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International Seminar on "Forestry and Allied Specific Topics [FAST- 2019] for Innovation and R & D Initiatives"

The Department of Forestry organized International seminar on 21st - 23rd November, 2019 for imparting Current trends in forestry and natural sciences' education, research and extension through invited and popular lectures by scientists, field foresters, wildlife conservationists and others of repute from India and abroad. Sessions on different aspects of forestry and allied branches covered some of the most important topics on emerging trends in the field of natural sciences by providing a common platform to Life scientists, Foresters, Scientists and others to interact with the students, faculty and researchers on forestry and allied topics like trends in tropical forest restoration and rehabilitation management; grass root innovation and Intellectual Property Rights; human wildlife conflict mitigation; advances in wood & technological sciences; climate change and resilience; forest survey through advances in Remote Sensing and GIS; Global climate change impact and mitigation through short rotation hybrid, and knowledge transfer and exchange of practices. There was a panel discussion on 'International exchange of best practices and learning through students and faculty for the development of forestry & allied sciences in changing times' learned guests from Canada and Malaysia participated.

The targeted participants in the seminar were students of Forestry, Botany, Biotechnology, Agriculture, Horticulture and Microbiology from Central and State Universities, R&D Institutions, Academic and Training Institutions, Colleges and educational institutes like Indian Institute of Remote Sensing, Forest Research Institute, HNB Garhwal University,



Shri Arvind Gupta, Chairman, DIBNS felicitating Prof. A. A. Nuruddin with a memento



Dr. Arun Kumar, Director presenting memento to Prof. Jorma Neuvonen

SGRR University, Graphic Era University, Punjab Agriculture University and Himalayan University, etc.

Prof. Ahmad Ainuddin Nuruddin, Director, Institute of Tropical Forestry and Forest Products, University Putra Malaysia was the Chief Guest for the inaugural. Dr Subhash Ashutosh, IFS, Director General, Forest Survey of India, Dehradun and Prof. Jorma Neuvonen from University of British Columbia, Canada were Guest of Honour. Shri Arvind Gupta, Chairman of the Dolphin Institute blessed the occasion with words of wisdom, Dr. Shailja Pant, Principal of the institute greeted the participants and guests, while Dr. Arun Kumar, Director of the institute deliberated on the academic activities of the College. Prof. Sas Biswas, Organizing Secretary of FAST-2019, provided outline on the technical sessions of the Seminar. "Book of Abstracts" comprising 71 selected papers was released on the

Post inaugural session had two leads presentations on Global Forest and Forestry sector scenario. Dr. Jorma





Prof. Jorma Neuvonen addressing the gathering

Neuvonen, Faculty of British Columbia made illustrated presentation on British Columbia Forestry & Climate change where it is double from rest of the world's climate change rate. It has positive as well as negative impacts, i.e., longer growing season is available but less summer rain increases the drought incidences. It surely effects productivity if not survival due to lack of optimal growth conditions. It results in ecosystem change that leads to the need of change in forest management practices. He emphasized that climate modeling is necessary to study bioclimatic shift.

Dr. Ahmad Ainuddin Nuruddin gave insight on newer trends in Tropical forest restoration and rehabilitation in Malaysia. Forest area of Malaysia has decreased from 1990 to 2008 thereafter an increase has been recorded due to Agroforestry landuse, enrichment planting programmes, retention of selected timber species, coastal rehabilitation programmes and public awareness.

Dr. VK Chawla, Senior Scientist from IPIRTI, Govt. of India, Bangalore explained several value added technologies with special reference to bamboo. After value addition several bamboo products like bamboo tiles, pillars etc have capability to replace timber. Dr. Anamika Dey, GIAN, Ahmedabad also played a impactful video which can be summed up in a phrase 'Need Based Innovation' as it gave insight on linking the triangle of creativity, i.e., innovation, enterprise and investment. She invited participants with innovative ideas to her organization as it will provide investment to give them a shape. Shri Shivan Joshi, an IIT alumnus, working



on Green Environment Product (GEP) at HESCO discussed the idea of environmental sustainability with reintroduction of old-lost technologies like water-mills, recharging of springs, etc. These in turn will lift up the socioeconomics of villages by increasing the crop production. He also talked about GEP-Green environment products as need of the day considering prevalent environmental situation. Dr Prabhakar Manori emphasized on the need of mycrorrhizal association in land restoration and explained his

demonstrated the use of tranquilizer gun to the participants. Mr. SMS Jagne emphasized on the need of community participation in the well being of forests and forestry. JFM, community management, community parks, community controlled state forest and forest inventor etc are successful examples from the Gambian forests growth. Further oral presentations were made by Drs. Bobbymore Konsam, Vikaspal, Rashmi Thapliyal, Ms. Merensangla Longkumer, Asif Hussain Paray and Dr. Tahir Nazir on various aspects of



studies on the hypothesis of land restoration by reducing degradation by mycrorrhizal association. Dr Aashish Raturi presented his studies on Non-destructive Technology (NDT) NIR spectroscopy to estimate wood properties.

Two lead presentations were made by Dr. Aditi Sharma, Senior Veterinary Officer, Rajaji Tiger Reserve and Mr. Sulayman M S Jegne, Forest Officer, from The Gambia on Day 2. Dr. Shrama gave a talk on 'Human Wildlife conflicts Mitigation: Recent Trends'. She emphasised in the use of Human Wildlife interaction in place of Human Wildlife conflict. She talked about the need of new technologies to set prior warning system to save animals as well as human from any conflict between the two. She also forestry including climate change, seasonal variations and their effect on seed production and regeneration of

On third day of Seminar, Dr. Trevor Jones, Faculty University of British Columbia delivered an impactful lecture on most emerging aspects of remote sensing. Prof. Sas Biswas presented his observations on climate change resilience in the forest biodiversity, sustainable livelihood, traditional systems and communities of Uttarakhand Himalayas. It was followed by presentation by Drs Sandhya Goswami and Mandeep Kaur. Poster Presentations on in innovative approaches and research initiatives in forestry were also made on the last day. The Seminar concluded with Panel discussion and valedictory.



From Chairman's Desk...

Tolerance: Its importance and benefits



Tolerance is the real test of civilization". It was Arthur Kelps who thus extolled the virtue of tolerance. Man in the 21st century believes he is more civilized than his ancestors. But is he also more tolerant than them? Unfortunately, the virtue of tolerance is not abundant in today's world. Tolerance is a power which makes people able to do justice by hearing and accessing the different views of others. Democratic countries have tolerance as an indispensable quality. Being tolerant, helps a person resolving any astringent conditions in the surroundings.

Tolerance can be defined as the possession of a fair and objective perspective and attitude towards those people who are of different races, religions, nations or have a set of opinions, beliefs and ideas the differ from our own.

The importance of tolerance lies in its ability to make a human being broad minded to be receptive to all kinds of ideas. This, in turn, enables one to widen one's knowledge and exercise more freedom of choice and judgement for oneself. At the same time it creates a deeper understanding of other's views and beliefs.

Today, tolerance seems to be at a discount at all levels. At slightest disagreement hot words are exchanged, almost immediately escalating into a fight and sometimes even fatal incidents. Family members find it difficult to put up with one another's shortcomings. After all which human being is perfect? There appear to be an acute lack of tolerance at all levels be it communities, social groups, facial groups or nations. Trivial misunderstandings, even rumours, give rise to riots with the accompanying bloodshed and permanent rifts in relationships. So often a personal matter such as religion has been distorted to create hatred amongst peoples. If people learnt to tolerate one another's views, perhaps such sad occurrences could be reduced, even if not totally removed from the society!

Why has tolerance level come down? Or, indeed, has it come down at all? Human beings all through the ages have shown intolerance of views and beliefs and customs alien to their own. Racial tension has grown due to intolerance. So long as human beings give in to envy, malice, jealousy and greed, tolerance will suffer. In rent times several longstanding and accepted social institutions have shown signs of crumbling. Family values, social values are all being eroded. An increasing materialistic and consumer culture has not helped to nurture essential values. The individual has assumed such importance that anything that militates against that individual's own ideas is not collated.

Enlightenment of individuals is necessary. Universal values of liberalism, the willingness to listen to others, at most agree to disagree and not enter into fights of domination—these qualities have to be inculcated at every level of society. Democracy, after all, means tolerance of dissent; if this tolerance is not imbibed and nurtured, it will only give rise to yet another conflict

Tolerance is an important concept that helps people to live together peacefully. To be tolerant means that you accept other people's opinions and preferences, even when you don't agree. Tolerance also means that you don't put your opinions above those of others, even when you know that you are right. Tolerant people show strength in that they can deal with different opinions and perspectives

Tolerance doesn't just make peaceful coexistence possible, another advantage is that being open to other ways of thinking can help with our personal development. When you know more about different thinking and ideas from around the world, it will help you to understand the

Teaching children about tolerance is the best gift that you can give them. Children shouldn't grow up with feelings of hate and suspicion. Children who grow up with malice and jealousy towards others turn into unhappy people. And children who are forced to believe certain opinions will develop into people who aren't free or independent thinkers. If children experience love and tolerance, they will be able to grow up and lead a happy and peaceful life.

Accepting the values of others is a difficult decision and choice. It isn't simple to be a tolerant person. It is okay to stick to your own values, but it makes sense to evaluate your values, especially if they effect others. It needs to be clear that everyone has their own opinions and values and that these need to be respected and accepted. If we want to live in a peaceful society, there is no alternative to tolerance.

Workshop-cum-Symposium on "Traditional and Modern Animal Taxonomy and IPR Issues for Biodiversity Protection and Conservation"

Department of Zoology in collaboration with ZSI, Dehradun and ICAR-IISWC organized the above Symposium. It was inaugurated by Dr. Dhananjay Mohan, IFS, Chairman State Biodiversity Board and PPCF, Uttarakhand Forest Department. He enlightened the participants on the relevance of taxonomy in studying biodiversity. Dr. Arun Kumar, Director, DIBNS delivered the welcome address and spoke in length on the science of taxonomy and its relevance in resolving the nomenclatural issues. Organising committee honoured Prof. Jagbir Singh Kirti, Punjabi University Patiala with Lifetime Achievement Award for his contribution in Taxonomy.

Participant from various colleges, universities and institutes learned the techniques on animal taxonomy and conservation issues related to biodiversity by the eminent scientist and professors. Dr. Arun Kumar delivered an invited lecture on 'Collection and preservation of museum specimens'.



Shri Arvind Gupta honouring Prof. Jagbir Singh Kirti with Lifetime Achievement Award



Participants also visited Rajaji Tiger Reserve and spotted many wild fauna species. Students and research scholars got the chance to interact with the invited speakers and also presented their papers. Best papers



Shri Arvind Gupta felicitating Dr. Dhananjay Mohan with memento

were awarded in poster and oral category. Best paper in oral presentation in research category was won by Ms. Sarabjeet Kaur, WII, Dehradun and The oral presentation award in PG and UG category was won by Linto Paul Jacob, and best paper in poster presentation was won by Sneha Rajan, both from BFIT, Dehradun. In wildlife photography competition (Incredible India) the first prize was won by Ms. Arthita Adhikari, DIBNS, Dehradun.

Indian Nobel laureates

1907 Nobel Prize in Literature

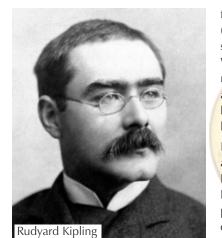
Rudyard Kipling

Prize motivation: "in consideration of the power of observation, originality of imagination, virility of ideas and remarkable talent for narration which characterize the creations of this world-famous author".

Background: 1865-1936. Born: Bombay, India.

Residence: United Kingdom.

Work: Joseph Rudyard Kipling was an English journalist, short-story writer, poet, and novelist. Kipling's works of



fiction include The Jungle Book (1894), Kim (1901), and many short stories, including "The Man Who Would Be King" (1888). He is regarded as a major innovator in the art of the short story; his children's books are classics of children's literature.

In 1907, at the age of 42, he was awarded the Nobel Prize in Literature, making him the first English-language writer to receive the prize and its youngest recipient to

CME / Workshop / Conferences organised National Conference on "Food Microbiology"

In commemoration of World Food Week, departments of Microbiology and Horticulture jointly organised two-day national conference on "Advancement in Food Microbiology" to discuss the global challenges related to agricultural production, food supply, food processing industry and quality of foods, etc. About 300 students', teachers, researchers and scientists participated in the conference.

Shri Arvind Gupta, Chairman Dolphin Institute, in his inaugural address emphasized on the changing global scenario in our food and eating habits where in instead of home-cooked food, majority of the people are eating the food being provided by supermarket, fast food outlets, street food vendors and take away restaurants are thus vulnerable to



diseases like heart problems, diabetes, obesity and cancer. Dr. Shailaja Pant, Principal, threw light on the purpose and importance of the conference and amazing revolutionary changes in fields of food processing, agriculture, medicine, sanitation and environment and with the help of microbiology successfully tackling the challenges of food crisis, malnutrition, food processing, sanitation and environment etc. Dr. Arun Kumar, Director said that today we have many choices in the world, but the removal of millions of people from starvation and malnutrition is a major task. He highlighted that due to urbanization, the land for agriculture is getting scarce, thus ensuring food supply for the growing population has become a challenge. He said that in this era of global challenges, the National Conference on important topics like advancement in food microbiology is welcome.

Distinguished guest and well-known industrialist, Shri Sudhir Windlas said that students must understand the importance of ethics and enrich the knowledge of their respective fields and develop basic under-standing of their subject so as to upgrade human life, provide cheap technology and solve basic problems.

Keynote speaker Prof. SK Sharma, Professor of Food Science and Technology, Pantnagar University, discussed in detail the "Challenges and workload of food safety". He told that today 82 crore people in the world are suffering from hunger and



dehydratio, while more than 67 crore adults and 12 crore youth are obese. He pointed out this is a strange contradiction and should be corrected. He also discussed the shortcomings of the food delivery system. Dr. SVN Vijayendra, the Scientist, Central Food Technological Research Institute, Mysore, shared information about "Micronutrients of Commercial Importance". Dr. Divas Pradhan, Scientist, NDRI Karnal discussed on 'Probioxi Health Benefits and Challenges'. Dr. Anil Kumar of the Food Science and Technology Department of GB Pant University spoke about the food analysis and quality management. Prof. Garima Mittal from Swami Ram Himalaya Medical College discussed about 'Food Born Diseases'. Prof. SK Soni, Punjab University, Chandigarh, presented his views on "Thermal Processing in Food Industry" and "Importance of D, Z and F values". Dr. Anupama Panghal, National Institute of Food Technology Entrepreneurship and Management, Sonepat discussed "Emerging Business Models in Food and Agri Business and Road Ahead". Shri Swapnil Bhardwaj, Quality Manager, Chocolate-Coffee Division, ITC, Haridwar, explained the immense potential for employment in the food processing industry.

Dr. S. Sen Gupta Pandey, Additional Food Secretary, Government of Uttarakhand and the Chief Guest valedictory, highlighted the problems faced by common people like poverty, starvation, malnutrition, lack of drinking water, crisis of agricultural produce, flood, drought, unemployment, diseases and social imbalances etc. which we cannot avoid blindly. She said that we have to use all our knowledge and skills in the research for inexpensive and effective techniques by adopting human approach so that the lives of common people struggling with these problems can be saved and their standard of living can be raised.

The winners of the poster competition held earlier on the occasion of Word Hand Sanitization Day on 15 October 2019, were awarded at the conclusion of the program. Poster by Ankipriya of B. Sc. Medical Micro-biology Final Year was awarded first, Ellis and Ocean of B. Sc. Medical Microbiology 2nd year were selected second and by Karthik and Pakhi's of B. Sc. Medical Microbiology second year were awarded the 3rd prize.

Poster competition was also organized during the workshop on 'Benefits and risks of fermented food, functional food, processed food and probiotics'. Poster by Prashant Singh Bisht, Pratapi Talukdar, Pawan Kumar and Mohit Yadav of Dolphin Institute was declared 1st, poster by Deep Nithun, S. Sheikh Rizauddin & Mansi Chauhan of SGRR University was declared 2nd



and poster by Shikha Sharma and Atul Singh of Sai Institute was selected for 3rd prize. All the winners were awarded cash prizes and citations.

During the conference stalls for food products were setup by NGOs like Shikhar Food Products, Hasco, Bagwan and Krishi Van. Information on Agri Business Management was provided to the participants by NGO





Shri Ram Ayurvedic Aushadhalaya, Suddhowala, Dehradun, run by Dolphin PG Institute, organized a free medical camp on

31st Dec. 2019 for consultation, pathology tests and Ayurvedic medicines. Lots of patients came and took benefits of Pathology team collecting blood the same.



Editor's Column...

Change Attitude, the Situation shall change itself

We cannot always change situation and circumstances, but one can certainly change the attitude to cope up with the prevailing situation. Instead of feeling resentful, frustrated and unhappy, one can learn to be calm, accept the situation, and not fight with it. One can try to look at the situation dispassionately, and try to find out what we can learn from it. Various situations and circumstances could be lessons we need to learn, and after learning and acknowledging the lessons, the situations and circumstances will start to change.

Instead of talking about the problems, talk about the way of solutions. Instead of spending your time thinking about how bad things are, think about how good they will be! When you accept what you cannot change, you save yourself a lot of energy and time, and can devote your time to better things than thinking about the situation you

Some people might misinterpret what I said and think that accepting situations means giving up. Others might regard acceptance as an excuse for laziness and doing nothing. This is far from the truth. Acceptance of situations that you cannot change is wisdom and not passivity, and has nothing with giving up and should not be an excuse

You cannot change the past, and regretting and feeling bad about it is not going to change it. However, you can learn to stop dwelling on the past and move on.

If you don't like one of your colleague at work and you do not get along with him, anger and resentment would not help. However, you can try to be friendly and stop

Suppose it is raining outside, but you need to go to work, go the grocery or meet friends. You cannot stop the train and you cannot fight the rain. Would you give up and stay at home, or wear a raincoat and go outside despite rain?

When you change your attitude, you start to feel better, you become happier, recognize opportunities to make changes, and on many occasions, the situations or circumstances you could not change, begin to change. By changing your attitude, situations and circumstances would start to change, as if by magic.

Are there any tools that can help you change your attitude? Yes, there are a few, such as repeating affirmations, practicing visualization and developing inner peace.

For the most part, we could all benefit from adjusting our attitudes. Especially in situations where we are unhappy or bored or upset, we could really change things if we changed our attitudes. Sometimes people refer to change as this big, global act, as something that will affect the entire world. Attitude is like that. It's the kind of change you can make every single day that can change the world. Just think -- what if we all took the time, just a few moments a day, to change our attitudes? What if we woke up tired and stressed and unhappy and we said, "Nope, I'm not going to have a bad attitude. I'm going to be positive today!"?

It seems to me that attitude has a ripple effect. One person's good attitude can cause another's. Just think about it. If you choose to have a good attitude and it spreads to another person and another and another, you really are changing the world. Some might scoff at this idea and consider it trivial. They might read this and think, how can one person's attitude change the world? Before my quest for a positive, present life, I would have been one of those people. I can remember so vividly, standing there with my arms crossed and a sassy look on my face, rebelling against my mother's "attitude adjustment" idea. I thought I was above adjusting my attitude. But you know what? Now I know I'm not. I'm a lot better off with my attitude adjusted and, like with so many other things, I would have been better off back then if I'd just listened to my

Don't wait too long; adjust your attitude right now. You'd be surprised how much you really can change the world just by changing your attitude. Changing your attitude can change your life. Changing your life can change the lives of those around you. Changing the lives of those around you can, ultimately, change the world. When you hear about changing the world, don't sit back and say you can't do anything. There is one thing you can do every single day that will make the world a better place: change your attitude.

Or "Alter Your Attitude to Change Your Circumstances"

Wildlife Week-cum-National Workshop on "Emerging Issues on Wildlife"

Wildlife Week-2019 organised by Department of Forestry from 2nd to 7th October. Celebration began with the planting of Wildlife's choicest food plants mulberry, kachnaar and Golden rain-tree by Shri Arvind Gupta, Hon'ble Oath taking ceremony for wildlife conse

Chairman and other dignotories. Poster, Poem, Photos prepared or clicked on 2nd October were displayed for competition. "National Workshop on Emerging Issues on Wildlife" was conducted on 4th October. Discussion on threat, mitigation, Zero Hunting of Migratory AMUR Falcons and techniques on Wildlife Film making was undertaken. Shri Surender Mehra IFS, DIG National Tiger Conservation Authority, Government of India; Dr R Suresh Kumar Scientist-F, Wildlife Institute of India Dehradun and Shri Sunal K Roamin, Wildlife Researcher & Film Maker from Punjab were the resource persons for workshop.

Technical session on live workshop on tools & techniques on wildlife photography inspired the students for freelancing in Wildlife. Another session for Poster & Photography competition commemorating 150 years of Mahatma Gandhi was entitled "Ahimnsa Paramo Dharma". MASTER QUIZ, 5 minutes talk, Thematic



presentation in Workshop by Forestry Faculty were conducted on 5th October. Dr Shalini Singh from Biotech department critically judged for the competitors. Winners of various events were following:

Poster/ photography competition:

1st: Ashwini, Mehmoda Sultana, Disha 2nd: Kanika, Jayaram Shravasti and Samjhana Yadav, 3rd: Alfred Jamy

Poem/talk competition:

1st: Anisha Pradhan, 2nd: Kartik Shahi, 3rd: Nandha Jayan

Master Quiz -

1st - Vishvendra Singh Jadaun and Soumya Pathak, 2nd - Tenzing Samphel and Kalpana Mukhia, 3rd – Kartik Shahi and Prabesh Gyawali.



Dr. Shalini Singh distributing certificates and prizes

Two Day Workshop on "Indian Designed Costeffective Raman & Fluorescence Spectroscopy"

The workshop on "Indian Designed Cost effective Raman and Fluorescence Spectroscopy" was conducted by Department of Physics, Chemistry and Pharmaceutical Chemistry in Collaboration with the RI Instruments and Innovations India, Haldwani, Uttarakhand.

The subject of the workshop was chosen very carefully considering the fact that spectroscopy is being taught in a number of PG programmes including Physics, Chemistry, Biochemistry, Pharma-chemistry, Biotechnology and Microbiology. Raman and Fluorescence Spectroscopy find a very important place in modern era of spectral techniques and from time to time cutting-edge innovations are being made to make these techniques very cost-effective and approachable. RIMS Modular Spectroscopic work station is unique of its kind and first time introduced by RI Instruments and Innovation India to the world. The machine is capable of measuring parameters like Raman, Fluorescence along with absorbance, transmittance, reflectance, irradiance, CRI, Spectroelectrochemistry etc. Since the Spectrophotometer is a very expensive instrument, the students never find an opportunity to get an exposure to work on it. It was a unique experience of hands on training for the students under the guidance of the scientists and engineers from RI Instruments & Innovations India & our senior faculty.

The workshop was attended by 174 participants, including 91 outsiders and 83 from our College. These



included Students, Research Scholar and Faculties from various Universities of Uttarakhand, Uttar-Pradesh and Scientist from Government Organisations. The workshop represented a great opportunity to bring participants together from diverse backgrounds on a common understanding of basic concepts related to scientific temperament & instrument handling techniques by providing opportunity to get an exposure to work on it.

The resource person were Dr. R.P Joshi (Chief Resource Person), RI Instrument & Innovation India, Prof. Versha Parcha, Dolphin (P.G)Institute, Er.Kuldeep Kumar Patel, Engineer, RI Instrument & Innovation India, Miss Vaishali Rathi, Scientist, RI Instrument & Innovation India.

Dr. Shailja Pant, Principal, DIBNS formally welcomed the dignitaries and the participants.

Dr. Arun Kumar, Director DIBNS summarized the objectives of the workshop, and the roles of Raman and Fluorescence Spectroscopy in modern era of spectral techniques.

Dr. R.P Joshi, CEO, RI Instrument & Innovation India, briefly discussed about his successful Indian designs of Raman Spectrometer, RIUS (Universal Spectroscopy), RIMS (Modular spectroscopic work station), XRD TEM (Under Trial), Class A Solar Simulator

The Guest of Honor, Dr. Vimal Kothiyal, ADG, ICFRE guided and motivated the young researchers as how to proceed for the quality research work using spectroscopy in the biological research with the help of Chemo metrics. Shri Arvind Gupta, Chairman, DIBNS addressed participants.

The Chief Guest, Dr. D.K Aswal,



Director, CSIR-National Physical Laboratory, New Delhi in his inaugural address emphasized that "we are not getting desired results due to poor standards of calibration and manufacturing of instruments". As a result, we rely on foreign technology for manufacturing of goods of daily use, defence equipments and even for information technology. He emphasized the need to rise above personal interests and talk about invention and science.

Dr. Rajendra Pd. Joshi, Founder & CEO, RI Instruments & Innovation India along with his team of trainers were present on both days of the workshop.

The training workshop intended to bridge the gaps and challenges that are being faced by Scholars in hilly areas of Uttarakhand. The workshop was partially funded by Uttarakhand State Council For Science and Technology, UCOST under the "Promoting Indigenous People and Technology Programme".

The Technical session started with a lecture by Prof. Versha Parcha on the basic concepts of Spectroscopy. Subsequently Dr. R.P Joshi delivered technical lecture on RIMS Modular Spectroscopy. Following which the work shop moved on to hands on training session conducted by Shri Kuldeep Kumar Patel, Engineer & Ms. Vaishali Rathi from Research India. 10-15 participants in one batch were selected to run live samples in Raman Spectroscope-photometer and were able to get the results for their

respective research areas. The session after lunch continued with the live demonstration of setup/its mechanism by the expert from RI Instruments.

On second day of the, the first session was started by Dr. R.P. Joshi with the introduction of the advance features of Indigenous Raman Instrument followed by an experiment using the same device. He further took the participants through various samples testing that dealt with the following:

- · to show the Anti stoke and Strike
- · Identify the samples and their exposure on Raman Band.

In the second session, each participant performed the above task on their own samples using Raman Instrument and thereafter the results were evaluated and rectified by the resource persons. Further the queries of the participants were clarified by the facilitators. The post lunch session was also continued by Dr. Joshi where in more functions of advance perimeter were demonstrated by the experts.

Overall, it was a 'well-rounded' practical based discussion. It served in bridging the huge gulf between the theory & practice. It was able to address all those hard spot areas where students often get confused. The success of the event has been proved by Statistics of Feedback.

Certificates of participation were then awarded to each of the participants by Dr. Arun Kumar,. Thereafter the training-workshop was concluded by Dr. Aasheesh Raturi.

Achievements

Department of Pharmaceutical Chemistry



Our student Divya Jyoti, has topped

the HNB Garhwal University in M.Sc. Pharma Chemistry (2017-19) and has been awarded the Gold Medal. Her CGPA is 8.6.

Department of Forestry

Satyam Kumar, student B.Sc. Forestry 2011-15 batch was selected as Development Officer, Life Insurance Corporation of India. He joined LIC on 27th November 2019

Physiotherapy Services

Department Of Physiotherapy provided physiotherapy services for Dehradun half marathon for Road Safety, organised by Thrill Zone on 1st December 2019. The physiotherapy team included Drs. Deptee Warikoo, PT, Vivek Chauhan, PT, Richa Agarwal, PT and Kapil Garg, PT. The physiotherapy services and first aid were provided at 3 points along the marathon route. These included treatment of sudden cramps, sprains, strains or bruises. Relaxation techniques along with warm up and cool down techniques were also provided to the participants at various spots. Throughout the 'six hours' by 'marathon' the physiotherapy team was active in field. It was indeed a great experience for team Physio and they provided special consultation for injury prevention, strength maintenance and endurance to the



Dr. Vivek Chuhan, PT, providing physiotherapy

athletes. It was an encouraging and motivational event for the physio team.

New Faculty



Dr Jitendra Kumar, Ph.D., M.Sc Horticulture joined as an Assistant Professor in the Department of

Horticulture from 23rd September



Guest Lectures Organised

Department of Biotechnology

A guest lecture was arranged on "Plant Tissue Culture of Rare, Endemic and Threatened species for conservation" on 23rd December, 2019 by Dr. Giriraj Singh, Scientist D, Botanical Survey of India, Dehradun. He explained in details the basic techniques of Plant Tissue Culture and it's advantages over conventional propagation techniques. He emphasizes that India has a rich biological diversity due to its varied climatic and altitudinal variations and



ecological habitats. However, there have been increasing rates of threats to these biological resources due to immense biotic and a biotic stresses. Indiscriminate collection of plants for their medicinal, ornamental, perfumery uses, etc. Habitat loss and degradation are potential causes of threats. His lecture on the subject was highly informative for the students and faculty as well.

Department of Botany

1. Guest lecture was held for the B.Sc. and M.Sc. students of Botany, Biotechnology, Forestry, Agriculture and Horticulture on 17th October 2019 on the topic "National Capital and Sustainability" by Dr. Y.K. Sharma, Former Professor and Head, Department of Botany, University of Lucknow. Dr. Sharma focused on



present circumstances of population blast, increased rate of urbanization, environmental and ecological sustainability, and depletion of renewable and non-renewable resources. He discussed about high yield, disease resistant varieties of useful plant crops using genetics and plant breeding techniques as nutrient rich foods are being developed using advanced techniques of molecular biology and nanotechnology. He also suggested more and more use of renewable resources like light, wind and geothermal energy for sustainable development.

2. Dr. N.S.K. Harsh, Former Head, Forest Pathology Division, FKI, Dehradun, delivered a guest lecture on 7th November 2019 on "Fungal Diversity-Gift of Nature" for the B.Sc.



and M.Sc. students of Botany, Microbiology, Biotechnology, Forestry, Agriculture and Horticulture. During his lecture he focused on fungal diversity of India specially use full groups of fungi. He also focused on the economic aspects of the fungi and how this group of botany improve the economic status of the rural population and serve as nutritious and delicious food of the human beings.

3. Guest lecture was delivered by Dr. Puneet Kumar, Scientist, Botanical Survey of India, Dehradun, on 23rd November 2019 on the topic "Role of



Cytology in Plant Taxonomy". The major objective of his lecture was to serve the B.Sc. and M.Sc. students of Botany, Forestry and other related subjects. He focused on the application of cytological evidences in identification and classification of plants. He also focused on the scope of Cytotaxonomy in carrier building.

Department of Physiotherapy

Department of Physiotherapy organized a Guest lecture on 04 october 2019 on 'A female athlete from the perspective of a Physiotherapist' by Dr. Narinder Kaur Multani Professor & HOD, Department of Physiotherapy, Punjabi University, Patiala.

Dr. Multani enlightened the role of Physiotherapy in sports injuries and focused on the health issues of female



athletes and how physiotherapy could bring a great relief to their problems. She presented different cases in front of students and discussed about the importance of a physiotherapist in health of female athletes. About 50 students attended the Lecture.

Department of Forestry

EVENT- Workshop on Emerging issues on Wildlife (2nd to 7th October, 2019)

1. Dr R Suresh Kumar, Scientist-F, Wildlife Institute of India, Dehradun delivered a lecture on topic "Threat to Mitigation, Zero Hunting of Migratory AMUR Falcons".

2. Shri Sunal K Roamin, Wildlife Researcher & Film Maker delivered a lecture on topic "Techniques on Wildlife Filming".

EVENT-FAST- 2019 (21st-23rd) November, 2019)

1. Prof. Ahmad Ainuddin Nuruddin, Director, Institute of Tropical Forestry and Forest Products, University Putra Malaysia delivered a lecture on topic "Newer Trends in Tropical Forest Restoration and Rehabilitation in Malaysia".

2. Dr Subhash Ashutosh IFS, Director General, Forest Survey of India, Dehradun delivered a lecture on topic "Inventory of Indian Forests and carbon accounting with passing reference to geospatial tools and techniques in forest management and monitoring".

3. Prof. Jorma Neuvonen, Faculty of Forestry, University of British Columbia, Canada delivered a lecture on topic "British Columbia Forestry and Climate Change".

4. Dr Trevor Jones, Faculty of Forestry, University of British Columbia, Canada delivered a lecture on topic "New and Emerging Remote Sensing Technologies for Ecosystem Management".

5. Mr Sulayman M S Jegne, Forest Officer, The Gambia delivered a lecture on topic "Forest and Forestry Scenario in Gambia, West Africa".

6. Dr VK Chawla, Senior scientist, Indian Plywood Industries Research and Training Institute (IPIRTI,) Govt of India, Bangalore delivered a lecture on topic "IPR in the Field of Bamboo and Bamboo Composite Technology".

7. Mr Shivam Joshi, Himalayan Environmental Studies and Conservation Organisation (HESCO), Dehradun, India delivered a lecture on topic "Innovations in Rural Technology for Environmental Conservation in Indian Hills".

8. Dr Anamika Dey , CEO, Grassroots Innovation Augmentation Network (GIAN), Gujarat, India delivered a lecture on topic "Linking Innovation, Enterprise and Investment: The Golden Triangle of Creativity".

9. Dr Aditi Sharma, Senior Veterinary Officer, Rajaji Tiger Reserve, Uttarakhand State Forest Department, Dehradun, India delivered a lecture on topic "Understanding and Management of Human Wildlife Conflict in Uttarakhand".

10. Dr Ramesh Krishnamurthy, Senior Scientist, Wildlife Institute of India, delivered a lecture on topic "Technological Sophistication and Integration in Wildlife Research & Management in India".

11. Dr R P Singh (IFS), Director Forestry Education, Gol delivered a lecture on topic "International Exchange of Best Practices and learning through students and faculty for the development of Forestry Education in Changing Time".

Department of Agriculture

1. Dr. Anil Kumar Srivastava, Emeritus Scientist, Ex-Director delivered a lecture on topic "Integrated Farming System for Food Livelihood & Environment Security" on Nov. 15, 2019



2. Mr. Justin George, Scientist - C, IIRS, Dehradun "delivered a lecture on topic" Uses of Remote Sensing in Agriculture" on November 23, 2019.

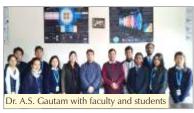
Department of Zoology

Dr. V. M. Sathish Kumar, Scientist, Zoological Survey of India, Dehradun delivered a guest lecture on 5th October 2019, on "Cyber Taxonomy, DNA Barcoding BioCorder- with special emphasis to the current failures/ future trends pertaining to the Taxonomy research, India."



Department of Physics

Dr. Alok Sagar Gautam, Professor of Physics, HNB Garhwal University delivered a guest lecture on 'Band gap theory and Atmospheric Physics' on 28th November 2019. He acquainted students with research and academic skills which help in attaining not just bookish knowledge but a meaningful application of physics in different domains of societal application. He also shared several research experiences among the students.



Department of Microbiology

Department of Microbiology organized a guest lecture on "Relation of Microbes & Immunity: Friends or Foes" on 30th September 2019 at

Conferences attended and paper presented

Department of Forestry

1. Dr. AK Unival attended National Conference on Multidisciplinary Approaches of Plant Science during 29-31 Oct., 2019 organised by the College.

2. Dr V P S Rawat attended a National Conference on Multidisciplinary Approaches of Plant Science during 29-31 Oct. 2019 organised by the College. 3. Dr AK Uniyal attended DST & ACS Workshop on 25th November 2019 at UCOST Dehradun.

4. Following faculty made oral presentations in International Seminar on "Forestry and Allied Specific Topics [FAST- 2019] for Innovation and R & D Initiatives" 21st to 23rd November, 2019 hosted by the College

I. Prof. Sas Biswas on 'Observation on Forest Dependent Communities and their Resilience to the Impacts of Climate Change in Uttarakhand Himalayas, India'.

ii. Dr. Rashmi T Chamoli on 'Photochemical analysis of medicinal plant- Nyctanthes arbor-tristis Linn.

iii. Dr. Vikaspal Singh 'Study on the Regeneration of Banj oak (Quercus leucotrichophora A. Camus) Forest along the Disturbance Gradient in Garhwal Himalaya, Uttarakhand, India'.

iv. Dr. Sandhya Goswami on 'Agroforestry: A Global Climate-Smart Landuse System'.

v. Shri Manish Kumar on 'Watershed Management: A Tool for Sustainable Livelihood'.

vi. Dr. Mandeep Kaur on 'Arbuscular Mycorrhizal Symbiosis in The Understory of Shorea robusta Gaertn'.

vii. Dr. Tahir Nazir on 'Carbon-Nitrogen ratio and soil temperature status of five forest types of Garhwal Himalaya, Uttarakhand, India'.

5. Following faculty members have given oral Presentations in National Workshop on "Emerging Issues on Wildlife" On 4th October,

I. Dr AK Uniyal on 'Wild cats of Garhwal Himalaya'.

ii. Dr. Sandhya Goswami on 'Tools and Techniques for Camera Trap'.

iii. Dr. Mandeep Kaur on 'Most Spectacular and Threatened wildlife of Himachal Pradesh'.

iv. Dr. Sas Biswas on 'Effective management of wildlife in India through research, education, extension and skill upgradation'.

v. Dr. VPS Rawat on 'Status of poaching of major fauna and degradation of wildlife habitat in NW Himalaya'.

vi. Dr. Rashmi Chamoli on 'Jim Corbett and Man-eaters of Kumaun'.

vii. Manish Kumar on 'Wildlife tourism in Bihar & Jharkhand with respect to National Parks'.

viii. Dr. Tahir Nazir on 'Status note on Hangul (Kashmir Stag) and academic awareness'.

Department of Horticulture

1. Issar, K. (2019) "Utilization of apple pomace fibre for the preparation of acidophilus yoghurt" at 6th Agro Supply Chain Conference (ASCC) on 'Food Security and Sustainable supply chain in Agriculture and Horticulture' on 4th and 5th October 2019 at University of Petroleum and Energy Studies, Dehradun. She also acted as Sectional Chairperson in the above Conference.

2. Issar, K. (2019) Intellectual Property rights in Horticultural crops. In: Workshop cum Symposium on Traditional & Modern Animal Taxonomy and IPR issues for Biodiversity Protection & Conservation at Dolphin (PG) Institute of Biomedical and Natural Sciences, Manduwala, Dehradun on 25th to 29th November 2019.

3. Singh, M. and SS Negi (2019) Issues on Intellectual Property rights in Horticultural crops. In: Workshop cum Symposium on Traditional & Modern Animal Taxonomy and IPR issues for Biodiversity Protection & Conservation at Dolphin (PG) Institute of Biomedical and Natural Sciences, Manduwala, Dehradun on 25th to 29th November 2019.

Guest Lecture Delivered

Department of Physics



Dr. Aasheesh Raturi, HOD, Department of Physics delivered an invited lecture on "Multivariate analysis to predict the specific gravity of biomaterials- A chemometric approach" in National workshop organized by the Department of Mathematics on "Advancement in Applied Sciences" and held on 22nd-23rd October, 2019 at SRT Campus, HNB Garhwal University, Tehri.

Department of Agriculture

Dr. Pradeep Kumar Mishra, Associate Professor in department of Agriculture

Dolphin PG Institute, D.Dun. The lecturer was Prof. Aruna Bhatia, Department of Biotechnology, Punjabi University, Patiala, Punjab.





delivered a lecture on topic "Contract Farming" on 25-12-2019 at Krishi-Van Center, Dhulkot, Selaqui, Dehradun. **Department of Physiotherapy**

Dr. Sunil Bhatt, got an opportunity to give training to Indian Sports Physiotherapists at Sports Authority of



Dr. Sunil Bhatt training the participant

India, JNL stadium. It is a proud moment for all Dolphin family that he contributed for the betterment of Indian international sports. Among the participants were sports Physios from 'Sports Authority of India', Delhi, Panipat and National Institute of Sports Patiala (Punjab).



DSWC News

Daan Utsav: Dil ki **Suno Kuchh Karo**

Dolphin Students Welfare Council (DSWC) organized "Daan Utsav: Dil ki Suno Kuchh Karo" in collaboration with Goonj, an NGO on 5th October 2019. The students, faculty and staff donated various articles for under privileged members of the society through 'Goonj', an organization which collects cloths, books, utensils and stationary etc. from the students. It assured the students to distribute the collected items among the needy peoples after recycling.



DSWC organized an Dolphin (P.G.) Institute @ awareness programme organizing rogramme on Disaster in association with on Disaster

Disaster Management Awareness Programme

nai Disaster Re 10" October, 20

ASTER RESPO

राष्ट्रय आपदा मोत्

Management by National Disaster Response Force (N.D.R.F.) for students on 10th October 2019. NDRF team gave live demonstration of various disaster Live Demo being provided by NDRF team management

instruments and activities to the students for educating them on how to save themselves during the disaster.



Party for orphan children

students in case of disaster.

Team also gave the first aid tips to the

On the occasion of the birthday of the Chairman, Dolphin Institute, Pizza and chat party were organized on 27th November at Shri Shradhanand Bal Vanita Ashram and Akhil Bhartiya Mahila Ashram, Dehradun.

Watching Theatre Drama MOOCHH



DSWC in association with Kala Munch organised a visit for our students to watch theatre play 'MOOCH' on 12th October 2019 at town hall. It was

Interdepartmental Kabaddi Tournament (Boys and Girls)

appreciated by all Dolphinites.



Institute organised 2-days interdepartmental Kabaddi Tournament for Boys and Girls in its campus on 15th and 16th October 2019. The winners were: Girl's category Mixed Department; Boy's category Agriculture Department.

Sadhna Sharma won solo dance competition

Ms. Sadhna Sharma, B. Sc. Forestry 1st Semester won 1st prize in solo dance competition during 'Lamhe-2019', the Annual Fest of IMS With trophy



Unison University held on 15th November 2019.

Help those who need Most

Dolphin Students Welfare Council (DSWC) participated in the programme "FUHAR" organized by Hindustan News Daily on 7th December 2019. The Dolphinites donated sweaters, shoes, socks, school bags and stationary to the needy students of Government Primary School, Balbir Road, Dehradun. Shri Arun Mohan Joshi, SSP Dehradun was the Chief Guest on the occasion. He deeply appreciated the noble deed by the Institutes management and the enthusiastic participation of the College students.

Ms. Sadhna Sharma, B.Sc. Forestry gave dance performance and Ms. Aanchal Sharma, B.Sc. Medical Microbiology sang a song during the program.

H.N.B. Garhwal University Inter-Collegiate **Kabaddi Championship 2019**

H.N.B. Garhwal University, Srinagar (Garhwal) Uttarakhand Inter-Collegiate Kabaddi Championship 2019 was organised at Dolphin Institute from 21st to 23rd October 2019. 17 affiliated Colleges of HNBGU participated in the tournament. DAV (PG) College, Dehradun were the winners in girl's category, while BSM College,

Roorkee were the winners in boy's category. Shri Vipul Garg, DSW and



Shri N. K. Joshi, Sports Officer felicitated the winning teams.

DSWC celebrated Deepawali festival with under-privileged children

Dolphin Student's Welfare Council (DSWC) officials and students celebrated Deepawali festival with under-privileged children of Akhil Bhartiya Mahila Ashram and Shri Shraddhanand Bal Vanita Ashram, Dehradun. The children were served with various delicious food items and busted crackers. They enjoyed Chaat-Pakoras, Chinese food items and Dominos pizza a lot.



Human Chain for Polythene Free Dehradun

Nagar Nigam Dehradun in association with Uttarakhand Government organized a public awareness campaign for on 5th November 2019. Dolphinites making human chain

500 students along with faculty of the long human chain during the above institute became part of the 50 km

Public Awareness Campaign.

Uttarakhand Day- 2019

Dolphinites participated in Bharat Bharati programme organized by Uttarakhand Government on the occasion of Rajya Sthapna Divas held on 9th November 2019. College students performed Cheraw dance of Mizoram and Lavani dance of Maharashtra in front of large appreciative audience and guests. Shri Rajnath Singh, Defence Minister of India was the Chief Guest for the event. CM of Uttrakhand Shri T S



Pokhriyal Nishank along with other MPs and MLAs were also present during the event. Our students were rewarded for their performance.

Tribute to Gandhi Ji and Shashtri Ji

College students paid homage to the father of the nation, Mahatma Gandhi and former Prime Minister Shri Lal Bahdur Shatri on their birth anniversaries on 2nd October 2019. Number of activities were organized to commemorate the occasion. Students participated in essay competition on 'Plastic & the Environment' also took part in debate on the role of Gandhi Ji and Shashtri Ji in shaping history of India. The volunteers took oath to spread the message of truth, nonviolence, love and peace for the welfare of the mankind. DSW assured to felicitate the winners of essay competition with awards of prizes in a separate programme.

DSWC sponsored various sports activities

Dolphin Institute sponsored prize of Rs. 15000.00 for the winning team of Anusuya Prasad Memorial Volleyball Tournament held at SG.R.R. Intermediate College, Bhauwala, Dehradun on 29th November. Another prize of Rs. 10000.00 was sponsored for the man of the match in India-Nepal Blind Cricket Tournament held at Intl. Cricket Stadium at Dehra Dun on 8th Dec. 2019. Sri Vipul Garg and Dr. Gyanendra Awasthi made presentation on behalf of our College.

Children's Day

Commemorating Children's Day our College donated lab instruments and chemicals to Saraswati Vidya Mandir School, Manduwala, Dehradun on 14th November 2019. The articles were duly received by the Principal of the school. Members of DSW Committee conducted various social activities during their visit in the

Institute Volleyball team Felicitated



Volleyball team of Dolphin Institute, Dehradun won the H.N.B. Garhwal (Central) University Inter-collegiate Volleyball Tournament 2019. To celebrate their victory institute organised a felicitation ceremony on 16th November. Chairman of the institute Shri Arvind Gupta, Dr. Arun Kumar, Director, Principal Dr. Shailja Pant, DSW Shri Vipul Garg, Sports officer Shri N. K. Joshi and other dignitaries of the college felicitated the team for their outstanding achievement.

Shri Vipul Garg along with College यवा सम्मल् organised by Shri Rama Krishna

of Swami Vivekananda

students participated in a programme Mission Ashram, Dehradun on 6th October 2019 to commemorate the 125th anniversary of 'Chicago speech' of Swami Vivekananda. Three students from our college, Ms. Ankita Belwal from Agriculture Department, Ayush Singh from Horticulture Department and Ms. Shivani Bhatt from department of Physiotherapy delivered speeches on the life of



Swami Vivekananda during the programme which were highly appreciated by the audience and they were presented with certificate of appreciation by the Ashram.

Shri Ram Niwas Gupta Memorial Volleyball Tournament

The above tournament was hosted by the College on 25th & 26th November 2019. Dr. Arun Kumar, Director of the institute inaugurated the tournament. 21 teams (both men & women) from various colleges of Uttarakhand participated in the two days event. Dolphin won Ram Niwas Gupta Memorial Inter-University Volleyball Tournament Trophy 2nd time.

There was a stiff contest in the final of mens category in which Dolphin Institute defeated Graphic Era University. In women category, DAV (PG) College Dehradun defeated MKP



(PG) College, Dehradun in straight sets 25-17 and 25-19.

A Volleyball match in progress

Shri Arvind Gupta Chairman of the Institute presented trophies and certificates to the winner teams. Cash prizes of Rs 15000.00 & 10000.00 were given to the winners and runners up men team and Rs. 10000.00 & 5000.00 were given to the winners and runners up women team. Shri Sunil Kaul, Joint Director, Shri Vipul Garg, DSW and Shri N. K. Joshi, Sports officer were also present during the

Blood Donation Camp

tradition this year too a Mega Blood Donation camp was organized in College on 27th November 2019 to celebrate the birthday of Shri Arvind Gupta, Chairman, DIBNS. The

camp was organized by DSWC in collaboration with IMA Blood Bank,



NCC, NSS, Scouts & Guides and YRS.



Doon Hospital Blood Bank and Red Cross Society. The camp was supported by College students of Altogether 170 units of blood were donated by students & faculty members. Shri Arvind Gupta, Chairman was one of the first



Field Visits/Educational Tours

Department of Biotechnology

1. Participants of add-on course on Basics of Plant Tissue Culture Techniques, conducted by Department of Biotechnology visited Tissue Culture Labrotory, Botanical Survey of India, Dehradun on November 22nd, 2019 where they were explained about in-vitro propagation and ex-situ conservation of the rare, threatened and economically important plant species of the Himalayan region. Trainees were explained enhanced morphogenetic response specifically rooting of in vitro shoots, secondary metabolite-producing cell line development, germination of synthetic seeds etc. They were also imparted knowledge that in vitro propagation offers not only a means for mass multiplication of existing Germplasm stocks, but also for the conservation of important elite and RET species which are facing danger of



The production of large no of multiple shoots and root biomass through plant tissue culture is one of the important approaches to obtain medicinally important alkaloids and other secondary metabolites, along with to conserve the natural reserves of rare, endangered & threatened species.

2. Students of Department of Biotechnology visited Tissue Culture Labrotory, Division of Genetics and Tree Improvement, Forest Research Institute, Dehradun on November 22nd, 2019. Dr. Ajay Thakur, Scientist-



in-Charge provided vital information on clonal propagation and plant tissue culture. The Students obtained knowledge on new trends in clonal propagation, tissue culture and cryopreservation of Rare and threatened species (RET), in vitro variation, polyploidy of important forest species and molecular taxonomy. Dr. Thakur imparted knowledge on clonal propagation of selected genotypes of important trees and bamboos such as Corymbia interspecific hybrids: a fast growing timber bamboos which is otherwise difficult to propagate by other means.

Department of Botany



M. Sc. Botany I sem. and III sem. students undertook academic field visit to Botanical Survey of India, Dehradun on 6th November 2019. Students visited Botanical garden, Orchid house, Fern house, Museum and Herbarium of BSI. The scientists and technical officers of BSI gave briefing to the students. The students also learnt about the scope of

herbarium, museum, garden and conser- vatory for various groups of

Department of Horticulture

1. B.Sc. Horticulture Ist semester students undertook a field visit to low lying hills of Sahastradhara valley on 12th December 2019 under the guidance of Dr. Sas Biswas, Dr. Tahir Nazir, Dr. A K Uniyal and Dr. Mandeep Kaur.



2. B. Sc. Horticulture Vth semester students undertook a visit to Krishi Van Training Centre, Selaqui on 28th November 2019 under the guidance of Dr. Ritu Pandey and Mr. Sanjay Singh Negi.



3. Students of Horticulture department participated in 'Krishi Samwad' on the occasion of Farmer's day at village Sherpur Block, Selagui, Dehradun on 23rd December 2019.



Department of Forestry

1. Students of B.Sc. Forestry 1st Semester visited Regional Sericulture Research Station, Sahaspur on 14th October 2019.



2. Students of M.Sc. Forestry I Semester visited Jaunpur and Mussoorie Forest Range for Ecological cum Biodiversity Assessment Exercises on 25th November 2019.



3. Students of B.Sc. Forestry I Semester visited FRI Museums for Forestry awareness among new students on 29th November 2019.



4. Students of B.Sc. Forestry V Semester visited Botany Division of FRI, Dehradun and Xylarium, Wood Anatomy Discipline, FRI Ddun on 30th November 2019.

5. Students of B.Sc. Forestry III Semester visited Seed Testing Lab and Xylarium, Wood Anatomy Discipline, FRI Ddun on 4th December 2019.

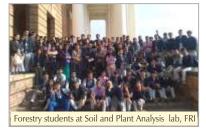


6. Students of B.Sc. Forestry III Semester visited Timber Depot, Selaqui on 5th December 2019.



7. Students of B.Sc. Forestry III Semester visited Jagatpur Khadar Forest, Jhajhra Forest Range Dehradun to study Silvicultural practices on 6th Dec 2019.

8. Students of B.Sc. Forestry V Semester visited Soil & Plant Analysis Lab, Forest Soil & Ecology Discipline, FRI Dehradun on 9th December



9. Students of B.Sc. Forestry I Semester undertook Geological & Botanical Exercises at Sahastradhara Hills, Dehradun on 12th December 2019.



Department of Agriculture

1. Students of B.Sc. Agriculture VII Semester were on an educational visit to "Aanchal Dairy" Dehradun on 16th November, 2019. Students were explained milk processing and the milk collection procedure though cooperative societies.



2. Students of B.Sc. Agriculture VII Semester were on an educational visit to "CAP" at Selagui, Dehradun, on 20th November, 2019. Dr. G. Shah explained to students Cultivation practices and Identification of different Aromatic plants, and distillation procedure of lemon grass.



Important Days

World Soil Day

Forestry & Horticulture students along with faculty observed World Soil Day-2019 on 5th December 2019 in field with a brief event 'Soul of Soil' comprising Field Talk,



Nazir, Field quiz on International Future".

micro-level soil profiling by Dr Tahir Theme "Stop the erosion, Save our

Kisan Diwas

Department of Agriculture and Horticulture organized Krishi Samwad on the occasion of "Kisan Diwas" on December 23, 2019 at village-Sherpur, Block-

Vikasnagar, Dehradun. Approximately fifty five farmers attended the programme. During the programme farmers raised issues related to their crops, namely, sugarcane, wheat, fruits and vegetables etc. Female farmers were interested in processing and preservation techniques for fruits and vegetables. The main objective of programme was direct interaction with farmers related to their problems.

Breast cancer day

October is known as breast cancer awareness month and a worldwide campaign is organized during the month every year. On 10th October2019, Department of Pathology took initiative for highlighting the importance of breast cancer awareness in the society and organized a guest lecture on "Fight against breast cancer" by Dr. Ankita Juyal, Associate Professor of Physiology, Govt. Doon Medical College. Sign, symptoms, etiology,



diagnosis and prognosis of breast carcinoma were discussed in detail during the session. Students raised lot of queries which were well satisfied by the speaker.

Research Publications

Department of Forestry

1. Singh, V., Chauhan, D.S. and S. Dasgupta (2019) Variation in species distribution pattern and dominance with altitude and aspects of Garwhal Himalayan Oak Forest. Journal of Tree Sciences, 38 (1): 15-22.

2. Puspwan, KS, Singh, V and B.N. Pandey (2019) Species richness, plant diversity and composition with respect to altitudinal variation in Western Nayar watershed, Uttarakhand, India. International Journal of recent Science Research, 10(06):177-182.

Department of Horticulture

1- Negi, SS, Chandra, N. and Ankush Singh (2019) Postharvest Physicochemical and mechanical changes in apple fruits. Journal of Plant Science-PLANTICA, 3: 347-352.

Department of Agriculture

Meena, J. K., Gupta, A., Chamola, B. P. and Pant, N. C. (2019) Studies of insect and disease incidences in French bean genotypes under net-house conditions. Journal of Entomology and Zoology Studies, 7 (5):1147-1150.

Meena, J. K., Chamola, B. P., Pant, N. C., Singh, K. K. and Rana, D. K. (2018) Effect of integrated nutrient management on yield & growth performance of French bean (Phaseolus vulgaris L.) under subtropical conditions of Garhwal Hills. International Journal of Chemical Studies, 6 (2): 3356-3358.

Meena, J. K., Gupta, A., Kumar, C., Pandey, C. S., Pant, N. C. and Singh, S. (2019) Influence of integrated nutrient management on growth and yield of French bean (Phaseolus vulgaris L.) Cv. Pant Anupama under valley conditions of Dehradun. Journal of Pharmacognosy and Phytochemistry, 8 (6): 1032-1035.

Distinguished Alumni

Dr. Seema Saini, Professor, Dr. D.Y. Patil College of Physiotherapy, Pune is an alumni who completed her Master of Physiotherapy - Musculoskeletal Disorders from Dolphin Institute in the year 2005.

Dr. Saini with 14 years experience as a Physiotherapist, has a firm understanding of how to determine root causes of bodily pain and retrieving motor functions. Well versed in a broad range of treatments and modalities for restoring functions and minimizing disability.

Dr. Seema Saini has been awarded 'Rashtriya Shiksha Ratan Award 2019' in Global Teachers Conference 2019at



Yashwantrao Chavan Center, Mumbai on 22nd December 2019 in Recognition of "Meritorious Services, Outstanding Performance and remarkable Role as a Teacher for Building Sustainable Global Society". Our heartiest congratulations on the outstanding achievement and the distingui -shed honor bestowed on Dr. Saini. As an alumni she has made all of us proud.



Faculty Corner

Organic Foods: importance in nutrition

Organic foods are products that are produced, prepared, and processed either without the use of any chemicals or with restricted use of approved chemicals i.e., limited use of pesticides, fertilizers, or chemical preservatives, and may not affect human health in harmful ways since it does not contain any elements of toxic chemicals. Consequently, organic foods are increasingly gaining popularity as public belief is that it is healthier compared to the conventional ones leading to their increased demand over the past decade. The use of Low External Input Technology (LEIT), natural techniques such as green manure to fertilize the lands and crop rotation in pest and disease control work absolutely well in producing safer and, healthier final food products.

The positive effects of antioxidants on overall health have been established in a number of scientific studies, especially those derived from organic foods. This is because organic foods are free of foreign chemicals that normally react with vitamins, organic compounds and minerals thus lowering the essential positive impacts of antioxidants in food products. Recent studies propose that the consumption of organic food can contribute to more intakes of nutritionally advantageous antioxidants like ascorbic acid, beta carotene, anthocyanin, vitamins A & E, Flavonoid, polyphenols etc., and limited exposure to heavy metals. The positive impacts of antioxidants obtained from organic foods include prevention of heart disease, cancer, vision problems, premature aging, and cognitive malfunction.

The traditional or industrial farming practices aim at enhancing production and farm output by all means necessary. For example, the notion of producing more cereals, more meat and bigger fruits through genetic modifications and use of growth hormones seems to solve some of the world's food insecurity concerns. The effects are not yet visible, but in the long-term, the consequences are sensitivity to allergens and a major reduction in immune system strength.

When humans consume the nonorganic food products, they indirectly consume the antibiotics, growth hormones and vaccines which weaken immune systems because of byproducts overdose. Humans are susceptible to various health issues and disease, and most of the time they have to take precautionary measures to ensure they remain healthy. This is achieved by getting a variety of vaccinations and antibiotic drugs when a new strain of virus or bacteria is realized. Similarly, nonorganic food sources (especially livestock and feeds) use vaccines, growth hormones, animal byproducts, and antibiotics to treat

and feed the animals which are ultimately passed on to us on consumption of such food.

Organic farming does not use any kind of dangerous chemicals to keep away pests and diseases. The practices are natural and thus do not harm the consumer. Aspects such as bio magnification are lessened via the practice of organic farming as chemical pesticides, fertilizers, herbicides, and artificial growth hormones are all prohibited on an organic farm. Therefore, organic food products are free of contamination with health harming chemical substances.

Organic food products such as organic meat, organic milk, organic fish, and organic poultry contain very high nutritional content because they do not contain modified ingredients compared to the conventional agricultural food products. Another factor that makes them highly nutritious is that they are given time to develop and are provided with the best natural conditions for growth. The vitamin and mineral contents of organic food products are always high as the soil life and health offers the most suitable mechanism for crops to access soil nutrients.

Organic foods are GMO free, that is, they are not genetically engineered in nature. Genetic engineering of food products is a huge concern in the current era. They are foods or plants with altered DNA in manners that do not take place in nature, usually to enhance resistance to pesticides/ herbicides. While there is lack of conclusive evidence of its dangers, food safety advocates are concerned that long-term research has not been conducted to confirm their safety.

The food safety advocates believe GMOs are a leading cause of slowed brain growth, internal organ damage, gastrointestinal disorders, and the thickening of the digestive tract. Thus, the health benefit of consuming organic food is that they are free of GMOs, a very common component in non-organic foods.

Organic foods are locally grown and pose very minimal interference to the environmental resources that support healthy living. Since harmful chemicals are forbidden in organic farming, there is minimum water, air, and soil pollution therefore ensuring a healthier and safer environment. To be precise, organic farming lessens the longterm human health implications caused by air, water, and soil pollution. Organic food products are guided by very strict standards of production, processing and preparation. Not at any time will you find chemical preservatives used in organic foods. As such, organic food is often fresher and full of flavor since it doesn't make use of preservatives to make it have a longer shelf life. Majority of organic food products are sold or availed

locally next to where they are produced.

Organic meat and milk is of the highest quality. There are claims that meat is not good for human health. However, it is the CAFOs that normally worsen meat and milk quality by introducing foreign and unhealthy antibiotics as well as other drugs in the final food product. Consumption of milk and meat that is organically produced, prepared and processed, are guaranteed of products with higher quality vitamins and minerals. For instance, organic milk is proved to have 60% more omega-3 fatty acids, antioxidants, vitamins, and CLA than non-organic milk. Also, organic cows are pasture grazed which results in the better meat quality. New studies confirm that organic crops have 48% lower levels of the toxic metal cadmium than conventional crops.

Some other benefits of locally grown foods is that the money stays within the local economy. More money goes directly to the farmer, instead of distribution chain. Freshness: Local food is harvested when ripe and thus fresher and full of flavor. Small local farmers often use organic methods but sometimes cannot afford to become certified organic.

> (Dr. Arnab Khanda) Assistant Professor Department of Agriculture

Training & Placement Cell Activities

PDP & Communication Skill Enhancement

Interview's Arranged: Results

Training & Placement Cell arranged off campus interviews for the students of the institute and the results of the interviews were as below:

- 1. Ms. Savita Rawat of M. Sc. Pharmaceutical Chemistry- Final year was selected in Avalon Cosmetics (Unit of Vanity Case Group of Companies), Paonta Sahib (H.P.) on 03.10.2019. She joined the company on 09.10.2019.
- 2. Mr. Yashpal Singh of M. Sc. Pharmaceutical Chemistry- Final year was selected in Sharon Biomedicine Ltd., Dehradun on 02.12.2019. He joined the company on 05.12.2019.

T & P Cell of the Institute

conducts regular interactive

sessions on Personality

Development & Communication

Skills enhance-ment through Shri

Rahul Mishra, Director, Officers

Academy, Dehradun. The

October, 16th November, 23rd

November, 30th November and 14th

December 2019 respectively. Shri

Mishra explained to students various

techniques to enhance the

communication skills and also

- 3. Mr. Akshaiwar Nath Pandey of M. Sc. Pharmaceutical Chemistry- Final year was selected in Themis Medicare Ltd., Haridwar on 07.12.2019. He joined the company on 09.12.2019.
- 4. Mr. Tarun Kumar of M. Sc. Pharmaceutical Chemistry- Final year was selected in Akums Drugs and Pharmaceuticals Ltd., Haridwar on 09.12.2019. He joined the company on 12.12.2019.
- 5. Mr. Amit Kumar Show of M. Sc. Microbiology- Final year was selected in US MNC Cynet Systems Inc., Dehradun on 10.12.2019. He joined the company on 12.12.2019.

NCC ACTIVITIES

Poster competition on: Swach **Bharat Abhiyan**

To commemorate Gandhi Jayanti on 2nd October 2019 NCC cadets of the College organized poster making competition to spread the message of 'Swach Bharat Abhiyan'. Students from other colleges enrolled under 29 UK Bn. NCC also participated in this event. Altogether 150 cadets participated in the event.

Drill Activity

Drill and personality development classes and lecture for NCC cadets were under taken by ANO Lt. Rohit



Maithani and CTO Shri Pankaj Gusain. 70 cadets took part in the above programme including one Senior under officer namely Habib Ur Rahman, two under officers namely Md. Aslam and Ms Kalpana Mukhiya



with SD and SW cadets. Some classes were also held under the guidance of PI staff of 29 UK Bn.

Swachhata Awareness Rally

On 14th October 2019 Dolphin NCC cadets organized a rally on 'Swatch Bharat Abhiyan' from College Campus

to Manduwala Chowk Dehradun. Cadets carried self made posters and slogans. Motto of the rally was to spread awareness about cleanliness of our surroundings.

Uttarakhand Divas

Uttarakhand Government on 9th November 2019 organized a programme to celebrate the anniversary of Uttarakhand day at Parade Ground Dehradun. This programme was Presided by Shri Rajnath Singh, Honb'le Defense



Minister of India and Trivendra Singh Rawat, Honb'le Chief Minister of Uttarakhand and large number of guests. The programme reflected cultural heritage of Uttakhand through various dance recitals, instruments and music performed by students of Uttarakhand. Our students performed on the Stage and the NCC cadets of the institute also took part in the above programme.



Valley of Words

A prestigious literary festival was held from 17 to 21 Novemer 2019 at Madhuban Hotel, Dehradun, in which



many officers of central and state government participated during the launching of different books and sharing their experiences through motivational discussions. Display of beautiful canvases, posters, drawings,



historic stamps, historic coins etc were also held. Following cadets, namely Senior under officer Habib Ur Rahman, under officer Md. Aslam and cadets Rohit Thakur, Jagganada Paik, Ahishek Kumar and Abu Md. Zakaria along with ANO Lt. Rohit Maithani actively participated in the event.

Advance Leadership Camp 6 -Coimbatore

ANO Lt. Rohit Maithani along 16 cadets from all over Uttarakhand attended ALC VI at Coimbatore from 6th Dec to 17 Dec 2019. This camp provided the unique opportunity for them to learn from Indian Naval Academy, Air force Academy cadets and officers detailed outline on leadership under pressure conditions. SSB capsule was the main attraction of the camp.

Institute also shared his experiences discussed different aspects of with the participants. personality development. Students

Industrial Training

sessions were organised on 19th Shri Rahul Mishra conducting PDP session

Training & Placement Cell arranged summer/industrial trainings for the following students:

Tushar and Priyanshu Kapil, M. Sc. Pharmaceutical Chemistry I year have

been perusing 01 month industrial training from 20th December 2019 to 20th January 2020 at India Glycols Ltd., Dehradun.

interacted freely and had questions on

setting up the goals, time

management, analysis of situation and

work management etc. Shri V K

Nagpal, Additional Director of the



Deepawali Function

Institute, Dehradun. Cultural

Pre-Diwali Bash-2019 was held on programmes and games were 24th October 2019 at Dolphin PG organized and sweets and gifts were distributed to all on the occasion.





Activities: Bharat Scouts & Guides

Bharat Scouts & Guide Unit of the institute organized the following programmes to develop discipline, patriotism and nationality among the students under the guidance of Dr. A. K. Pundir and Dr. Manoj Kumar Bhansala, Programme.

1. **16.11.2019:** A training programme was conducted in which Shri V. Dhami, Instructor trained the Rangers & Rowers on uniform distribution. During the programme game activity was also organised which was won by Rower Ms. Mauli Paul.

- 2. 23.11.2019: Training programs on 'Flag making' and 'Food processing' techniques were organized in the premises of the institute. During the programme game activity was also organised which was won by Rower Ms. Mauli Paul.
- 3. 30.11.2019: Drill training was conducted by Shri V. Dhami, Instructor for Rangers & Rowers in the premises of the institute. During the programme game activity was also organised which was won by Rower Ms. Sumayya

SCIENTIFIC ADVANCEMENTS

Medicine Nobel Honors Discovery of How Cells Deal with Oxygen

Medicine has been awarded jointly to American scientists William Kaelin Jr and Gregg Semenza, and British biologist Sir Peter Ratcliffe. The trio won it for discoveries of how cells sense and adapt to oxygen availability.

The 2019 Nobel Prize in Physiology or The committee said the trio's discoveries paved way for "new strategies to fight diseases including anaemia and cancer. (https://medicalxpress.com/news/201 9-10-nobel-prize-medicineawarded-scientists.html)

Physics Nobel Awarded For Cosmology and Exoplanet Discoveries

jointly to Michel Mayor and Didier Queloz. Mayor and Queloz received the prize for discovery of an exoplanet

The 2019 Nobel Prize in Physics has orbiting a solar-type star. The 2018 been awarded with one half to James Nobel Prize in Physics was awarded Peebles for theoretical discoveries in for inventions in laser physics physical cosmology and the other half (https://www.sciencenewsforstudents .org/article/physics-nobel-2019discoveries-cosmic-evolutionmicrowave-exoplanets).

Lithium-Ion Batteries Work Earns Nobel Prize in Chemistry

The 2019 Nobel Prize in Chemistry has been awarded to John B Goodenough, M Stanley Whittingham and Akira Yoshino for the development of lithium-ion batteries. With this, German-born American scientist John B

Goodenough became the oldest Nobel laureate at the age of 97. The previous record-holder was Arthur Ashkin, who won Physics Nobel in 2018 at 96 (https://www. nobelprize.org/prizes/lists/all-nobelprizes-in-chemistry).

Olga Tokarczuk, Peter Handke Win Literature Nobel for 2018, 2019

The 2018 and 2019 Nobel Prize in Literature were awarded to Polish author Olga Tokarczuk and Austrian author Peter Handke, respectively. The Nobel Prize in Literature wasn't awarded last year after allegations of sexual misconduct and financial malpractice in

Swedish Academy. The Nobel Prize in Literature has now been awarded 112 times to 116 Nobel laureates (https://www. thehindubusinessline.com/news/vari ety/peter-handke-and-olgatokarczuk-win-nobel-prizes-forliterature/article29643024.ece).

Academic Achievements (College Toppers)





79.57%

M.Sc. MLT-3rd Sem.



Upendra Aryal 75.28%

B.Sc. MLT-1st year



Md. Aslam 81.88%

M.Sc. Biotechnology-3rd & 4th Sem.



Sohini Sharma 8.58 CGPA

M.Sc. Pharmaceutical Chemistry- 3rd & 4th Sem.



Divya Jyoti Singh 8.67 CGPA

B.Sc. Biotechnology-5th & 6th Sem.



Ayushi Saini 8.53 CGPA

M.Sc. Forestry-1st & 2nd Sem.



Kallempeta Uma Maheshwari 8.61 CGPA

M.Sc. Microbiology-1st & 2nd Sem.



8.11 CGPA

B.Sc. Agriculture-3rd Sem.



Tilak Bhusal 81.71%



Alpana Bhandari 79.44%

B.Sc. MLT-2nd year



Shabnam Anis 84.44%

M.Sc. Chemistry-3rd & 4th Sem.



Rama Saini 8.17 CGPA

M.Sc. Microbiology-3rd & 4th Sem.



8.24 CGPA

M.Sc. Botany-1st & 2nd Sem.



Neelam Gautam 8.42 CGPA



Divya Jyoti Singh 8.75 CGPA



Vikram Singh Rawat 8.27 CGPA



M.Sc. MLT-

Aisha Siddiqua 78.57%

B.Sc. MM-2nd year

Apeksha Saikia 80.88%

M. Com-3rd & 4th Sem.



Karge Koyu 7.46 CGPA

M.Sc. Physics-3rd & 4th Sem.



7.92 CGPA

M.Sc. Zoology-3rd & 4th Sem.



Insha Muzaffar 8.38 CGPA

M.Sc. Botany-1st & 2nd Sem.



Joint

Toppers

Sweetv 8.42 CGPA

M.Sc. Zoology-1st & 2nd Sem.



Joint

Toppers





8.00 CGPA

M.Sc. MLT-2nd Sem.

Aisha Siddiqua

80.00%

B.P.T.-3rd year

Deepak Yadav 78.25%

M.Sc. Biochemistry-



Asna Shamim 8.42 CGPA

M.Sc. Botany-3rd & 4th Sem.



8.42 CGPA

B. Com. -5th & 6th Sem.



Shivani Bhatt 8.00 CGPA

M.Sc. Chemistry-1st & 2nd Sem.



Rama Saini 8.08 CGPA

M.Sc. Zoology-1st & 2nd Sem.



8.25 CGPA **B.Sc.** Horticulture-



8.45 CGPA

Mahatma Gandhi's 150th **Birth Anniversary NSS News**

NSS Unit of the institute organized Mahatma Gandhi's 150th Birth Anniversary in institute premises on 2nd October 2020. Students participated in various activities like essay competition on 'Plastic & the Environment', Nukkad Natak on 'Non-violence'. Students also spoke about the contribution of Gandhi ji

in Independence of India. The volunteers promised to spread the message of truth, non-violence love & peace for the welfare of the humankind. NSS students took oath to follow the path shown by Bapu and face the challenges and future prospective of social services with the experiences faced by



Mahatma Gandhi, the father of the