



Dolphin Insight

The Quarterly News Bulletin of Dolphin (P.G.) Institute of Biomedical & Natural Sciences, Dehra Dun-248 007
{Recognised by UGC U/s 2 (f), Local Chapter NPTEL}

Volume : 10

Issue : 02

April - June, 2018

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Entrepreneurship Development Programme on 'Food Processing Industries'

The six days Entrepreneurship Development Programme on 'Food Processing Industries' was organised under the aegis of department of Capacity Building & Skill Development Cell of the institute in collaboration with Horticulture department from 2nd to 8th April 2018. The EDP was conducted with the objectives of training participants on project formulation, management techniques, marketing and finance to develop skills for setting business start-ups, know how on opportunities and financial aid and information regarding market and start-ups for new entrepreneurs and other related assistance being provided by central and state governments. 80 participants from different Educational Institutions and Non Government Organisations participated in the programme. The EDP was inaugurated by Dr. Dhan Singh Rawat, the Minister for Higher Education, Government of Uttarakhand. The training manual for the EDP was released during the inaugural. The key note address was delivered by Dr. Rattan Kumar, Jt. Director, Uttarakhand Horticulture Department. Following which Dr.



Dr. Dhan Singh Rawat lighting the lamp

Arun Kukhsal, Director, Institute of Entrepreneurship & skill development and Dr. Sanjay Agarwal, OS FDP delivered talks on Entrepreneurship, concept, development and incentives.



Dr. Shailja Pant, Dr. Arun Kumar and Dr. Sanjay Agarwal addressing the audience



A glimpse of audience attending the seminar



Dignitaries on the dais releasing the training manual

On the 2nd day of the EDP Commander Yog Raj Negi and Dr. Sanjay Aggarwal discussed the



Babujee and Chairman welcoming the Chief Guest
Dr. Dhan Singh Rawat & Shri Surendra Mittal, GOH.

following topics with the participants, namely, Goal setting, who am I, NLP for Entrepreneurs and Fearless Public Speaking. On third day an educational tour was organised for the participants to Doon University and Krishi Utpadan Mandi Samiti Dehra Dun, where in Dr. H.C. Purohit, Dean Management delivered a lecture on "Management", to the participants Dr. Sudhanshu Joshi on "Entrepreneur Opportunity", whereas Dr. Prachi Gupta delivered a talk on "Social Innovation and Development". Shree Vijay Thapliyal, Secretary, Krishi Utpadan Mandi Samiti, Dehra Dun delivered detailed information to the participants on the working of E-Mandi and E-NAM.

On the 4th Day of the workshop participants were provided hands-on-training for preparing Pickles, Jam, Murraba, Juice and other produces by food processing technology by the experts from Horticulture department of Uttarakhand Government. The participants also visited Bagwan Samiti of Thakurpur, Sehaspur Block, Dehradun. On fifth day Participants were delivered a talk on Quality of an entrepreneur by the Chairman of the Institute,

Shree Arvind Gupta, on Quality Assurance in Food Processing Industry by Dr. Shailja Pant and on Financial Education, Market Survey and Preliminary Project Report Preparation and by Dr S. K. Agarwal. On sixth day Dr. Gulshan Dhingra, IPR Expert and faculty of PLMS PG College Rishikesh delivered a talk on Intellectual Property Rights, in addition participants were apprised detailed information on various topics by different experts, namely Dr. Vijay Veer, Ex Director DRDO on "Food Processing Technologies Developed by DRDO", Dr S. Sen Gupta Pandey, Addl. Commissioner of Food and Civil Supply of Uttarakhand Government on "Legal Aspects of Food Processing Industry", Dr. G. C. Kandwal from Food Safety and Security Agency of India (FSSAI) on "Prospects of Food Processing Industry in Uttarakhand", Shree V.K. Nagpal, Ex AGM of Punjab National Bank on "Accountancy and Book Keeping". Ms Asha Rani Kapoor, The Management Guru delivered her enthralling talk on topic "who



Glimpses of EDP activities

stops you".

At the end of session The Valedictory was organised, in which Chief Guest Shree Ram Nivas Gupta, General Secretary, Akhil Bhartiya Jankalyan Samiti distributed the certificates to the participants. Shri Gupta emphasized



Babujee presenting the memento to the Chief Guest

that Entrepreneurship was an integral part of Indian culture. He stated that Food Processing was a traditional activity in every home since ancient times and Ghee, Curd, Butter, Pickles, Murraba, Juice, Extracts of Pulses, Besan, Masale and many other food products were prepared in every home by the housewives themselves. However, with the change in time, all those food and dairy products turned into business. He further said that the business gives employment and valuable products to a large number of population which helps to uplift in the social and economic system of a country.

Dr. Arun Kumar, Director of the Institute, presented, products prepared by the participants during the workshop, to the chief Guest. Dr. Sanjay Agarwal, Organising secretary of the program delivered Vote of Thanks to all.

From Chairman's Desk...

Plastic Pollution



Plastic pollution is the accumulation of plastic products in the environment that adversely affects wildlife, wildlife habitat and humans. Plastics that act as pollutants are categorized into micro-, meso- or macro debris, based on size. Plastics are inexpensive and durable, and as a result levels of plastic production by humans are high. Moreover, the chemical structure of most plastics renders them resistant to many natural processes of degradation and as a result they are slow to degrade. Together, these two factors have led to a high prominence of plastic pollution in the environment.

Plastic is made from toxic compounds known to cause illness. Living organisms, particularly marine animals, can be harmed either by mechanical effects, such as entanglement in plastic objects or problems related to ingestion of plastic waste, or through exposure to chemicals within plastics that interfere with their physiology. Humans are also affected by plastic pollution.

According to a paper published in Science recently, more than 300 million tonnes of plastic are manufactured every year. From the 1950s up to 2018, an estimated 6.3 billion tonnes of plastic has been produced worldwide, of which an estimated 9% has been recycled and another 12% has been incinerated. India generates around 56 lakh tonnes of plastic waste annually, while Delhi alone accounts for 9,600 metric tonnes per day. In fact, over-reliance on single-use or disposable plastic has proven to be an environmental as well as human health hazard.

Finding the way out

Banning plastic products is not the solution as they play an important role in our daily lives and for the economy. Plastic has multiple functions that help tackle a number of challenges our society faces. Light and innovative materials in cars or planes save fuel and cut carbon dioxide emissions. In packaging, plastics ensure food safety and reduce food waste. However, the problem lies in the way plastics are currently produced, used and discarded.

Remember that because plastic doesn't break down easily (if ever), recycling plastic means that it is still plastic, just being used for a different purpose. Therefore, you're not actually reducing plastic amounts or exposure, even in the recycling process.

Try and select items that come in non-plastic recycled and recyclable packaging, to do your best to properly handle items that can't be reused. Check everything before you put it in the trash, as more and more items are able to be recycled these days.

The mantra 'if you can't reuse it, refuse it' underscores an active engagement required from the governments, general public, civil society and private sector in the fight against plastic pollution. One hopes that wiser counsel will prevail to save us from frightening prospects of prediction that if no action is taken, by 2050 there could be more plastic than fish in the oceans! India has a role cut out to lead the way in this global battle against menace of plastics.

Recycling is the best available way to tackle the waste, though it is not the ideal solution. India, which hardly recycles plastic waste, has its task cut out. It dumps a huge quantity into the ocean although it generates a relatively small amount of this waste per person — 3 per cent of 0.34 kg per person a day of all solid waste generated. The huge population offsets the advantage of low plastic consumption in the country. Cutting down on the use of plastic should also begin in earnest, and the first item that has to be targeted is the single-use plastic bag.

What are we doing to stop plastic menace?

The World Environment Day 2018, with India as the global host, has the theme 'Beat plastic pollution'. Prime Minister recently mentioned it in his radio show Mann ki baat and called for saving environment. But Mann ki baat wouldn't yield any outcomes until it becomes Jan-jan ki baat and the citizens of India realize the drastic effects of plastic and feel the need for saving environment.

What can be done by citizens?

Although the government's job is to spread awareness, let's not expect everything from it. We all have to change our attitude and act responsibly to put an end to our problems. Plastic bags were once a modern convenience but can be efficiently replaced by reusable bags, many of which fold up compactly in order to be portable. Disposable water bottles are causing immense damage to environment; it's time to replace them with re-usable bottles. Plastic food containers, lids, and utensils are all easily replaced by reusable containers, which will cut down significantly on even a single meal's waste. Low-cost replacements, such as bamboo utensils in place of plastic ones in local restaurants need to be promoted. We all can try and select items that come in non-plastic recycled and recyclable packaging, to do our best to properly handle items that can't be reused.

We owe our existence to mother Earth and it's our duty to save and protect earth. India can be a better country, if we all become better Indians.

-Chairman

New Faculty

1. Dr. Pallavi Chaudhary, Ph.D., M.Sc.(Ag.) joined as Assistant Professor in the Department of Agriculture on 21/04/2018.



2. Dr. Pradeep Mishra, Ph.D., M.Sc. (Ag.) joined as Associate Professor in the Department of Agriculture 01/06/2018.



Indian Nobel laureates

1979 Nobel Prize for Peace

Mother Teresa

Prize Motivation: Humanitarian work

Saint in the Gutter - and Saint in Heaven

At the age of twelve, the Catholic Albanian girl Agnes Gonxha Bojaxhiu heard a call. God demanded that she devote her life to Him. She entered a nunnery, received an education, and was sent to Calcutta in India to be a teacher. Her new name was Teresa. In India she received a second call from God: to help the poor while living among them. She founded a new sisterhood, Missionaries of Charity.



Although she had no funds, she depended on Divine Providence. Mother Teresa and her helpers built homes for orphans, nursing homes for lepers and hospices for the terminally ill in Calcutta.

The modest nun became known all over the world. She was regarded as a spokesperson for the Vatican. In 2003, the Pope took the first step towards her canonization. In 2016, Mother Teresa was declared a saint by Pope Francis.

Background

(1910-1997)

Place of Birth: Skopje, Republic of Macedonia

Residence: India

Affiliation: Missionaries of Charity, Calcutta

Seminar on Women Empowerment & Legal Awareness

A One Day Seminar on Women Empowerment and Legal Awareness was jointly organized by District Legal Authority, Dehra Dun and Dolphin PG Institute on 6th June 2018. The students and the local residents of the nearby rural areas participated in the seminar. Govt. officials from various departments like, Health, Social Welfare, Women and Child Development, UREDA, Agriculture and Revenue etc. also interacted with the participants. Representatives from various NGOs from nearby Panchayats, villages also participated.

Shri Abdul Qayum, PCS Civil Judge/ Secretary District Legal Authority presided over the seminar. Shri Qayum in his inaugural address said that National Legal Authority was formed in 1987 when it was realized that due to lack of finance and awareness the common man is not benefitted from the legal system. Therefore, State and District Legal Authority were formed to provide free



Chairman Shri Arvind Gupta with Justice Abdul Qayum and other dignitaries

of charge legal advice and lawyers to fight the cases for them. He highlighted various laws to protect women from exploitation and to safeguard their interest. He also advised the menfolk that they should treat women with equality and respect, while on the other hand the women should also not misuse their rights.

Shri B.K. Garg, Secretary Family

Welfare emphasized that women empowerment in real terms will be achieved only when the mind-set of the people will change and they start treating their sons and daughters equally. Shri S.S. Chauhan, Legal Expert talked in detail about the laws under IPC to safe guard the interest of the women. He also suggested the participants to spread the awareness in their neighbourhood.

Shri Arvind Gupta, Chairman, Dr. Shailja Pant, Principal, Dr. Arun Kumar, Director Mr. Sunil Kaul, Joint Director, IQAC Coordinator Dr. Shruti Sharma, Mrs. Malti Sawhney, Mr. Pankaj Gusain, Shri Sudhir Bharti, Dean Mr. Vipul Garg, Dr. GN Sinha, Dr. Deeptee Warikoo, Dr. Vivek Chauhan, Mr. Vijay Ratna Panwar and large number of girl students were present in the program. The programme was very well anchored by Dr. Ashish Raturi- HOD Department of Physics.



Justice Abdul Qayum addressing the students

Resource Person

Dr. Arun Kumar, Director, Dolphin Institute acted as Sessional Chairperson in the technical session of Workshop on "Launching of Projects under National Mission on Himalayan Studies cum Stakeholder Consultation Workshop" organised by Zoological Survey of India, Kolkata on 26th April 2018. He headed the panel for discussion with stake holders regarding the project on "Conservation of Threatened Vertebrate Fauna in Indian Himalayan Region through Long-term Monitoring and capacity building" funded by MOEF &CC, GOI, New Delhi.



Dr. Arun Kumar is being felicitated by the Director, ZSI



Attentive audience in ZSI workshop

On Line Courses

Achievements

Dr. Mandeep Kaur, Associate Professor, Department of Forestry completed six week online certificate course on 'Integrated Disease Management' jointly conducted by agMOOCs and Department of Mycology and Plant Pathology, BHU.

Editor's Column...

The Importance of skilled writing

Writing skill is an important part of our communication and allows us to communicate our message with clarity and ease to a far larger audience than through face-to-face or telephonic conversation.

Writing skill is a mandatory requirement for every youngster. One might be called upon to write a report, plan or strategy at work; write a grant application or press release within a volunteering role; or somebody may fancy communicating ideas online via a blog. And, of course, a well written CV or résumé with no spelling or grammatical mistakes is essential if he or she want a good job.

Correct grammar, punctuation and spelling are the key in written communication. The reader will form an opinion of the author, based on both the content and presentation, and errors are likely to lead them to form a negative impression. Checking for poor writing and spelling mistakes should be seen as a courtesy to your readers since it can take them much longer to understand the messages in your writing if they have to think and re-read text to decipher these.

All written communications should therefore be re-read before sending to print, or hitting the 'send' button in the case of emails, as it is likely that there will be errors. Do not assume that spelling and grammar checkers will identify all mistakes as many incorrect words can indeed be spelt correctly (for example, when "their" is used instead of "there" or "principle" instead of "principal") or entire words may be missing. If at all possible, take a break before re-reading and checking your writing, as you are more likely to notice problems when you read it fresh.

Even if you know spelling and grammar rules, you should still double-check your work or, even better, have it proof-read by somebody else. Our brains work faster than our fingers can type and accidental typographical errors (typos) inevitably creep in.

The good news is that writing is a skill which can be learned like any other. One trick for checking and improving your work is to read it aloud. Reading text forces you to slow down and you may pick up problems with the flow that your eye would otherwise skip over.

Another way to improve your writing skills is to read - as you read you pick up new vocabulary and engage with different writing styles.

There are many times in your life when you will be asked to write something very specific. Whether this is to take notes of a conversation, write the minutes of a formal meeting, or prepare a report, all these types of writing require specific skills, and usually a particular style.

In spite of the different type of the write-ups, writing is constructed by putting sentences in sequence, one after another and, if a single sentence is read aloud, it should be understandable. Meaning should flow from one sentence to the next, carrying the argument or point of view forward in a clear and concise manner. If you do not use correct grammar and punctuation, or your sentences are too long and complex, what you are trying to say will become unclear and the reader will be unable to follow the text because the flow of meaning is interrupted.

CME / Workshop / Conferences

Department of Physiotherapy organised a two days hands-on-workshop on 'Neuro Developmental Therapy' on 2nd and 3rd June, 2018. The workshop was conducted by Dr. Harpreet Singh, MPT (Neuro), Senior Physiotherapist, AIIMS, New Delhi. He has so far conducted about 100 workshops on the subject around the country and abroad for physiotherapy professionals & trained many eminent physio-therapists in skills of NDT.

38 students from Dolphin Institute and other physiotherapy institutes of Dehradun participated in the workshop. Participants also included clinicians from Dehradun and Delhi. Dr. Singh explained to students about The NDT technique, a definitive rehabilitative technique that is



Dr. Deeptee Warikoo welcoming Dr. Harpreet Singh

designed for stroke patients. All the students had great hands on session and practiced NDT techniques under the guidance of Dr. Singh.

Dr. Deeptee Warikoo, HOD Physiotherapy extended thanks to Dr.

Harpreet Singh in the valedictory for having conducted the workshop so effectively. Dr. Vivek Chauhan, Dr. Sunil Bhatt, Dr. Kapil Garg, Dr. Keerty Mathur and Dr. Richa Agarwal also attended.

Celebrating World Environment Day

Department of the Botany organized the World Environment Day-2018 on 5th June, 2018 on the theme "Beat Plastic Pollution" as declared by UNEP. The programme was inaugurated by Prof. G.S. Rajwar, Principal, Govt. P.G. College, Agastyamuni, Rudraprayag. During his talk, he focussed on the theme of this year's environment day and pointed out that the use of plastic is very common everywhere in the world and it severely affects not only the human health but also the biological diversity. During his lecture, he invited and encourage the students to minimize the use of plastic by using three 'R' principles i.e. Reduce, Reuse and Recycle the plastic.

To commemorate the occasion Prof. G.S. Rajwar, Chief Guest, Dr. Arun Kumar, Director, Dr. Shailja Pant, Principal, Dr. K.P. Tripathi, Head,



Ms. Perna Bahuguna administering oath for Conservation

Botany Dept., Ms. Perna Bahuguna, Faculty Env. Science and Dr. Beena Joshi Bhatt, Head, Zoology Dept. planted saplings of *Elaeocarpus sphaericus* (Rudraksh), *Rauwolfia serpentina* (Sarpagandha), *Embolia officinalis* (Amla), *Terminalia chebula*

(Harad), *Terminalia bellirica* (Bahera), and *Thuja occidentalis* (Thuja).

Chairman, DIBNS also presented 150 copies of the book "Trees Incredible-Life Sustaining Lives" by Shri Madan Mohan Pant, IFS to the participants.

FDP on "Use of ICT in Education and Research Methodology"

Department of Physics and the Local NPTEL Chapter of the Institute, in collaboration with Teaching Learning Centre Ramanujan College, University of Delhi, organized a one week FDP program on "Use of ICT in Education & Research Methodology" at Dolphin (PG) Institute from 11th to 17th June 2018. The FDP was held under the aegis of Pandit Madan Malviya National Mission on Teachers and Teaching. 75 faculties from the Institute, other colleges and universities participated in the training programme. The FDP was ably coordinated by Dr. Nikhil Rajput, Assistant Director, TLC, Ramanujan College, Delhi University with a number of his colleagues specializing in application of ICT in education; Dr. Prakhar Wadhwa, Dr. Ashish Shukla, Dr. Schin Tomar from Ramanujan college of Delhi University, Dr. Archana Shukla from MHRD and Dr. S.K. Sharma from Khalsa College, Delhi University were the other resource persons for the training programme. Dr. Aasheesh Raturi, Assistant Professor, Department of Physics with his team

ably organised the workshop on behalf of the Institute. The course curriculum was adopted as prescribed by UGC. The 1st session was marked by the practical training on how to create classroom home page and teachers personalized home page in computer,

wherein detail information regarding syllabus, reference books, evaluation system, credits, marks, notes uploading by teachers and assignment uploading by students, creation of subject wise classrooms in computer, subsequently the advance features of EXCEL sheet etc. were covered by the resource persons. Thereafter, participants were explained the revolutionary features of LATEX. Teaching and learning can be much more meaningful and well presentable in an organized documentation



Prof. S.P. Agarwal delivering valedictory address

methodology. Subsequent sessions of the programme broadly revolved around the statistical software SPSS. Participants were also provided skills on various other software such as ANOVA, Regression, Co-relation, etc. and were made familiar with the working knowledge of the above programmes to make them technology savvy. All sessions of the FDP were therefore practical oriented and were open to multiple queries and hands-on-training. Prof. S.P. Agarwal, Director, Teaching Learning Centre, Ramanujan College,

form by LATEX. Dr. Archana Shukla, Indian Statistical Services, Assistant Director MHRD delivered an informative lecture on fundamental tool of statistics in research and

methodology. Subsequent sessions of the programme broadly revolved around the statistical software SPSS. Participants were also provided skills on various other software such as ANOVA, Regression, Co-relation, etc. and were made familiar with the working knowledge of the above programmes to make them technology savvy. All sessions of the FDP were therefore practical oriented and were open to multiple queries and hands-on-training.

Prof. S.P. Agarwal, Director, Teaching Learning Centre, Ramanujan College,



Dr. Aasheesh Raturi O.S. delivering Vote of thanks

and the Chief Guest for valedictory, congratulated the participants and highlighted the importance of FDP in updating the knowledge of the faculty and pointed out that the MHRD has made FDP compulsory for the college teachers for their career progression. Dr. Arun Kumar,



Dr. Arun Kumar addressing the participants

Director Dolphin institute requested Prof. Agarwal to conduct FDP in the college at least once in a year. Dr. Shailja Pant, Principal DIBNS expressed the hope that the faculty would make full use of the knowledge gained. Certificates were awarded to the participants.

Papers presented/ Contributed in Seminars/ Conferences

1. Biswas Sas. (2018) Integrated Studies on International Community Specific Participatory Appraisal with Reference to Multi-Disciplinary Knowledge Transfer (KT). Bridging The Gap Between Academia and Industry, GCU International Knowledge Transfer Conclave: 121-122. Organised by School of Sciences, Department of Life Sciences, Garden City University, Bangalore, 18th June 2018.
2. Biswas Sas. (2018) Recent trends in Inventorization and monitoring of threatened species. Seminar on "Biodiversity Conservation and its

Utilization". Organised by Botany Division, Forest Research Institute, Dehradun, 29th May 2018.

3. Kumar, A. and Rawat, S (2018) Biogeography of the Indian Himalayan Region, with special reference to the Biotic Resources in Uttarakhand; 1-25. Lead Paper in National conference on Environment, resource and development of Indian Himalaya. Organised by Department of Geography, HNB Garhwal central University (A central University), Srinagar-Garhwal, Uttarakhand.



Dr. Shailja Pant presenting memento

Field Visits/Educational Tours

1. Students of B.Sc. Agriculture IV Semester visited Sericulture Research Station, Sahaspur, Dehradun on 12th April, 2018 for hands-on exposure for sericulture under the guidance of Dr. Pankaj Tiwari. The students were accompanied by Dr. Deepali Singh, Sh. Lenin Laishram & Emugan, Assistant Professors, Deptt of Agriculture.

2. Students of B.Sc. Agriculture VIII Semester visited Apiculture Centre, Clement Town, Dehradun on 20th April, 2018 to learn the beekeeping techniques for honey production under the guidance of Shri Rajesh Singh of Khadi and Village Industries Commission, Dehradun.

3. Students of B.Sc. Biotechnology VI Semester and M.Sc. Biotechnology IV Semester visited Central Academy for State Forest Service (CASFOS), Dehradun on 20th April, 2018 for receiving practical demonstration and detailed procedure for organic waste disposal through City Farming. Ms. Meera Iyer, IFS (Principal) and Ms. Sarita, IFS (Faculty), CASFOS explained about bioculture and biocatalyst produced from natural ingredients and used to manage toxic organic and inorganic components converting waste into resources.



It's an innovative method for agri- and horti-farming in urban areas essentially on terraces and balconies, etc. using organic waste generated in the premises at its source itself for simultaneously growing vegetables, flowers, fruits, medicinal plants etc.

It is a self-operating & self-improving system producing enriched compost that can be used by plants for their growth & thus developing biodiversity in adjacent urban environment as well.

4. The students of B.Sc. Horticulture and Forestry II semester undertook a field visit to Jodi Booti Farm at Kolhu Pani, Dehradun on 21st April, 2018. The objective was hands-on training regarding identification, cultivation practices, oil extraction techniques etc. of medicinal and aromatic plants. The students also gained knowledge on various equipments used in oil extraction from medicinal & aromatic plants. The students also attended a popular lecture by Sh. Painuly on importance of medicinal & aromatic plants & their demand in the industry. The visit was undertaken in the guidance of Drs. Sas Biswas & V.P.S. Rawat.



5. Students of B.Sc. Forestry IV Sem undertook a field study trip to Kala Amb and Nahan in Himachal Pradesh on 21st April 2018. The students visited M/s Ruchira Paper Mills, Kala Amb and were shown the process of paper making. They also visited Sagar Katha Factory at Kala Amb and learnt the technique of Kutch and Katha extraction from the heartwood of *Acacia catechu*. The trip concluded with a visit to Resin and Turpentine Factory of HP Forest Development Corporation. The students were shown the resin processing and manufacture of resin & turpentine oil. Students were

accompanied by Dr. Sandhya Goswami & Dr. Mandeep Kaur.

6. Students of B.Sc. Forestry IV Semester visited the forest Pathology Division, at FRI Dehradun On 14th May 2018. Students visited the Forest



Pathology Museum and saw the samples and specimens of diseased tree species. Besides they were taught the techniques to identify various types of diseases and their causal organisms in field. They also visited the Molecular Pathology laboratory and learnt Molecular techniques for identification of Fungi including DNA bar coding techniques. The tour concluded with visit to National Type Culture Collection of Pathogenic Fungi housed at FRI where students learnt about the type cultures and methods to preserve Fungal Cultures. They were addressed by the head of the Division Dr. Amit Pandey and his colleagues. Drs. SAS Biswas, Sandhya Goswami and Mandeep Kaur accompanied the students.

7. Students of B.Sc. Forestry II semester studied techniques of installation of equipments, operation, implementation, recording and retrieval of meteorological data of forestry and agriculture importance at Forest Research Institute, Dehradun on 15th May, 2018. Six scientists and technical experts from the Forest Environment and Ecology Division of the Institute addressed the students. Dr. SAS Biswas and Shri Manish Kumar accompanied the students.

8. Students of B.Sc. Forestry II Semester were given practical session on Techniques on Ethnobotanical studies and Participatory Rural Appraisal (Extension Education) as per the requirement of syllabus in field at



Kotra-Kalyanpur village, Dehradun on 16th May, 2018. Participants from rural community, both women and men for PRA gathered in appreciable number & interacted with the students.

9. Students of B.Sc. Forestry VI Semester along with faculty members Drs. SAS Biswas, Sandhya Goswami, AK Uniyal and Shri Manish Kumar learnt the practical aspects of timber trade under the expertise of renowned timber traders of north India (M/S Surjit & Co.). The visit covered techniques related to yield calculation, demand and supply, national, international and local marketing strategies, least waste and utilization of wood with regard to important timber species like Teak, Sal, Shisham, Meranti, Eucalyptus etc.

10. Students of B.Sc. Forestry II semester along with Drs. SAS Biswas, AK Uniyal, and VPS Rawat visited Centre for Aromatic Plants, Govt. of Uttarakhand. They studied techniques of plantation, harvesting and processing for end products from Aromatic cum Medicinal plants. Discussion was held with the Scientist -in-Charge of the Centre regarding field exposure to students and on-site introduction and harvesting in hills.

11. Students of M.Sc. Forestry IV Semester undertook a study visit to the Forest Product Division, Forest Research Institute, Dehradun on 1st June 2018. Students had hand-on exposure to the time tested techniques on preservation, durability, seasoning methods, graveyard testing to assess timber decay, etc.

12. Students of B.Sc. Forestry VI Semester while on a field visit on 2nd June, 2018, to study the effectiveness of forest act and management in Raipur Range of Mussoorie Forest Division assessed the in-field enforcement of various acts w.r.t. cognizable and non cognizable offences in jurisdiction of Raipur forest. Forestry personnel of Uttarakhand SFD explained to the students about intricacy in gathering evidences against the offenders. Drs. Sas Biswas, VPS Rawat and Shri Manish Kumar guided the students in opting newer techniques for carrying out study on eco-prophetic succession in fire devastated Sal forest.

13. Students of B.Sc. IV Semester learnt on-site techniques of wood preservation, such as Boucherie process, measuring strength properties, composite board making and paneling using traditional cum recent approaches from wood technologists of Forest Research Institute, Dehradun on 4th June 2018.

14. Students of M.Sc. Botany IV Sem. along with Dr. K.P. Tripathi, Head, Botany Department visited Sal Forest at Doonga on 07.04.2018. During the field visit the students learnt about the conservational methods in the forest ecosystem. They also learnt about the biomass and productivity estimation techniques, plant species diversity, distribution and dominance of the natural forest ecosystem.



15. Department of Pathology organized three days educational tour to Jalandhar and Amritsar for the students of B.Sc. Medical Lab Technology and B.Sc. Medical Microbiology students. On 14th April students attended and participated in PHYTOCON 2018 – International Conference on “Commercialization of Medical Plant Products: Lab Techniques to Trade” organized by Lovely Professional University, Jalandhar, Panjab. On 15th April the second day of the tour students visited the Science City, Jalandhar. Science city covered the subjects areas including Health Science, human evolution & civilization, the environment, ecosystems, natural & social sciences as well as frontier areas



like space, nuclear science, information technology. On 16th April the a last day of tour students visited the WAGAH BORDER, Amritsar to witness the BEATING RETREAT CEREMONY. Students were accompanied by Shri Aditya Swarup and Shri Ankit Johari.

Guest Lectures Held

Department of Botany

Dr. Ajay Thakur, Scientist & OIC Tissue Culture Discipline, Genetics and Tree Propagation Division, FRI, Dehradun, Uttarakhand delivered a guest lecture on “In Vitro approaches of variation in Plant Improvement” on 13th April 2018. The objective of his lecture was to enlighten the UG and PG students of various disciplines of the institute such as Botany, Biotechnology, Forestry, Agriculture



and Horticulture. During his lecture Dr. Thakur focused on basic concepts, techniques, approaches of variation in plant improvement and its applications in plant science. Students interacted with him regarding their queries. Dr. K.P. Tripathi, HOD Botany proposed vote of thanks to guest speaker.

Department of Agriculture

1. Shri Yuvraj Manish, Master Trainer Agri Career, New Delhi did career counseling 'On opportunities in Agriculture and Food Sector' for the U.G. and P.G. students of Agriculture, Horticulture & Forestry.

2. Shri Manoj Kumar Karn, Senior Agronomist, Nepal Agricultural Research Council (NARC), Kathmandu delivered a guest lecture on “Direct Seeded Rice Technology” to the U.G. and P.G. students of Agriculture.

Department of Biotechnology

1. A guest lecture was arranged by the Department of Biotechnology on 'Organic waste disposal through City Farming' by Dr. R.R. Deshpande, Hon. Director (MGM -CLEAN India Centre), Aurangabad (Maharashtra) on 13th April, 2018. The students of M.Sc. & B.Sc. Biotechnology attended the lecture.



2. Dr. Deshpande elaborated on farming methods in urban areas essentially on terrace, balconies, etc. using organic waste generated in the premises at its source itself and simultaneously growing vegetables, flowers, fruits, medicinal plants, etc.

3. The subject was highly appreciated by the students and faculty.

Department of Physiotherapy

1. A guest lecture was organised on Cyriax Manipulation by Dr. Amit Sharma, PT, Department of Physiotherapy, HIHT, Dehradun on 19th May 2018. The guest speaker explained to the students about Cyriax manipulation and its various uses. Concept of selective tissue



tension (STT) was also explained. The three types of nonsurgical procedures of Cyriax intervention were explained to the students. These intervention procedures are manipulation (high-velocity thrust), and deep friction massage (DFM), traction, and injection. The lecture was attended by both UG & PG students, which they enjoyed a lot.

2. Department of Physiotherapy organised another guest lecture on



'Roods Approach' by Dr. Vaibhav Agarwal, PT, Department of Physiotherapy, HIHT, Dehradun on 1st June 2018. The speaker elaborated on the importance of Rood's approach for the treatment of CNS disorders. Various categories of Rood's approach, i.e, facilitation and inhibition of movements were taught to the students. Students were highly enlightened by the lecture.

Guest Lecture's Delivered

1. Dr. AK Uniyal and Shri Manish Kumar from Department of Forestry delivered invited lectures on 'Beating the Plastic Pollution' at Uttarakhand Forest Corporation on the occasion of World Environment Day, 2018.

2. Dr. SAS Biswas from Department

of Forestry delivered a lecture on 'Integrated Studies on International Community Specific Participatory Appraisal with reference to Multidisciplinary Knowledge transfer' at Garden City University, Bangalore on 18th June, 2018.

Physiotherapy Camps

Department of Physiotherapy provided physiotherapy services to residents of Dehradun by organising two camps on 1st April 2018.

The 1st camp was held at Panchayati Mandir School, Sudhowala. Dr. Sunil Bhatt and Dr. Pragya Chaudhary treated number of patients and gave their valuable advice on the importance of exercises.

Another camp was conducted at Raipur where Dr. Kapil Garg



provided physiotherapy services. Large numbers of patients were treated and home plans were taught to them.

Training & Placement Cell, Dolphin Institute

Activities conducted (1st April 2018 - 30th June 2018)

Off Campus/On Campus Selections

Date	Name of Company	Sent for Interview/ Campus Interview	Name of the Student	Department	Results
08-05-2018	Torrent Pharma Ltd., Baddi (HP)	Sent for Interview	1. Sachin Kumar	M. Sc Pharma Chemistry-2018 Batch	Selected
			2. Amit Kumar Gupta	M. Sc Pharma Chemistry-2018 Batch	Selected
08.05.2018	Macleods Pharma Ltd., Baddi(HP)	Sent for Interview	1. Sachin Kumar	M. Sc Pharma Chemistry- 2018 Batch	Selected
			2.Gaurav Kumar	M. Sc Pharma Chemistry- 2018 Batch	Selected
			3. Amit Kumar Gupta	M. Sc Pharma Chemistry- 2018 Batch	Selected
18.05.2018	Flex Foods Ltd, Dehradun	Campus Interview	02 Students	B. Sc. Biotechnology- 2018 Batch	Result Awaited
			06 Students	M. Sc. Biotechnology- 2018 Batch	"
			06 Students	M. Sc. Microbiology- 2018 Batch	"
25.05.2018	Oknet Healthcare Ltd., Bangluru	Campus Interview	1. Meghna Roop Raina	M. Sc. Microbiology- 2018 Batch	Selected
			2. Sohini Basak	M. Sc. Microbiology- 2018 Batch	Selected
			3. Shinjini Rath	M. Sc. Microbiology- 2018 Batch	Selected
			4. Sudipta Dutta	M. Sc. Microbiology- 2018 Batch	Selected
			5. Shantanu Ghosh	M. Sc. Biochemistry- 2018 Batch	Selected
			6. Seetat Magsood	B. Sc. Biotechnology- 2018 Batch	Selected
			7. Rabina Kumari	M. Sc. Biochemistry- 2018 Batch	Selected
			8. Ipsita Adhikari	M. Sc. Microbiology- 2018 Batch	Selected
08.06.2018	Yacc Life Sciences Ltd. Roorkee	Sent for Interview	1. Madhumita Chatterjee	M. Sc. Microbiology- 2017 Batch	Selected
25.06.2018	Sage Publications Pvt. Ltd, Dehradun	Sent for Interview	1.Bhavna Chand	M. Sc. Biotechnology- 2018 Batch	Selected

Industrial Training

Name of Company	Name of Students	Department	Time period
Syncom Healthcare Ltd, Dehradun	1.Ankita Saklani	M. Sc Microbiology-2nd Semester	30 days 18.06.2018 to 18.07.2018
	2.Preeti Pundir	M. Sc. Microbiology-2nd Semester	
Suncare Formulations Ltd., Dehradun	1.Shivani Chauhan	M. Sc. Microbiology-2nd Semester	15 days 20.06.2018 to 04.07.2018
	2.Rashmi Gusain	M. Sc. Microbiology-2nd Semester	15 days 05.07.2018 to 19.07.2018
HLG Memorial Hospital, Asansol, West Bengal	1. Ipsita Adhikary	M. Sc Microbiology-4th Semester	10 days 26.06.2018 to 06.07.2018



A glimpse of Campus Interview by Flex Foods LTD, Dehradun

Distinguished Alumni

Akhilesh Kumar completed his M.Sc. Industrial Biotechnology (2011-2013) from Dolphin Institute with an aggregate of 76% marks. He is

Affair Department as Executive from January 2017 to Feb. 2018, with Axa Parenterals Ltd., Roorkee in Regulatory Affair Department as an

currently working with Ambica International Corp., Philippines in the Regulatory Affair Department as Regulatory Pharmacist from March 2018 to till date. Prior to this he worked with Troika Pharmaceuticals Ltd., Ahmedabad in Regulatory

Executive from Sep. 2016 to January 2017 and with Rhydburg Pharmaceutical Ltd, Dehradun as an Executive (Formulation & Development Dept) from July 2013 to July 2016. He has also undergone three month training at Rhydburg Pharmaceutical Ltd, Dehradun. During his professional journey he held following important responsibilities in different departments such as Regulatory Affairs, Quality and Documentation, F&D and Audit with various Industries in India and abroad.



Akhilesh Kumar

Research Publications

- Arora, S., Bhaukhandi, K. D., Singhal, S., Latval, M., Sati, T. U. and Kumar, D. (2018) A review on Phytopharmacological Activity of *Plumeria* species. *International Journal of Engineering Science and Mathematics*, **7(4)**: 127-131.
- Bhardwaj D.K. & Falswal, J. (2018) The Coccinellids (Coleoptera : Coccinellidae) fauna in Manduwala region, Dehradun. *Indian J. Experimental Zoology*, **21(1)**:177-183.
- Gupta, A., Pant, N.C., Dwivedi, U., Tiwari, S., Pandey, C.S., Dhoundiyal, R., Maurya, K.N. and Verma, O.P. (2018) Studies on correlation and path coefficient analysis for yield and yield related traits in Indian mustard (*Brassica juncea* L. Czern and Coss.) under timely and late sown conditions. *J Pharmacogn Phytochem.*, **7(2)**: 2545-2551.
- Kumar, D., Sanghi, A., Arora, S., Tiwari, G., Chandra, R. and Shekhar (2018) Membrane Stabilizing and Antioxidant activity of *Myrica esculenta* leaves extracts. *Saudi Journal of Medical and Pharmaceutical Sciences*, **4(5)**:575-578.
- Kumar, V., Nanda, M., Kumar, S. and Pankaj K. Chauhan (2018)
- The effects of ultraviolet radiation on growth, biomass, lipid accumulation and biodiesel properties of microalgae. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, **40(7)**:787-793.
- Kumar, V., Nanda, M., Verma, M. and Ajay Singh (2018) An integrated approach for extracting fuel, chemicals, and residual carbon using pine needles. *Biomass Conversion and Biorefinery*, **8(2)**: 47-54.
- Laishram, L., Pant, N.C., Singh, O.S., Dhoundiyal, R., Joshi, K. and Pandey, C.S. (2018) CuO nanoparticle mediated elicitation of polyphenols and antioxidant activity in chicory (*Cichorium intybus* L.). *International Journal of Chemical Studies*, **6(2)**: 3270-3276.
- Pant, N.C., Tewari, M., Dhoundiyal, R., Pandey, C.S., Singh, J.P. and Agarwal, S. (2018) Evaluation of Micronutrients in Fenugreek (*Trigonella foenum-graecum* L.): A Viable Alternative for Micronutrient Supplementation. *International Journal of Current Microbiology and Applied Sciences*, **7(5)**: 2446-2464.
- Sati, A., Sati, S.C. Negi, J.S. and

- O.P. Sati (2018) Mineral composition of *Berberis aristata* DC roots. *Analytical Chemistry Letters*, **8(3)**:361-367.
- Singh, O.S., Pant, N.C., Laishram L., Tewari, M., Dhoundiyal, R., Joshi, K. and Pandey, C.S. (2018) Effect of CuO nanoparticles on polyphenols content and antioxidant activity in Ashwagandha (*Withania somnifera* L. Dunal). *J Pharmacogn Phytochem.*, **7(2)**: 3433-3439.
- Singh, R. and Pant, D. (2018) Bio-inspired dechlorination of poly vinyl chloride. *Chemical Engineering Research and Design*, **132**:505-517.
- Tiwari, S., Pant, N.C., Gupta, A., Dwivedi, U., Meena, J.K., Pandey, C.S., Dhoundiyal, R. and Bhatt, A. (2018) Genetic variability and genetic divergence for seed yield and its component characters in grain amaranth (*Amaranthus hypochondriacus* L.) Germplasm. *International Journal of Chemical Studies*, **6(2)**: 3292-3297.

Book Published

Gaur, H. and Anand, S. (2018): The DBS Handbook of Biofertilizers and Biopesticides. D B S Imprints, New Delhi, PP 1-725.

Academic Achievements

College Toppers

B.Sc. Horti. 7th Sem.



Ronia Linggi
88.38%

B.Sc. Forestry- 7th Sem.



Meenakshi Bacheti
83.40%

B.Sc. Horti.- 8th Sem.



Ronia Linggi
82.83%

M.Sc. Biotech. I & II Sem.



Bhavna Chand
8.25 CGPA

M.Sc. Biotech. I & II Sem.



Naina Chakraborty
8.25 CGPA

M.Sc. Botany I & II Sem.



Saima Jan
7.92 CGPA

M.Sc. Chemi. I & II Sem.



Rachita Gupta
8.42 CGPA

M.Sc. Forestry III & IV Sem.



Nitesh Sharma
7.82 CGPA

M.Sc. Agronomy I & II Sem.



Km. Bunnie Dignium
8.17 CGPA

M.Sc. Agronomy II year



Biri Karba
71.5%

M.Sc. Pharm. Chemi. I & II Sem.



Amit Kumar Gupta
7.92 CGPA

M.Sc. Pharm. Chemi. I & II Sem.



Manavendra K.Kushwaha
7.92 CGPA

M.Sc. Physics I & II Sem.



Sonika Sharma
7.67 CGPA

M.Sc. Zoology I & II Sem.



Kiran Kumari
8.42 CGPA

B.Sc. Biotech. I & II Sem.



Ayushi Saini
8.68 CGPA

B.Com.- I & II Sem.



Shivani Bhatt
7.77 CGPA

B.Sc. Biotech. III & IV Sem.



Shivani Sati
8.16 CGPA

B.Sc. Biotech. III & IV Sem.



Sunaina Chhetri
8.16 CGPA

Guest contributors

Seasons in A Day

Nights like winter, foggy streets,
Roasting peanuts, with s'mores,
Around the bonfire of sleepy love,
With cozy blankets and pillows.

The inky blues turn into blushes,
Crystals of dew on every green blade,
The fresh perfume of damp soil,
Recalling monsoon at transcended dawn.

Rose vervian and morning glory bloom,
As the sun peeks through horizon,
Bringing spring mornings and smiles,
As peepers open to first light.

Noon creeps slowly,
With its summery hot and clear skies,
And a yawn or two elude,
As the day gets rushed by.
Journey home in twilight hours,
As the winds carry colorful leaves,
Autumn colours bashful sky of dusk,
Gently morphing into a twinkling world.

- Yukti Gupta

DSWC NEWS

Seminar on National Integration- Need of the day

The Institute organised a one day seminar on "National Integration-Need of the Day" in its premises. The programme was organised under the aegis of Dolphin Students Welfare Society with the motto to develop understanding between the students, staff and faculty to spread the message of 'bhai-chara' in society at large, and among members of different religions, casts, and communities. Renowned intellectuals and authors spoke to the students, staff and faculty members of the institute on this issue.

Chairman of the institute, Shri Arvind Gupta welcomed the guests and the participants; he talked in brief about the objectives and guidelines of the Seminar. College students presented melodious song "Vande Mataram.....Maa Tujhe Salam", a beautiful folk dance on the song "Kahmir Nure Jannat", whereas another group of presented an Arunachali folk dance on national integration. These were praised by one and all.

Dr. M. S. Ansari, Secretary Red Cross Society of India, Uttarakhand Chapter opined that the National Integrity can best be developed by Social Service. He further told that once we decide to serve people living at the lowest level of the society, related to any religion, cast or community, and ensure to provide them food, education, health and other necessary requirements everybody will help you and this will be very fruitful for mutual faith and National Integrity. He mentioned that out of 11 members in the Red Cross Society of India- Uttarakhand Chapter there are 10 Hindus and they were electing a Muslim (him) for so many terms, this is an example of the mutual faith and inspire him to work with more dedication for the people at large. Another eminent speaker, Dr. Imam Ul Haq Ramszi pointed out that the verses from Holy Kuran-e- Shareef, Hindu Holy Religious books, Guru Granth Sahib and Bible all deliver the message of love and tolerance. He sung a self written poem "Mere Pyare Vatan Mere Hindostan Sari Duniya Me Hai Tera Sani Kahan....." it was praised by the audience.

Brigadier (Retd.) K. G. Bahal shared with participants that during the service in Indian Army he got opportunity to visit all over India by road and noted that after every 50



Guest speakers interacting with the audience

kilometres there are through differences in language, food habits, religion, casts and communities, the feeling of National Integrity is very sound in people of India. He said that initially people may not believe on each other, but when we don't disturb the religious beliefs, commonalities in life style and food habits increases the mutual faith and inspire us to move forward with more opportunities.

Professor Firoj Ahmad, the key-note speaker of the Seminar, a renowned



Chairman and Director DIBNS presenting memento to Dr. Ansari

author and retired Professor from many Universities quoted that 'Integration is strength and disintegration is destruction'. He clarified that messengers of any religion never picked up the sword rather served the poor, destitute and helpless people and taught them to live with love. He pointed out that all Indian languages adopted and accepted Hindi, but only if the people in Hindi belt would also try to learn Assami, Tamil, Telgu, Malyalam, Kashmiri, etc and learn their difficulties then all the problems shall be solved. He further said that Indian culture possess such power that Hindu, Muslim, Sikh, Christian, Buddhists, Parasis and Jainis can all walk together that's why Md. Iqbal has said "Kuch Baat Hai ki Hasti Mitati Nahi Hamari Sadiyon Raha Hai Dushaman Dore Jahan Hamara.....".

Shri Arvind Gupta, Chairman of the

institute in his thanks giving address mentioned that India is a country full of diversities and there lies its power too. He expressed hope that students will spread a positive message in the society and in today's environment it is the need of the day to enhance mutual faith and national Integrity. He also expressed his thanks to all the guests speakers by presenting them mementos.

Dolphin Students Welfare Committee is always active to work for the needy students at Dolphin PGI as well as for other needy students and people in



Prize Winners at Hotel - Oyester

'Hindustan daily News' celebrated Star Plus's presentation "Hindustan Anokhi Club" at the Institute

The presentation of "Hindustan Anokhi Club" based on Star Plus serial "Khichdi" was organised on 26th April 2018 among the youth in the premises of the Institute. Besides singing, dancing and acting students showed their aptitude by presenting multi forms of their art and talents. The students demonstrated their multi talents on the platform provided by Anokhi Club with full zeal and enthusiasm.

The first round was singing in which youths presented their self composed songs and Bollywood songs too and made the public spell bound. While in acting and dancing they showed off their hidden talents. In jokes they made one and all to laugh. During the programme the organisers also asked the questions related to the serial and the students who answered the questions right were awarded. The programme was anchored by Ms. Shaiba Khan.

Gaurav Baluni sung "Ud ja kale kanwa....." while Vivek sung "Preet kee lat mohe aisi lagi ..." Manish sung "Aaj se teri sari khushiyan meri ho gayee....." Shivani sung "Mai rahun na rahun...." and Sonalika sung an English song and all appreciated them

DSWC donated Water Cooler and Street Lights to Nyaay Panchayat, Bhauwala

The primary objective of Dolphin Students Welfare Committee is to support education for economically backward meritorious students, education for girls and facilitate socially and economically backward children and individuals with the motto to light a candle to move forward one and all. In persuasion of this motive DSWC donated a water cooler and hundred street lights to Nyaay Panchayat, Bhauwala on June, 16, 2018. The water cooler was installed in Nyaay Panchayat Bhauwala whereas the street lights were distributed to various Gram panchayats as listed below: Gram Panchayat Badonwala- 04, Gram Panchayat Manduwala- 66, Gram



DSWC handing over water-cooler to Nayaay Panchayat, Bhauwala



DSWC handing over street-lights to Nayaay Panchayat, Bhauwala

Panchayat Bhauwala-05, Gram Panchayat Dunga- 05, Gram Panchayat Naugaon- 10, Chetra Panchayat Kanswali- 10.

Shri Sahdev Singh Pundir, MLA Shahaspur, Pramukh Sahaspur Shri Rajnish Kumar, BDC Badonwala Shri Yashwant Chauhan, Joint Gram Pradhan Manduwala Shri Dinesh Kumar, Smt. Maya Devi Pant, Shri Sandesh Dhiman, Gram Pradhan Bhauwala Shri Praveen Chauhan, Gram Pradhan Dunga Shri Rajkumar, BDC Bhagwanpur Shri Yashpal Negi along with Dean DSW Shri Vipul Garg, Members Shri Pankaj Gusain, Shri Karan Bansal and students graced the occasion.

Chairman felicitated DSWC Team

the society. During the year 2017-2018, DSWC also marked a lot of achievements to serve the society. This was acknowledged and appreciated by the Chairman of the institute and as a reward he released a cash amount of INR 50000 to DSWC. Member of DSWC celebrated the reward and organised a grand party at Hotel Golden Oyster, Near Shimala Bye Pass, Dehradun. Chairman Shri Arvind Gupta, Dean



Chairman with the students

DSW Shri Vipul Garg, faculty Members Ms. Perna Bahuguna & Ms. Pallavi Bhatia along with the student members also enjoyed the party.

DSWC donated for activities of Kala Manch, D.Dun

Kala Manch Dehradun is known for promoting theatre & all the other forms of culture & art in the society. Kala Manch organised sandhya Manchan at Town Hall Dehradun on April, 30, 2018. Members of DSWC donated for promotion of activities of Kala Manch & smooth functioning of programmes like Sandhya Manchan. Sh. Vipul Garg, Dean,



DSWC presenting a cheque to 'Kalamanch' officials

DSW also praised the activities of Kala Manch, Dehradun.

Students of B. Sc. MM learned modern techniques at IMA Blood Bank

DSWC organised one day educational tour to IMA Blood Bank, Dehradun for the students of B.Sc. MM on May, 10, 2018. The students were shown different modern equipments and activities maintained by the Blood Bank. Dr. Piyush Goyal from the Blood Bank organised a technical session for the students which was

very educative. The students were demonstrated the modern techniques used for blood sampling, separation, storage and others activities. Shri Vipul Garg, Dean, DSW conveyed his thanks to the officials of IMA Blood Bank, Dehradun for sparing their valuable time for the students.

Chairman made contribution for group wedding of poor girls

Bala Ji Seva Samiti, Dehradun is working a lot of works for society in many fields for many years. Like the earlier years this year also the Bala Ji Seva Samiti took an initiative for group wedding of poor girls. It took all the responsibilities and made all the arrangements for group wedding on

June, 17, 2018. Chairman of Dolphin (P.G.) Institute, Dehradun also made his contributions for the above programme. The organisers of the programme also expressed their gratitude to the Chairman of the institute for his noble work and also for his valuable contribution.



Winners of Hindustan Anokhi Club programme

for their presentations.

The presentation of Babi, Sarita, Tanuja and Nihal was marvellous and was praised by one and all. The winners of different activities were as follows- Singing: Pritam (I), Manish Pathak (II) and Toko Sama (III)

Acting: Saijal (I), Jitendra (II) and Shivani (III)

Dancing: Srijita (I), Nagrang (II), Srijantika (III)

Dr. Shailja Pant, Principal appreciated the efforts of "Hindustan Anokhi Club". She said that today's youth are rich in capabilities and they have multi talents but there is a need to acknowledge and polish up their talents. She further said that "Anokhi Club" is the best platform to develop confidence amongst youths to move forward towards their dreams and goals. She also said that Hindustan is one news paper which is deeply connected with common people for their hopes, dreams and day to day concerns. The activities were judged by the faculty members of Dolphin (P.G.) Institute, Dehradun namely Mr. Vipul Garg- Dean, DSW, Dr. Shruti

Sharma- Coordinator (IQAC) and Dr. Beena Joshi Bhatt- Head (Zoology). The programme was attended by staff, faculty and students of the institute.

DSWC promoted the state dance competition Natraja



DSWC promoting the state dance competition

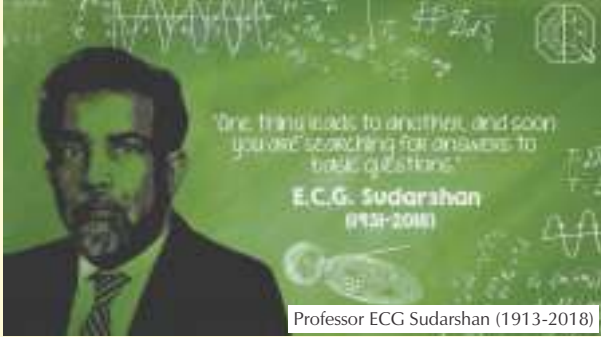
DSWC is continuously working for development of art & culture in the society. An Uttarakhand State dance competition namely Natraja was held on June, 25, 2018 at Town Hall, Nagar Nigam, Dehradun. Students of Dolphin Institute, Dehradun also participated in this dance competition & Dolphin Students welfare committee made donations for promotion of activities of the state dance completion Natraja. Sh. Vipul Garg, Dean, DSW also joined the state dance competition Natraja & appreciated the students for their performances.



TitBit

Indian Born Scientist who was recommended for Nobel Prize nine times passes away

The world of science has lost an eminent physicist with the passing away of Professor ECG Sudarshan (1931-2018), who was controversially overlooked for the Nobel Prize



Professor ECG Sudarshan (1931-2018)

on more than one occasion. His research interests spanned a wide range of fields from particle physics, quantum optics and quantum field theory to quantum information theory, gauge theories and classical mechanics.

Born on September 16, 1931, at Pallam in Kottayam district of Kerala, he did his M.Sc. from Madras University and Ph.D. from University of Rochester, New York. He had his academic career mostly in the US. He passed away in Texas recently. He was a Professor at University of Texas for the past 40 years. In the 1980s, he worked as Director of Institute of Mathematical Sciences at Chennai for five years.

One of the most accomplished and renowned theoretical physicists of Indian origin, he is known for his prodigious creative output. He, together with American physicist Robert Eugene Marshak, came out in 1957 with what is called the VA Theory of weak interactions. Dr Sudarshan had achieved another breakthrough in 1960s, when he

propounded the theory of Tachyons. According to the theory, there should be particles called Tachyons, which had speeds larger than that of light. So far, the particles have not been found experimentally. But physicists are hopeful. As and when they are discovered, it will be a historical moment as it would markedly change the conception and understanding of the universe.

Even as he missed the Nobel prize several times, Sudarshan openly expressed his anguish when the Royal Swedish Academy of Sciences chose to give a prize to RJ Glauber in 2005 "for his contribution to the quantum theory of optical coherence", ignoring Sudarshan's work. In a letter to the Academy, he said: "In the announcement of the 2005 Physics Nobel Prize, the Swedish Royal Academy has chosen RJ Glauber to be awarded half of the prize. The prize winners are chosen by the Royal Academy, but no one has the right to take my discoveries and formulations and ascribe them to someone else!"

Source: Science Wire

Spine of steel: Howrah Bridge celebrates 75th anniversary this year

The British-era Howrah Bridge, which serves as a crucial gateway to the city of Kolkata, that ferries one lakh-plus vehicle and over 1.5 lakh pedestrians daily, is celebrating its 75th anniversary. It was on February 3, 1943, that the bridge was quietly thrown open to the public, replacing a pontoon bridge linking what was then Calcutta and Howrah. The steel colossus -- christened Rabindra Setu (in 1965) after one of Kolkata's greatest sons, Nobel Laureate and poet Rabindranath Tagore - has become a symbol of the city over the decades, connecting the bustling eastern metropolis with the terminal Howrah station over the Hooghly river - a distributary of the mighty Ganges.

However, the beginning of the journey, of what was the world's fourth-longest cantilever suspension at that time, was unheralded, amid the dark days of World War II. The 26,500 tonne structure, that finds mention in Rudyard Kipling's works, was "thrown open to the public of Calcutta, as the city was then called, in the dead of night... a tramcar rolling down from the city end to the station," says a commemorative coffee table book "Howrah Bridge: An Icon in Steel" brought out by Tata Steel.

"The eerie silence upon completion was a testament to the terrifying oppressiveness of the War. The Howrah Bridge was the targeted bridge for bombing." The Japanese



attack on the United States naval base at Pearl Harbor on Dec., 7, 1941, "weighed heavily on every mind".

The work at the site began in October 1936, and it took around six years to make the bridge ready for traffic. It needed special legislation to begin with -- The Howrah Bridge Act, 1926 - - as the structure involved a plethora of laws to acquire land, levy taxes, employ people & ensure maintenance. The Act was replaced later with the New Howrah Bridge Act of 1935.

The bridge aroused much interest worldwide. Rendel, Palmer and Tritton were the civil engineers, and the British company Cleveland Bridge and Engineering Company Ltd secured the contract for the whole work. The Calcutta- based Baithwaite, Burn and Jessop became the sub-contractors for the fabricated steel work. The Tata Iron and Steel Company supplied 23,500 tonnes out of the total 26,500 tonnes of steel for the project. The remaining 3,000 tonnes were made in England.

With the completion of the bridge, where not a single nut or bolt was

used, the Kolkata skyline changed forever. It is now the sixth-largest bridge of its kind in the globe. The Engineer wrote on January 14, 1944: "It (the bridge) carries a roadway 71 feet wide and two footways, each 15 feet wide... and its central span has a length of 1500 feet."

The Kolkata Port Trust is the custodian of the bridge that stretches for 2,150 feet and rises up to 280 feet from its foundation. Corrosion, bird droppings and human pan (beetle leaf) mingled spit have damaged the bridge. In 2011, an inspection showed that, between 2007 and 2011, spitting had reduced the thickness of the steel hoods protecting the pillars from six millimeters to less than three millimeters. Remedial measures were taken and regular painting done. "In 2014, Kolkata Port Trust spent Rs 6.5 million to paint 2.2 million square metres with a whopping 26,000 litres of lead-free paint." Between 2013 and 2016, the average annual expenditure on engineering maintenance was Rs 2.5 crore.

FACULTY CORNER

Values: Mainstay of the Society

The importance of values in life can hardly be over-emphasized. It is because of values that we call ourselves human being. A society bereft of values is nothing but herd of wild animals. In the words of Philomena Aqudo, 'Values are the norms, goals and purposes that give a sense of meaning and direction to one's life'. They act as the cohesive force that helps develop human being in its entirety. Truth, honesty, righteousness, fellow-feeling, helpfulness, benevolence, generosity, charity, magnanimity, compassion, empathy, mercy, an undiluted love for motherland coupled with high degree of tolerance and tranquility of temper are some of the values of life that upholds not only the 'individual but also the society at large'.

The main difference between traditional and modern values is that in traditional societies people were the valuable resource, relations between them were carefully tended to. In modern society, whereas, things or objects are regarded as more valuable. People on the other hand are, too often, treated as disposable. This has resulted in making goods and commodities more important and valuable than the human beings. The great economist Roy. L. Smith has rightly remarked that 'Too many men, who know all about financial values, know nothing about human values'. Gen: X are hardly aware of the truth contained in the proverb 'Riches adorn the dwelling, values adorn the person'. The news of hooliganism, smuggling, kidnapping so on and so forth do not affect them and they remain insensitive to such issues. This

schism has disintegrated the personality of the present generation. This state of affair, however, cannot be and should not be allowed to perpetuate because the Gen: X who are the future custodians have to shoulder the responsibility to rejuvenate and regenerate the society and country. Youth in their student life well learnt to be competitive and imbibed with the spirit of ambition and hunger for personal achievement. But now that they are ready to shoulder the responsibility of life, they should learn and search the values of human life. For this they will have to develop kindness, mercy, tolerance, empathy, benevolence and other such human values.

Values help us in two ways – first, they act as indicators to our fundamental attitude and convictions. Secondly, they form the basis of our action. In other words they shape our motives and thoughts. Remember, values unlike ideals do not refer to the future. They are present, actual and factual. Therefore, such values should be selected that could be practiced in actual life, or else the person talking of values would be nothing more than a donkey who carries a load of scriptures and knows not a word thereof.

Values are prizes to be striven for, and not something to be imposed by authority. Unfortunately, in most cases values are treated like dogmas. This is

one of the reasons why they are only talked and preached and very seldom practiced in actual life. The values are not a way of teaching, but a way of life which prevents us from going out of order. It one hold certain values, believe in them, let people see what values have made you like. Finally values can be inculcated through study, reflection, self introspection and by devotion to ideals.

'My words fly up, my thoughts remain below, Words without thoughts never to heaven go'.

Dr. GN Sinha

Head

Department of Education

Seminar attended

1. Dr. Sandhya Goswami and Dr. Mandeep Kaur from Department of Forestry attended the 2 day 9th Environment Summit on Ecosystem Services and Plastic free Uttarakhand, which was jointly organized by Confederation of Indian Industry and UCOST on 5th and 6th June 2018.

2. Dr. Mandeep Kaur from Department of Forestry participated in the launch workshop of project Studies on Improving Livelihood Generation through Scientific Interventions in *Pinus gerardiana* and important wild mushrooms in Himachal Pradesh on 23rd June 2018 at Shimla, Himachal Pradesh.

Student's Corner

Tree Says

1. Stand tall ,keeping head high with proud,
2. Stretch out your limbs for help.
3. Give shelter to all- in sun and rain.
4. Never forget your roots and place.
5. Bloom and wave in all seasons.
6. Enjoy your surroundings with dancing leaves.
7. Be flexible to bend and bow.
8. Embrace with joy the changing seasons.
9. Be content with your natural beauty.
10. Live your purpose with grace and calm.



- Abhijit Chanda
(B.Sc.Forestry – 3rd Yr.)

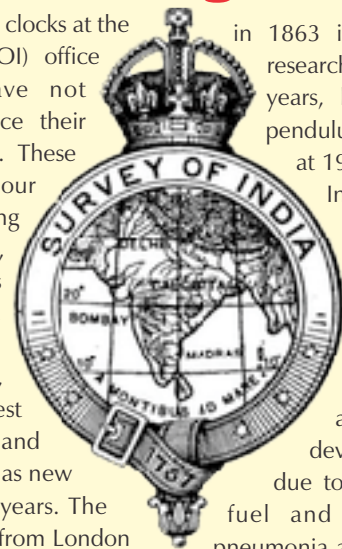
The clocks which have not stopped ticking since 1874

The three pendulum clocks at the Survey of India (SOI) office building here have not stopped ticking since their installation in 1874. These clocks chime every hour and their bells ring every 15 minutes, reminding residents of the racing times. Known as 'Basevi Memorial Clocks', these are India's oldest pendulum clocks and are running as good as new even after so many years. The clocks were bought from London and were installed on the top of the 40-ft tall concrete office building. The chime from the clocks can be heard from a long distance.

Installed in memory of scientist James Palladio Basevi at the Great Trigonometrical Survey (GTS) building after his death by his colleagues, these clocks have not developed any major technical snags till date. Basevi was an expert in pendulum motion and gravity observation. He began working

in 1863 in the field of gravity research. For the next seven years, he was employed for pendulum observation in India at 19 stations along in north India and in Minicoy and Lakshadweep Islands. In 1871, he took pendulums to the higher Himalayas in Ladakh for gravity observation. During an assignment, Basevi developed severe cough due to scarcity of provisions, fuel and rains and died of pneumonia at the age of 39 on July 17, 1871. He was buried at a Christian cemetery in Srinagar (Jammu and Kashmir).

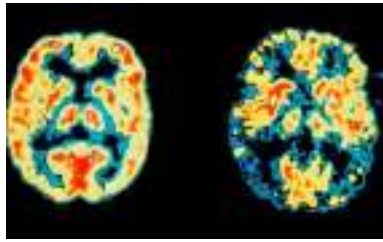
Some of his colleagues then collected an amount of Rs 2,000 and decided to install pendulum clocks as a tribute to the expert of pendulum motion. It is said that "these are the world's second oldest functional pendulum technology clocks. The credit goes to the Survey of India for maintaining these instruments properly."



SCIENTIFIC ADVANCEMENTS

Alzheimer's Gene Neutralised In Human Brain Cells for the First Time

A gene associated with Alzheimer's has been neutralised in human brain cells for the first time. Scientists "turned off" a protein associated with the apoE4 gene, which damages nerve cells, leading to dementia. Having one copy of the gene doubles the risk of Alzheimer's, whereas two copies increase the risk by 12 times. The study could open the door to a potential new drug capable of halting the disease. (<http://www.dailymail.co.uk/health/article-5598041/Alzheimers-gene-neutralised-human-brain-cells-time.html>)



dailymail.co.uk/health/article-5598041/Alzheimers-gene-neutralised-human-brain-cells-time.html)

Researchers Create Super Sponge That Mops up Oil Spills



A study led by Australian researchers has created a floating substance that acts like a sponge to absorb crude oil and diesel from sea water and can be squeezed to recover the oil. The polymer is made from sulphur, petroleum by product, and canola

cooking oil. Researchers are collaborating with several firms to develop the product on a larger scale for tackling oil spills. (<https://www.theguardian.com/business/2018/apr/19/researchers-create-super-sponge-that-mops-up-oil-spills>)

IISc. Researchers Find Gene Mutation Linked To Deadliest Brain Tumour

Researchers at the Indian Institute of Science (IISc.), Bengaluru and AIIMS, New Delhi have uncovered a previously unknown gene mutation linked to glioblastoma, the deadliest and most common form of brain cancer. They found a pathway of various signalling molecules and receptors severely mutated in a small fraction of glioblastoma patients who had a survival time of about three months. Identifying genetic changes that govern cancer growth and spread may help pinpoint new drug targets,



and develop treatments that are more effective. (<https://www.iisc.ac.in/events/gene-mutation-linked-to-aggressive-brain-tumour-identified/>)

Bengaluru Couple Develops Eco-Friendly Alternative to Plastic Bin Bags

A couple in Bengaluru has developed bags made of degradable material like newspaper and all-purpose flour (maida) as binder, an eco-friendly alternative to plastic garbage bags. The final product has multiple layers of newspapers to ensure that the paper doesn't tear easily or get soggy due to liquid waste being dumped into it. The duo has also started a social enterprise called 'greenBUG' and reached out to underprivileged women through an



NGO. So far, they have trained around 100 women, and they neither set production targets nor penalise for low production. (<https://swachhindia.ndtv.com/bengaluru-couple-develops-eco-friendly-alternative-plastic-bin-bags-19032/>)

Scientists Just Created A Deadly Human Brain Protein In A Lab For The First Time

US-based researchers have synthesised the first artificial human prion to combat a fatal form of neurodegenerative disease which is still incurable. Prions are infectious brain proteins that have folded incorrectly. They can bind to neighbouring normal proteins and trigger a domino effect that causes microscopic holes, resulting in

progressive deterioration, dementia, and death. This research will in future prove crucial for developing inhibitors of their replication and propagation throughout the brain, which is essential for halting prion-based brain disease. (<http://www.alphr.com/bioscience/1009542/deadly-human-brain-protein-prion>)

Scientists Uncover Enzyme Used By Plastic-Eating Bug

After the accidental discovery in 2016 of a bacterium which consumed plastic, researchers have now revealed the detailed structure of the enzyme produced by the organism. Researchers are hoping to speed up the enzyme's process further by a few days, so the PET plastic could be recycled faster. It could help solve the global plastic pollution crisis by enabling for the first time the full



recycling of bottles. (<https://in.reuters.com/article/us-science-plastic-enzyme/plastic-eating-enzyme-holds-promise-in-fighting-pollution-idINKBN1HN2OZ>)

A Mysterious New Form of DNA Discovered Inside Living Human Cells

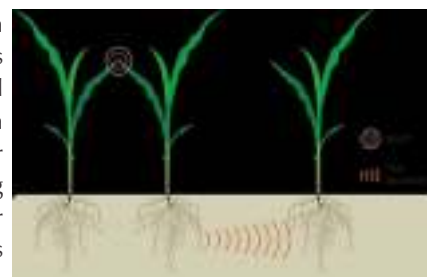
A new DNA structure inside human cells known as the "i-motif", has been identified by Australian researchers. This form resembles a twisted "knot" of DNA, instead of the well-known double helix first described by James Watson and Francis Crick. The scientists are not exactly sure what the function the i-motif is, but they suspect it is involved with the process of "reading" DNA sequences and converting them into useful



substances. (<https://www.sciencedaily.com/releases/2018/04/180423135054.htm>)

Study Reveals Plants Communicate Through Root Secretions

European researchers studying corn seedlings have suggested that plants use their roots to send chemical signals in the soil, informing each other of the proximity of other plants. Further, when germinating plants brush their leaves, they alter their growth preferences towards untouched plants. Previous studies have suggested plants communicate using fungal networks and also via clicking noises. (<https://www.theguardian.com/science/2018/may/02/plants-talk-to-each-other-through-their-roots>)



theguardian.com/science/2018/may/02/plants-talk-to-each-other-through-their-roots)

Chemists Develop New Blood Test To Quickly Detect Liver Damage



UK and US-based researchers have designed a finger-prick type blood test that can detect liver damage within an hour, before symptoms appear. Liver fibrosis, the first stage of liver scarring leads to fatal liver disease if left unchecked. Researchers designed a sensor that uses large molecules called polymers, coated with fluorescent dyes that bind to blood proteins based on their chemical properties. The fluorescent dyes change in brightness and colour, yielding a different pattern of fluorescence depending on the protein composition of the blood sample. With blood from 65 volunteers, the test could distinguish fibrotic samples from healthy samples 80% of the time. (<https://www.sciencedaily.com/releases/2018/05/180524140924.htm>)

Scientist Accidentally Discover Nanoparticles in Tea Leaves That Kill Lung Cancer Cells

Researchers have found that quantum dot nanoparticles derived from tea leaves suppress the growth of lung cancer cells. Tea leaves contain a wide variety of compounds, including polyphenols, amino acids, vitamins and antioxidants. The researchers mixed tea leaf extract with cadmium sulphate (CdSO₄) and sodium sulphide (Na₂S) and allowed the solution to incubate, a process which causes quantum dots to form. They then applied the dots to lung cancer cells. These quantum dots were found to penetrate into the nanopores of the



cancer cells and were found to destroyed up to 80% of them. (<https://www.sciencedaily.com/releases/2018/05/180521092720.htm>)

India Discovers New Planet, Joins Elite Club

Scientists at Ahmedabad's Physical Research Laboratory have discovered an exoplanet, propelling India into a select group of countries which have found planets outside the solar system. The 'super-Neptune' is about 27 times the mass of Earth and six times its radius. It is 600 light-years



away from Earth and is most likely 'uninhabitable' due to the proximity to its hot star, EPIC 211945201 or K2-236.

(<http://www.thehindu.com/sci-tech/science/indian-prl-scientists-discover-an-epic-planet/article24127772.ece>)