized by the 28 Innovations & DCOM Designs in association with the PTC network in Dubai. Baba Davinder Singh Ji, President Kalgidhar Trust himself collected the award on 19th March 2022.

Know Your Research Facility

Fourier Transform Infrared (FTIR) Spectrometer

Fourier Transform Infrared (FTIR) is a spectroscopic technique which is mostly used for measurements in the mid and near IR regions. For the mid-IR region, 2000−25000 nm (5,000–400 cm^{-1}), the most common source is a silicon carbide (SiC) element heated to about 1,200 K (930 °C; 1,700 °F) (Globar). Shorter wavelengths of the near-IR, 1000−2500nm (10,000- 4,000 cm^{-1}), require a higher temperature source, typically a tungsten-halogen lamp. The long wavelength output of these is limited to about 5000nm (2,000 cm^{-1}) by the absorption of the quartz envelope. For the far-IR, especially at wavelengths beyond 50000nm (200 cm^{-1}) a mercury discharge lamp gives higher output than a thermal source. The term Fourier-transform infrared spectroscopy originates from the fact that a Fourier transform (mathematical transform that expresses a function of time as a function of frequency) is required to convert the raw data into the actual spectrum.

Infrared spectroscopy is a powerful spectroscopy technique and can utilize for both quantitative and qualitative analysis, as the output received is a detailed information about the chemical composition of the substances/ material in the IR spectrum. The overall advantages of using FTIR analysis are that it provides rapid analysis data for better decision making in food and agriculture production processes including materials functional group identification and quantification. FTIR is widely used for:

- Identification of organic, inorganic, and polymeric materials utilizing infrared light for scanning the samples. Alterations in the characteristic pattern of absorption bands clearly indicate a change in the material composition.
- Identifying and characterizing unknown materials, detecting contaminants in a material, finding additives, and identifying decomposition and oxidation.
- Determination of the functional groups such as carbonyl, hydroxyl, protein, groups; present on the metal or metal oxide nanoparticles surface.
- Rapid determination of the trans-fat content of manufactured food products using infrared attenuated total reflectance (ATR) mode by food manufacturers.

Spectrum Two -Fourier Transform Infrared (FTIR) Perkin Elmer:

Applications

PerkinElmer recognizes that every application is different. The result is a complete solution to provide the fastest assurance of the quality of your materials, regardless of the application. Some of the industry applications that the Spectrum Two is designed to accommodate include:

- Pharmaceuticals and Nutraceuticals

- In-service lubricants and fuels
- Environmental
- Polymers
- Academia

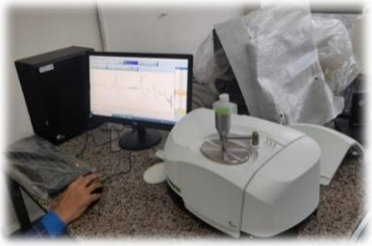
Specification:

Model	**Spectrum Two**
Company	**Perkin Elmer**
Detector Type	**$LiTaO_3$**
Operating Range	**5 - 45 °C**
Wavelength Range in terms of Wavenumber	**8,300 – 350 cm^{-1}**
Technology	**Diamond ATR with electronic pressure monitoring arm**
Resolution	**0.5 cm^{-1}**

For more details click on Hyperlink: Spectrum Two FT-IR Spectrometer

Samples preparation for a transmission mode measurement in FTIR is a rather difficult task and time consuming. Liquid samples need to be poured into a liquid cell with a fixed path length. Solid materials required to be mixed with the KBr (IR-inactive) and pressed in “pellet” form using hydraulic press and die set. Nowadays, to avoid the drawbacks of KBr pellets and liquid cells, IR-measurements are mostly carrying out in Attenuated Total Reflection (ATR) mode as this technique is relatively easy to use in comparison to the conventional transmission mode. All types of samples (e.g. solids, powders, pellets, pastes, slurries, liquids, fibers etc.) are placed straight on the ATR crystal in undiluted form and within a few seconds, the measurement is performed.

For more details click on hyperlink: Attenuated Total Reflection (ATR) Mode- Advantages for FT-IR Spectroscopy


“Akal Food Safety and Quality Control Laboratory” at Kalgidhar Trust, Baru Sahib”

Contact Persons:


Dr. Krishan Kumar **Dr. Nasir Ahmad**

Global Research Highlights

Credit: https://www.nature.com/articles

- **Rivers buffer a vast sea against climate-change impacts**

  As global temperatures rise, parts of the Gulf of Mexico are undergoing less acidification than expected — for now.

- **Rare metal helps to turn sunlight into fuel, day and night**

  Molecule that incorporates a light-sensitive ruthenium compound can store solar energy, then release it later to form hydrogen fuel.

- **Microbes that inflict deadly diarrhoea gain new powers**

  Shigella bacteria, which kill more than 200,000 people every year, are evolving resistance to crucial antibiotics.

- **Solar power's need for a carbon-intensive metal is set to soar**

  The shift to clean energy is expected to drive the demand for aluminium, which is used in the frames and fittings of solar panels.

- **Soft gels assemble into hard plastic — and it's recyclable**

  Sturdy 3D-printed objects can be broken down into materials that can be used to print new objects.

- **Gas stoves help to cook the climate — even when off**

  US kitchen appliances that burn natural gas emit much more methane than previously realized.

- **Green energy goes greener with a way to recycle solar panels**

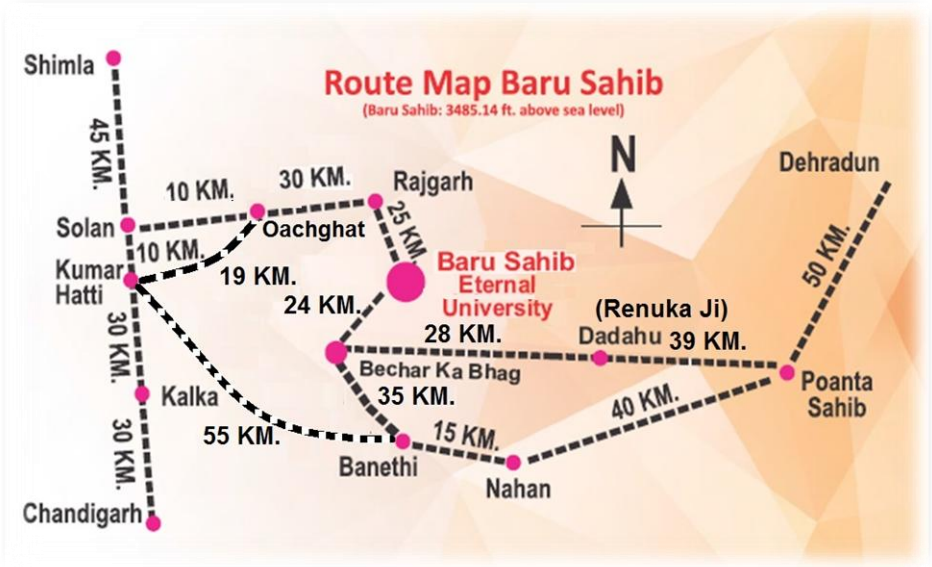
  The silicon in solar cells is difficult to reuse in new cells, but it can be converted into useful materials.

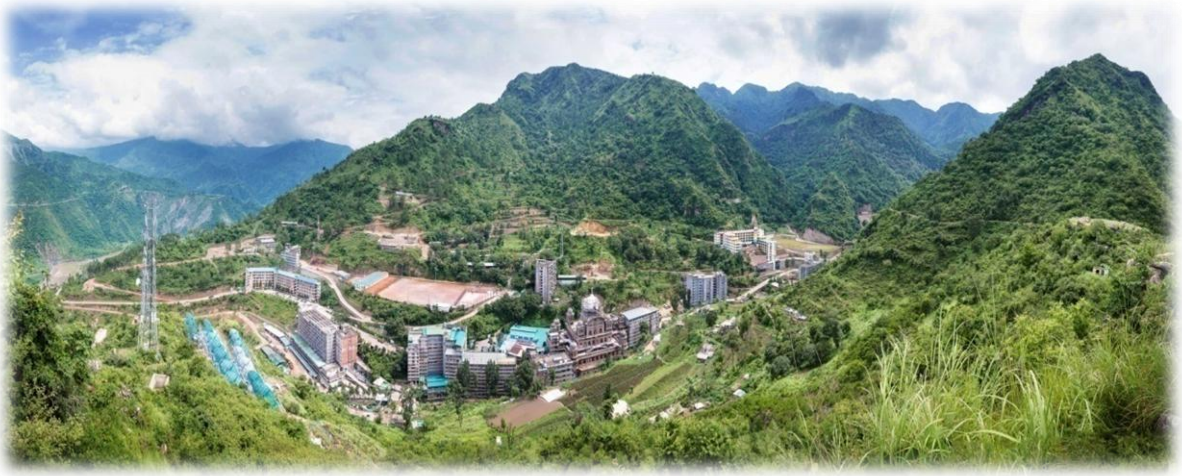
- **Engineered microbes put waste to good use — and help the climate**

  Ethanol-producing bacteria endowed with extra enzymes convert unwanted gases into useful compounds.

- **Venus flytrap snaps shut at synthetic neuron's command**

  Organic material proves superior to silicon for carrying 'nerve' signals to the carnivorous plant's maw.





Eternal University Campus
(World Peace Through Value Based Education)

Baru Sahib, via Rajgarh, Distt: Sirmour, Himachal Pradesh-173101 (India)
Tel: 01799-276012, Fax: 01799-276006, Mob: +91-9816400624
Email: contact@ eternaluniversity.edu.in
Website: www.eternaluniversity.edu.in