

REPORT ON
AWARENESS OF
TRENDS IN
TECHNOLOGIES

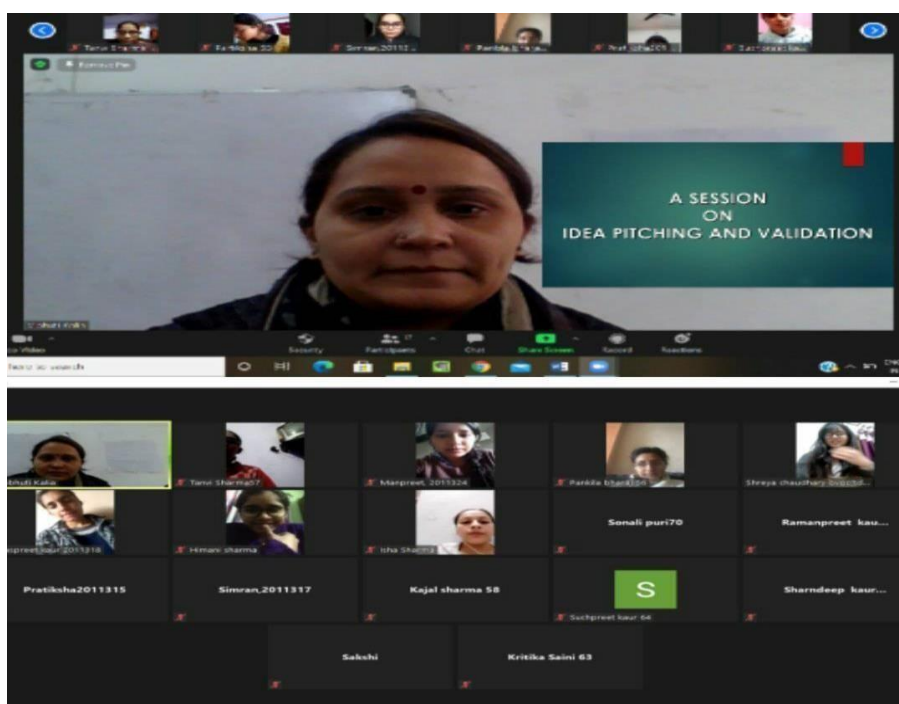
Session on Idea Pitching & Validation

Date: December 15, 2020

Student Participants: 20

Report

An online interactive session for the students of Textile Design & Apparel Technology was organised on zoom platform on 15 December, 2020. Ms. Vibhuti Kalia, Start-up activity coordinator, discussed about the Idea Pitching and Validation. 25 students dedicatedly participated in this session. The session was organised to give the vision to the students for start-ups. During the session, students discussed their innovative business ideas and their validation which will help them to identify that their vision will succeed in target market in the real world. Mentor discussed about the difficulties often faced by a founder in the development of business. At the end of the session students felt much benefitted and were enthusiastic to present their business ideas.



Workshop on Artificial Intelligence & Data Science for Beginners

Date: May 31, 2021

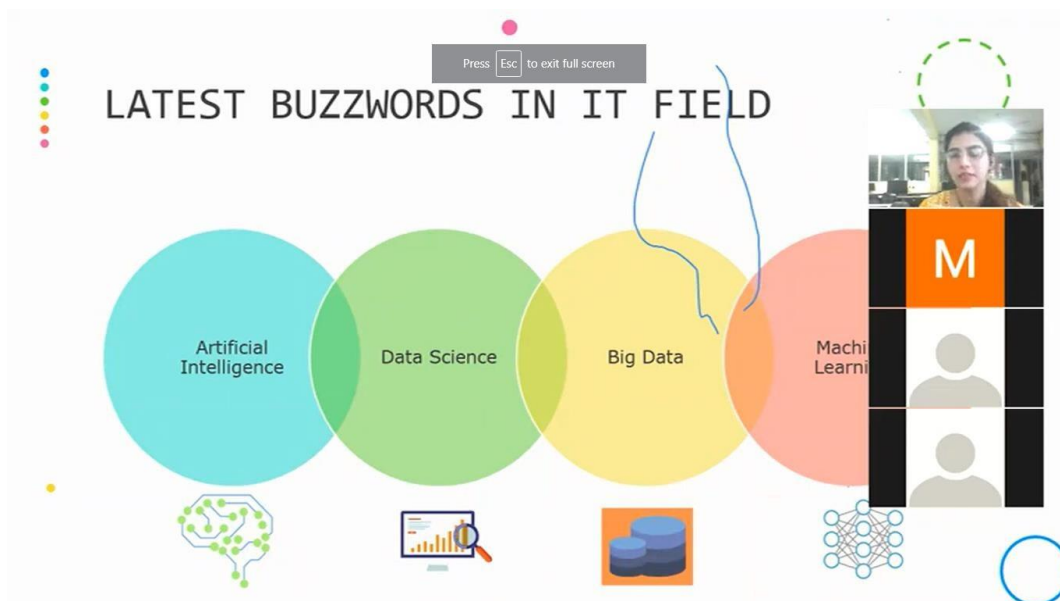
Number of students: 15

Faculty of B.Voc. Artificial Intelligence and Data Science organised a workshop on artificial intelligence and data science to acquaint the students about the emerging IT trends. It was an interactive session where basic concepts and real-life applications of AI and Data Science were discussed in detail.

Students were keen to know about the working of AI enabled devices such as Siri, Alexa, Google assistant, which they already use in their daily routine.

Moreover, a hands-on session on machine learning was conducted using an open-source machine learning model, which performs classification between different categories. Using this model, students learnt how a machine can accurately differentiate between images of dogs and cats using training and testing sets. Further, students were informed about positive points of joining this field and the job prospects of AI and Data Science.

Link: <https://youtu.be/21Z2y7yVD1I>



Reporton
Workshop on “Emerging IT Issues in E Retailing”

29th May 2021

No. of students participated: 26

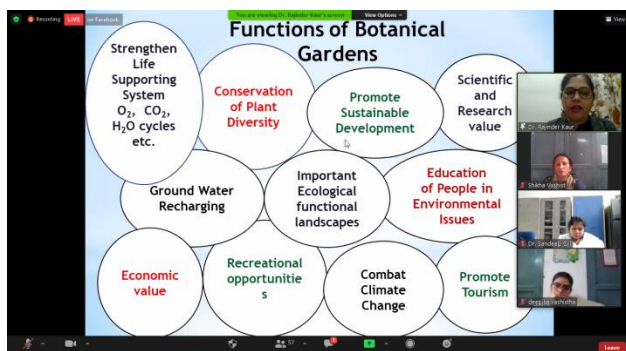
An exclusive webinar session for the faculty and students of Retail Management Department was organized by KMV College on the topic “Emerging IT Issues in E Retailing” scheduled on 29 May, 2021 in its endeavours to create awareness among Faculty and students. The session was presided over by respected Ms. Aarti, Faculty of Animation, KMV College, who firstly commended KMV College for their continuous efforts of educating students about various IT Issues Emerging in field of E Retailing among students. She further went on to give a vivid outlook of Emerging IT Issues generally faced in E Retailing.

Ms. Aarti, Assistant Professor, Faculty of Animation, KMV College. She mentioned some of the milestones achieved on the part of the Animation Department in the field by providing numerous online training sessions for creating Awareness among the students and Faculties of various departments like Retail Management Department. She further threw light on the fact that Colleges should now be prepared to keep their students updated of tackling emerging issues in their respective fields. She further emphasized that Colleges should educate students about the importance of E Retailing. The session went on to be more informative as she continued to talk about the need to for the college students to adapt to a more problem-solving based education and also incorporate ‘Emerging IT Issues in Retail’ as a part of the curriculum. Her focus was on an ‘Integrated Education’ that would not only facilitate academic progress of the students but help them build a happy, financially secure and positive approach to life.

Principal Prof Dr. Atima Sharma Dwivedi was thankful for the valuable inputs delivered by Ms. Aarti Mam, Assistant Professor, and Faculty of Animation. She is appreciative of the commendable efforts taken by the Department of Retail Management for organizing such a knowledgeable and informative session.



E-Workshop on “The Emerging Trends of Botanical Studies”



P.G. Department of Botany, Kanya Maha Vidyalaya, Jalandhar organizes two days E-workshop on the topic ‘Emerging trends of Botanical studies’ on 20th-21st

November 2020 at 12:00 pm and 1:00 pm respectively. Total 80 students from B. Sc. Medical and M. Sc. Botany have attended

the workshop. Dr. Rajinder Kaur from Department of Botanical and Environmental Sciences, Guru Nanak Dev University, Amritsar delivered lecture on topic ‘Ex-situ conservation of Medicinal plants: virtual tour to Botanical Garden of GNDU’. She explained very interestingly the various methods of medicinal plants conservation as seed banks, cryopreservation of germplasm, sacred groves, Arboretum and tissue culture technology. She made virtual visit to the Botanical Garden of GNDU, Amritsar where she explained the different components of garden like Herbal Garden, Green House, Lily pool, Fern house, Screen house etc. The second speaker was Dr. Saroj Arora from Department of Botanical and Environmental Sciences, Guru Nanak Dev University, Amritsar who delivered lecture on the topic ‘Herbal formulation in Hair, skin and oral care: current challenges in upgradation and modernisation’. She explained the herbal medicines and herbal formulations. Further, she gave the various uses of herbal cosmetics for skin, hair, teeth and mouth. Then she explained about some economical important plants with their uses and plant part used in skin, hair and oral care.

The Heritage Institution
**KANYA MAHA VIDYALAYA,
JALANDHAR** (Autonomous)
Status conferred by UGC, MHRD, Govt. of India
DBT STAR STATUS
Top National Rankings as per India Today survey 2020 and 2019.
Ranked No. 1 as Autonomous college in Punjab By Outlook Magazine

**P.G. Department of Botany
Organises
Two Days E-Workshop On The Emerging Trends Of Botanical Studies
(20th- 21st November 2020)**

Resource Persons:
1. **Dr. Saroj Arora** (Professor, Department of Botanical and Environmental Sciences, Guru Nanak Dev University, Amritsar)
Topic:
➤ Herbal formulations in Hair, Skin and Oral care: Current Challenges in Upgradation and Modernization.
➤ Advanced Instrumentation: Virtual Tour to Laboratories of Guru Nanak Dev University Amritsar.
2. **Dr. Rajinder Kaur** (Associate Professor, Department of Botanical and Environmental Sciences, Guru Nanak Dev University, Amritsar)
Topic:
➤ Ex-situ Conservation of Medicinal plants: Virtual Tour to Botanical Garden of Guru Nanak Dev University, Amritsar.

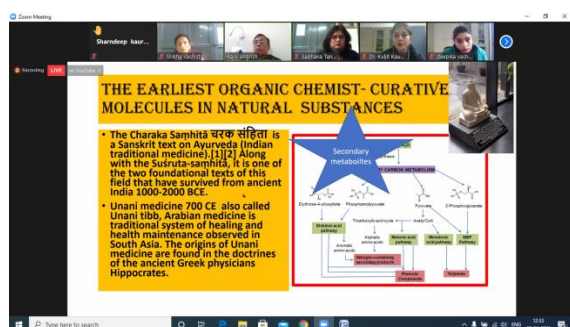
Platform: Zoom meeting Meeting ID: 82074412456 Passcode: 179444 Timing: 11:00am Date: 20 th November 2020	Platform: Zoom meeting Meeting ID: 81720730277 Passcode: 847395 Timing: 1:00pm Date: 21 st November 2020
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Mrs. Shikha Vashist, Head
P.G. Department of Botany

Prof. (Dr.) Atima Sharma Dwivedi, Principal

**Sponsored by:
Department of Biotechnology, Ministry of Science and Technology, Govt. of India**

Webinar On Plants, Agriculture And Humans: Past, Present And Future



P.G. Department of Botany, Kanya Maha Vidyalaya, Jalandhar organizes webinar on 29th January 2021 at 12:00pm. Total 260 participants from Graduate and Postgraduate classes have attended the webinar. Dr. Rajiv Angrish from Department of Botany and Plant Physiology, CCS Haryana Agricultural

University, Hisar delivered a lecture on topic 'Plants, Agriculture and Humans: Past, Present and Future'. Dr. Angrish divided his talk into five major parts to discuss the evolution of humans along with the domestication of crops and animals. He gave the examples of journey of *Homo sapiens* from Africa to other continents and changes in their living patterns across the time frame. He discussed the origin of earliest organic chemists, Charaka Samhita, their foundational texts that survived from 1000-2000 BCE and development of plant metabolites into modern day tablets. Then remains of earlier civilizations of 7000-8000 BC like copper tools, chart blades etc. were shown to students which were discovered in Rakhighari, Haryana. The speaker narrated the story behind the development and evolution of modern day grains by citing examples of wheat and maize. He also made students aware about the future prospects in the fields of biology, botany, biotechnology and use of modern day technologies in the agriculture like drones, sensors etc.



Webinars on “Signal Transduction in Plants and Protein-Protein Interaction”



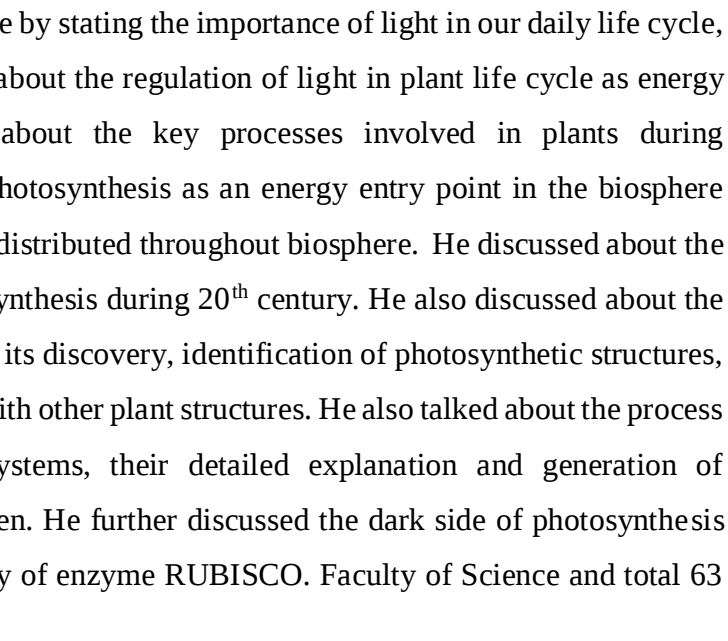
The Department of Biotechnology, Government of India, has planned “Science Setu” as a virtual platform to connect research Institutes with undergraduate students. Under this, our college has been assigned to National Institute of Plant Genome Research (NIPGR), New Delhi. NIPGR is an autonomous institution aided by the Department of Biotechnology.

Resource person: Dr. Alok K. Sinha, Scientist VII, NIPGR started his lecture with brief introduction on signal transduction in plants by giving an outline of signals, receptors and reverse phosphorylation. He introduced general points of signals, types of signaling, amplification, role and classes of receptors, ligand binding, etc. He discussed about his research article on “Interaction between two rice mitogen activated protein kinases and its possible role in plant defense.” He discussed specifically four methods to investigate protein-protein interactions and briefly explain them one by one. In total 38 participants, including faculty of science and students attended the event.

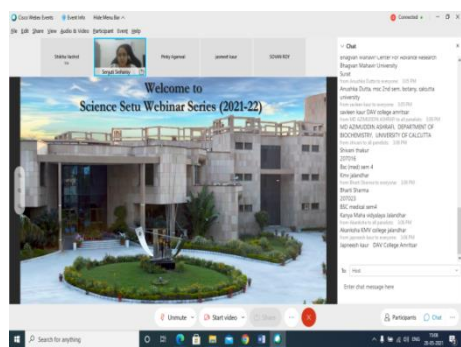
A screenshot of a Zoom webinar interface. The main video window shows a presentation slide titled "(i) Signals: General Points". The slide lists several bullet points: "Single signal may start several cascades", "Signal may be tiny, response can be big", "Many signals received at the same time – more than one may activate / repress the same cascade", "“Crosstalk” can occur (one cascade influences another)", and "Not all cells in organ sensitive to same signal (e.g. stomata more sensitive to ABA than other cells in the leaf)". The Zoom interface includes a top bar with "Zoom Webinars", "Event Info", and "Help Menu Bar". Below this is a toolbar with "Share", "View", "Audio & Video", "Participant", "Event", and "Help". A participant list at the top shows "Saurabh KUMAR college" and "Pratyaksha". The bottom of the screen shows a Windows taskbar with various application icons. On the right side, there is a chat window with messages from participants and a Q&A section.

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The Department of Biotechnology, Government of India, has planned “Science Setu” as a virtual platform to connect research Institutes with undergraduate students. Under this, our college has been assigned to National Institute of Plant Genome Research (NIPGR), New Delhi. Resource person, Dr. Aashish Ranjan,

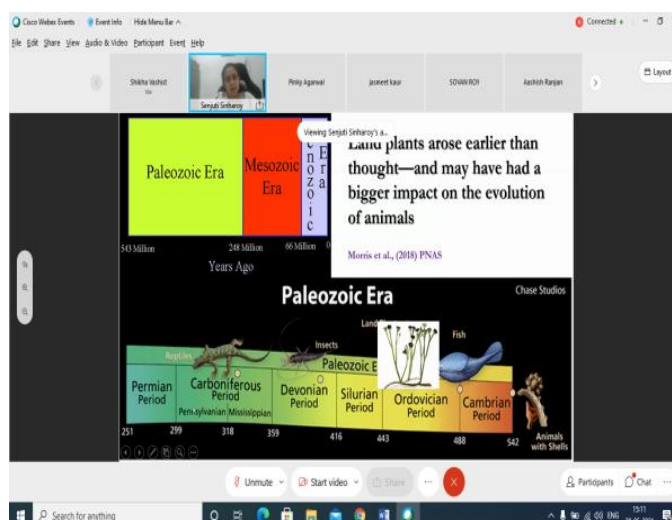


Webinar on “Plant-Microbe Symbiosis: An Avenue to Sustainable Agriculture”

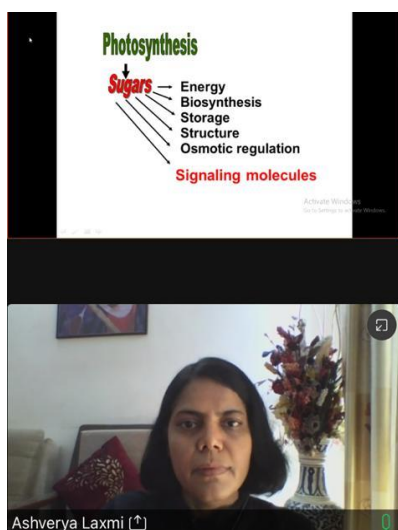


Department of Biotechnology, Government of India, has planned “Science Setu” as a virtual platform to connect research Institutes with undergraduate students. Under this, our college has been assigned to National Institute of Plant Genome Research (NIPGR), New Delhi. Resource person: Dr. Senjuti Sinharoy Scientist IV, NIPGR, began her talk by giving an introduction to

the mechanism of symbiosis. She discussed about the early evolution of land plants and their impact on animal evolution. She explain the evolution of arbuscularmycorrhizal symbiosis as well as root nodule symbiosis. She stressed about the common signaling pathway that control AM symbiosis across the plant lineage. She explained about common toolkit that has been used for the AM symbiosis and Root nodule symbiosis. She describe the Nitrogen –Fixing Clade: depicting the phylogenetic relation of Nodulating Plant Species. She focused on the process of root nodule symbiosis by citing five step mechanism and explain whole process under these steps. With the help of a small video she explained symbiosome formation in model legume Medicago. She discussed the discoveries took place over the years, and the path taken by scientists to engineer root nodule symbiosis to make cereal fix their nitrogen from the air. Faculty of Science and total 50 science students from Kanya MahaVidyalaya, Jalandhar attended the event.



Webinar On “Understanding role of sugar signal transduction in regulating plant growth development and stress responses”

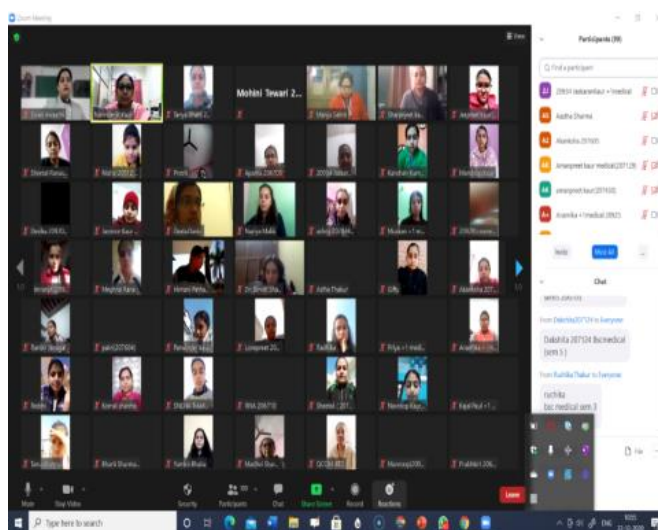


The Department of Biotechnology, Government of India, has planned “Science Setu” as a virtual platform to connect research Institutes with undergraduate students. Under this, our college has been assigned to National Institute of Plant Genome Research (NIPGR), New Delhi. NIPGR is an autonomous institution aided by the Department of Biotechnology. **Resource person: Dr. Ashverya Laxmi, Scientist V, NIPGR** started her lecture by giving an introduction and physiological role of sugar molecules. She emphasized on the role of sugar signal transduction in regulating plant growth, development and stress responses. She started her talk with an example of AtHXK1 mutant lines, in which AtHXK1 overexpression lines are hypersensitive while antisense expression lines are hyposensitive towards glucose. In addition, she discussed about her research on how glucose regulates many aspects of early seedling root growth and development in *Arabidopsis thaliana*. Further, she explained the role of glucose in acquired thermotolerance, SnRKs, flz6, flz10 mutants and regulating mechanism behind stress responses.

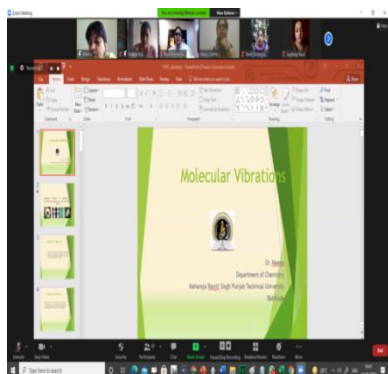
E-workshop on “ARGUS LAB”



P.G. Department of Chemistry, Kanya Maha Vidyalaya- the Heritage and Autonomous Institution, Jalandhar organized e-workshop on ARGUS LAB on 22 December 2020 under DBT Star College Scheme for undergraduate and post graduate students. Nearly 225 students and 35 faculty members joined the workshop (100 participants joined on Zoom Platforms and others have joined through YouTube link). This e-workshop provided an opportunity to get hands on training on the ARGUS LAB, important software in the field of Computational Chemistry, by eminent resource person Dr. Smriti Sharma Bhatia, Assistant Professor, Department of Chemistry, Miranda House, University of Delhi. She has extensive research experience in the field of Computational chemistry, Nanoparticles toxicity in plants and Educational technology. In her lecture, Dr. Bhatia highlighted the imperative role of computational chemistry in designing more productive and efficient processes, characterizing new compounds and materials, identifying sites on protein molecules that are most likely to bind a new drug molecule. She has also highlighted the involvement of computational chemistry to design a new drug using various softwares to reduce the quantity of experiments in lab, saving the wastage of chemicals, money and time during this current pandemic COVID situation.

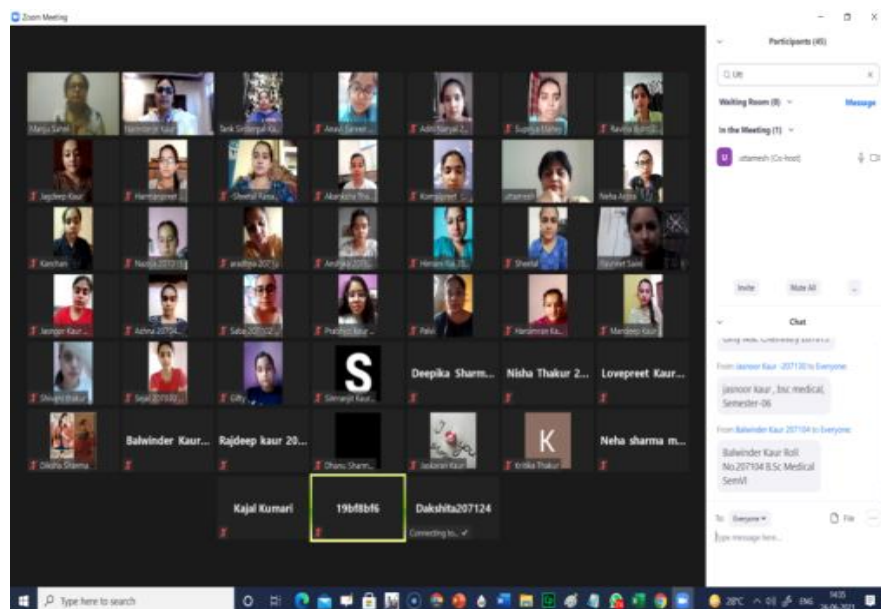


Webinar on “Inorganic Spectroscopy”



P.G. Department of Chemistry, Kanya Maha Vidyalaya, Jalandhar –the Heritage and Autonomous institution organised two day online webinar on “Inorganic Spectroscopy” for graduate and post-graduate students under DBT Star College Scheme by Dr. Meenu, Assistant Professor, Department of Applied Chemistry, Maharaja Ranjit Singh Punjab Technical University, Dabwali Road Bathinda. 50 students actively

participated in the webinar on both days. In her first session of the day, she enlightened the students about introduction and applications of structural elucidation of different inorganic compounds. She discussed in detail the use of group theory involved in vibrational spectroscopy to find out the vibrational modes (IR active and Raman active) of different molecules such as CO_2 , N_2O , H_2O , NSF_3 , cis and trans isomers etc using the character tables and symmetry point groups. In the session on second day, Dr. Meenu gave detailed introduction on “Nuclear Quadrupole Resonance Spectroscopy”. She explained the effects of magnetic field on the NQR spectra, relationship between the electric field gradient and molecular structure. She elaborated the interpretation of electric quadrupole moment (eQ data) to determine the effect of crystal lattice on the magnitude of eQ_4 in different molecules such BrCN , HIO_3 etc.



Name of the Session: Webinar on Artificial Intelligence and Data Science

Date: 30, September 2020

Counselled By: Sriraman Raja Goplan

Report: Kanya Maha Vidyalaya- the Heritage & Autonomous institution, Seat of Women Empowerment with Top National and State Rankings by India Today Survey of Best Colleges 2020 (various categories) & Outlook Magazine organised a webinar on Artificial Intelligence and Data Science. The webinar was organised by the PG Department of Computer Science and Applications. The webinar was attended by more than 250 participants with full zeal and enthusiasm. Mr Sriraman Rajgopalan - Specialist AI and Data Science from Industry was the resource person. Mr Sriraman Rajgopalan during his talk enlightened the students with the knowledge of Artificial intelligence, Machine learning and Data Science. He also discussed various Machine learning predictive models and various tools that can be used for Data Science. He stated that AI and Data Science is an upcoming area for excellent placements. It was overall a great learning experience for all participants. After his talk, query session was also organised wherein many inquisitive students asked their queries from Mr Sriraman.



KANYA MAHA VIDYALAYA
The Autonomous Heritage Institution, Jalandhar
Top Ranking College of India (India Today & Outlook Survey of Best Colleges 2020)

Webinar
on
Artificial Intelligence & Data Science
Eminent Speaker
Sriraman Rajagoplan
Specialist - Artificial Intelligence & Data Science



September 30, 2020
at 1.00 p.m.

Join us on Zoom
Zoom Meeting ID: **5891449954** Passcode: **ABCD123456**

Contact Us:
Ms. Suman Khurana: 98552-04214
Dr. Pardeep Arora: 98883-86706

Prof. (Dr.) Atima Sharma Dwivedi
Principal

Name of the Session: Webinar on Role of Artificial Intelligence to make Machine Vision Possible

Date: 9, December 2020 Counsellor

By: Dr. Rajneesh Rani

Kanya Maha Vidyalaya- the Heritage & Autonomous institution, Seat of Women Empowerment with Top National and State Rankings by India Today Survey of Best Colleges 2020 (various categories) & Outlook Magazine organised a webinar on Role of Artificial Intelligence to make Machine Vision Possible by Dept of Computer Sc. & Appls. The webinar was attended by more than 250 participants with full zeal. Dr Rajneesh Rani, Assistant Professor, National Institute of Technology, Jalandhar was the resource person. Dr Rajneesh Rani during her talk enlightened the students with the knowledge of Artificial intelligence, Machine learning and Deep Learning. She discussed various Machine learning predictive models and techniques that can be used to make Machine Vision Possible. She stated that Artificial Intelligence is an upcoming area and is very helpful for image recognition also.



Workshop on “Introduction to Mathematical Modelling Relevant to Real World Problems”



PG Department of Mathematics organised one day workshop on “Introduction to Mathematical Modelling Relevant to Real World Problems”.

Dr Atul Kumar Verma (Assistant Professor, Department of Mathematics) from NIT Tiruchirappalli, Tamil Nadu was the resource person. Dr

Atul commenced his lecture by introducing concept of mathematical modelling and its relevance to real life. He also gave emphasis on Applications of Mathematics in areas of Physics, Chemistry, Biology, Medical science and Computers. He elaborated all the concepts by considering realistic problems in above mentioned areas &, explained the technique to develop Mathematical models and their validations. Further he introduced Magic Square to students as one of the wonder of Mathematics. In the later session, he focused on MATLAB, a Mathematical software and also introduced its importance and usage techniques to the students. Students showed keen interest in the entire session and asked relevant questions regarding Modelling techniques, validations and need of error minimisation.

Workshop on “Hands on Astronomy”

Almost 30 Students of science club members of KanyaMahaVidyalaya, Jalandhar, the Heritage and Autonomous Institution participated in online quiz which was organized by VigyanPrasar in collaboration with MyGov. The quiz consisted of 10 questions already explained in the Hands-on Astronomy Workshop on held on June 5, 2020 and duration of quiz was 2 minutes. The quiz was based on questions such as what is solar eclipse, when and after how long solar eclipse happen? The other questions were based on how many lunar eclipses occur during calendar year. Overall, this activity enhanced the curiosity of students to observe Solar Eclipse scientifically. This activity was not part of curriculum of students. So this helped students to enhance their knowledge. Students also received participation certificate generated online.



Webinar series on “Vast and diverse fields of Science and Technology, Lecture I”



Students as well as faculty members of Kanya Maha Vidyalaya, Jalandhar– the Heritage & Autonomous Institution attended first lecture titled “Earthquake Genesis and Public Panic with reference to NCR-Delhi Seismicity” of the webinar series. The webinar started with welcome note by Dr. Nakul Parashar (the Director of Vigyan Prasar) and team of Organization. The resource person Dr. O.P.

Mishra explained the concept of earthquake, its causes and techniques to mitigate the risk of its after effects. He elaborated the concept of earthquake by sharing data of vulnerable cities of Asia. He presented the data in tabular as well as in graphical form, which attracted minds of listeners. He emphasized that we cannot prevent these natural calamities but can take disaster risk reduction actions so that after effects of disaster can be reduced.

Webinar series on “Vast and diverse fields of Science and Technology, Lecture II”.

The nationwide lockdown following the COVID-19 pandemic has led to a burst of activity with regards to online information. The Vigyan Prasar Network of science Clubs have organized many activities during this lockdown period related to different aspects of science. In continuation of Tuesday series, on 30th June 2020, VIPNET organized webinar on importance of Hydrological Cycle and its implications on Human Life. The resource person Dr. Santosh Murlidhar Pingale, Scientist at National Institute of Hydrology, Roorkee highlighted the water resources and its importance, impact of climate change, implications on human life etc. During the webinar

speaker briefly explained the types of water resources of India and importance for economy of country, growth of population etc. Further he explained the hydrology, i.e., science dealing with waters of earth, its applications, role of water cycle and its processes. Dr. Pingale



also highlighted the research methods and sources for water balance components and explained the types and use of meteorological instruments. Further he explained use of different software tools for image processing and land use/ land cover mapping, hydrological modelling. Dr Pingale also highlighted causes and impact of climate change and LULC changes on hydrological cycle. The impact on human life such as drought/water scarcity, rainfall weather, land fertility, crop yield, market price etc will lead to disastrous condition. Finally, he concluded his talk by saying that hydrological investigations are backbone of water resources management and development of water demand management techniques and their integration with supply management options may provide alternative in uncertain climate change scenarios. The seminar was very informative and imparted great knowledge to students as well as teachers for better use of water. Almost 50 KMV science club students participated in this webinar. The science club of KMV is very thankful to the VIPNET club for organizing such intellectual talks.

Webinar series on “Vast and diverse fields of Science and Technology, Lecture III”.

The Vigyan Prasar Network (VIPNET) of science Clubs have organised many events during nationwide lockdown due to the COVID-19 pandemic. VIPNET organised webinar on “Nanotechnology to Combat Climate Change” on 7th July 2020 in continuation of Tuesday series. The resource person Dr Vivek Polshettiwar, Associate Professor at Tata Institute of Fundamental Research, Mumbai highlighted the term nanotechnology and its importance to combat the climate change such as global warming etc. During the webinar speaker briefly explained the unusual properties of nanomaterials, various nanofabrication methods, electron microscopy techniques and use of nanomaterials in consumer products such as lithium-ion batteries, graphene, in paints etc. Further he explained that larger surface areas are associated with the nanoscale materials, leading to greater reactivity of materials as the greater amount of the material can come into contact with surrounding materials. Dr. Polshettiwar also highlighted the use of nano catalysts for the conversion of CO₂ to fuel and waste plastic to various chemicals. He also appreciated and made us proud about the level of scientific research in ancient India, by giving information about nano science associated with the paintings of Ajanta Caves, Maharashtra. Finally, he concluded his talk by saying that CO₂ capture, artificial photosynthesis as well as transforming plastic to simple chemicals by the use of nano catalysts can contribute to save the earth from climate change. The seminar was very enlightening, informative and useful to students as well as teachers for giving emphasis on less use of plastics in routine life as they might harm us. The science club of KMV is extremely grateful to the VIPNET club for organising such intellectual talks.



Webinar series on “Vast and diverse fields of Science and Technology, Lecture IV”.

Virtual meetings are becoming the norm under COVID-19 and winning over many initiatives. The Vigyan Prasar Network of science Clubs have initiated Tuesday lecture series on current trends in Science and Technology. In this series on 14th July 2020, VIPNET organised lecture on Characterization of Atmospheric particles: Implications to climate & human by Dr. Sumit K Mishra, Principal Scientist at CSIR- National Physical Laboratory, New Delhi. Dr. Mishra started his lecture with reference from Rigveda on importance of air in ancient India. According to Rigveda, Air is considered as an agent for the welfare of people and impart good health, eternal happiness and blessings. Then he explained natural as well as anthropogenic sources of particulate matter. PM is classified into coarse (PM 2.5-10), and fine (PM 2.5) size fractions based on aerodynamic diameter. The speaker highlighted the different determinants of concentration of particulate matter. Among several meteorological parameters, the role of wind speed and direction is particularly significant in controlling the concentrations of atmospheric pollutants. Various factors such as long-range dust storm play an important role in the aerosol concentration. Dr Mishra also talked about dust particle transformation phases, direct and indirect effects of particulate matter on atmosphere and Radiative Transfer models for determination of aerosol formation. Further he discussed adverse health effects of atmospheric particles such as premature death, lung cancer, lung diseases, heart attacks and neurological disorders. Finally, he concluded his talk by emphasizing the need to find sustainable ways for a sustainable living. He said we must connect to nature and the plants that purify the air are to be given importance than depending on the air purifiers.



Webinar series on “Vast and diverse fields of Science and Technology, Lecture V”.

In continuation of Tuesday lecture series by Vigyan Prasar on. 21st July 2020, Dr. Jyoti Gokhale, UGC Assistant Professor, Institute of Chemical Technology, Mumbai delivered a talk on **Role of functional foods in boosting immunity**. She started her lecture by briefly introducing immunity including its types and its role in fighting against various infections. She talked about innate, adaptive and herd immunity in detail. She stressed upon the importance of food in developing immunity mentioning the Ayurvedic quote “when diet is wrong, medicine is of no use; when diet is correct, medicine is of no need”. She explained functional foods as any foods and their components that may provide a health benefit beyond basic nutrition, reduces risk of disease and promotes good health. Earlier the main interest behind functional foods was to create them through fortification, but nowadays the focus has shifted to wellness and reduction of chronic diseases. With increase in awareness about functional foods, demand of functional foods has increased. She talked about different kinds of functional foods including inherent (grapes, garlic, carrot, turmeric, tea etc.), modified (enriched, modified & enhanced foods) and ancillary foods (probiotics). She discussed the limiting factors for the consumption of these foods talking about regulations, public acceptance and scientific evidences. She concluded the lecture suggesting research should be focussed on understanding mechanism of actions and whether they work synergistically or independently.



Webinar series on “Vast and diverse fields of Science and Technology, Lecture VI”.

Under Tuesday lecture series presented by VigyanPrasar, the sixth lecture was delivered on 28th July 2020. The resource person for the session was Mr. Rajiv Ranjan Mishra, Director General, National Mission for Clean Ganga (NMCG) and he delivered his talk on the topic “Scientific Approach To River Rejuvenation – Case Of Namami Gange”. Namami Gange Programme is an Integrated Conservation Mission to accomplish the twin objectives of effective abatement of pollution, conservation and rejuvenation of National River Ganga. In his talk he explains all the initiatives taken by Government to rejuvenate river Ganga including all scientific approaches. He elaborately explains how river Ganga Basin is spread in eleven states and is rich in biodiversity. He also added that river Ganga is divided into three major regions these are upper Ganga, middle Ganga and lower Ganga in order to work according to the need of that particular region. He discusses the vision of NMCG which include, Continuous flow (AviralDhara), Unpolluted flow (NirmalDhara), Geological entity and ecological entity. He elaborately discusses the need for different organizations to act together along with community involvement to make this project a reality like People River Connect under which many activities like Ganga Quest, Ganga Amantran, Ganga Utsav, River Fronts, Ghats, Crematoria etc were discussed. He explains the role of afforestation and biodiversity conservation by citing example of role of conservation of national aquatic animal Dolphin in rejuvenation of river Ganga. He also explains that small river rejuvenation is very important for the rejuvenation of main river for this a GIS based inventory of small rivers has been created along with its district wise location.



Webinar series on “Satellite Technology and Applications, Lecture VII”.

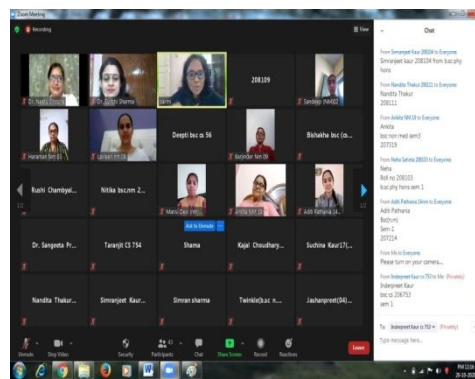
Under Tuesday lecture series organized by VigyanPrasar, the seventh lecture was delivered on Aug 4, 2020. The resource person Mr. Purushothaman Seetharaman, Senior Scientist, Joint Secretary, Antenna Test Measurement Society (ATMS) ISRO, Bengaluru gave a very informative and interesting talk on Satellite Technology and Applications. He gave an overview of Satellite principles, Challenges in Satellite Technology, Emerging applications of satellite technology and a success journey of Indian space programs. He apprised that satellite is an artificial man-made body placed in the orbit around the earth or another planet in order to collect the information or for communication. He further categorized types of satellites as circular or elliptical orbits, with respect to orbit around earth at different places and altitude of satellites. He elaborated that satellite orbits can be characterized with respect to distance i.e. Geostationary satellites placed at 36000 km above the earth surface are used for military and commercial purposes, satellites at 5000-15000 km are Medium Earth Orbit (MEO) used for navigation whereas satellites located at 500 to 1000 km are Low Earth Orbit (LEO) which includes military intelligence satellites. He also discussed about various terms related to satellite system viz. Earth station, Uplink, Downlink, Transponder. He elaborated concept of Radio Frequency Spectrum. He also discussed about the history of Indian Space Research Organization. It was a proud moment for every listener to know that India is among four space agencies internationally and first space agency in Asia who have launched satellite in the orbit of Mars. The project is known as Mars Orbiter Mission (MOM). It takes only 20 mins for a signal to reach in Martian orbit. He apprised that ISRO is currently working on Indian Manned Space Programs. He added that ADITYA, CHANDRAYAN 2 are upcoming projects of ISRO. Finally, he concluded his talk by saying that satellite technology is very crucial part of modern technology.



5 days' Workshop on “Online Physics”

P.G. Department of Physics, Kanya Maha Vidyalaya, Jalandhar, Heritage and Autonomous Institution organized 5 days Online Physics Workshop for under graduate science students from Oct 20-24, 2020. Workshop was sponsored by

Department of Biotechnology, Ministry of Science and Technology, Government of India. Workshop was conducted by Dr. Sarmistha Sahu, Coordinator, National Anveshika Network of India. Dr. Sarmistha Sahu is Retired Associate Prof. of Physics from Maharani Lakshmi Ammanni College for Women, Bangalore. The main aim behind organizing this workshop was to make students understand about some basic concepts of physics. The objective was achieved by providing hands on training by using material easily available at home. First day of the workshop was dedicated to the theme of “Multiple Reflection”. On day one, Dr.Sahu explained concepts behind image formation using planar mirrors. She explained that size and colour of image of an object does not change in planar mirrors. By using pair of mirrors she made students to deduce formula of finding angle between mirrors without even using protractor. Second day of the workshop was dedicated to the “Monte Carlo Simulation”. On the second day Dr.Sahu introduced a method to determine pi through simulations. Third day of the workshop was dedicated to the theme of “Radioactivity using dice”. Students were made to understand the basic concept of phenomenon of radioactivity, half-life, decay constant of radioactive elements. Students were able to determine half-life period by assuming dice and coin as radioactive element. Various fun activities were performed which grabbed attention of students and made difficult formulas simple to understand. Theme of fourth day of workshop was “Creative brain tickling technique”. On the fourth day of the workshop, Dr.Sahu prepared some puzzles for students and thus made them to establish relation between different shapes like square, rectangle, parallelogram etc. This activity enhanced the problem-solving skills of students. Last day of the workshop was dedicated to “Demonstration on physical optics” theme. On the fifth day, some of the basic concepts of diffraction, interference due to single slit, double and multiple slits were discussed. Students were able to calculate phase difference, path difference and fringe width by doing simple activities



ONE WEEK ONLINE WORKSHOP on

“INTRODUCTION TO RETAILING AND RETAIL IT SKILLS” (08.06.2020 to 13.06.2020)

No. of students participated: 24

Kanya Maha Vidyalaya, Jalandhar, The Heritage and Autonomous Institution always provides platform for the students to learn important skills which will help them to become a successful professional. In this series to mentor students, Retail Management Department organized One-week online workshop on “Introduction to Retailing and Retail IT Skills”. In which students are guided by faculty of Retail Management about career opportunities in retailing and retail IT skills and personality development. The retail industry offers diverse and unique career paths where students could work for some of the world’s most recognizable brands. Many of the main goals of retail— be it sales and profitability, product innovation, or customer relationships—intersect with other career fields like marketing, finance, technology, loss prevention, merchandising and management. Whether in stores or corporate headquarters many of key roles in retail include internal coordination, planning and logistics, store operations, human resources / training, finance and administration, buying, marketing, logistics, and information technology.

Positions in the retail industry can largely depend on what the company or store is selling. All positions must have some knowledge or familiarity with the products they sell and the needs of customers. At the forefront of the retail team are entry-level positions that tend to have the most face to face time with customers and tend to make up the bulk of the workforce of a company. Positions at this level could be a cashier, stocker, front end or sales associate. Entry level positions do not require a worker to supervise other workers at the same entry level positions. Digital technology is transforming the world of Retail. Students will learn about the impact of this transformation, from data transforming customer experiences and operations, to the increasing impact of connected devices and automation. It was a very workshop where the students were acquainted with the requisite traits

Link : <https://www.instagram.com/p/CBYkS17Avlf/><https://www.instagram.com/p/CBCrZzlgj-o/>

<https://www.kmvkaushal.org/activities/one-week-online-workshop-on-introduction-to-retailing-and-retail-it-skills/?d=retail-management>

