



Dolphin Insight

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डॉल्फिन इन्स्टिट्यूट में धूमधाम से मनाया गया 17वाँ वार्षिकोत्सव 'उड़ान'

- एनुअल वीक 'सृजन' मनाते हुए 'उड़ान-2018' का हुआ समापन।
- दुल्हन की तरह सजा हुआ था संस्थान का परिसर।
- दमदार प्रदर्शन के आधार पर स्पोर्ट्स व कल्चर एक्टिविटीस में छात्र-छात्राओं ने कब्जाए ढेरों पुरस्कार।

डॉल्फिन (पी.जी.) इन्स्टिट्यूट ऑफ बायोमेडिकल एण्ड नेचुरल साइन्सेज के परिसर में 17वाँ वार्षिकोत्सव 'उड़ान-2018' धूमधाम से मनाया गया। इसमें शैक्षिक, शिक्षणेत्तर, सांस्कृतिक तथा खेलकूद गतिविधियों में सर्वश्रेष्ठ प्रदर्शन करने वाले छात्र-छात्राओं को पुरस्कृत किया गया। साथ ही, संस्थान द्वारा संचालित मां बालासुन्दरी देवी प्रशिक्षण संस्थान की 60 महिला प्रशिक्षणार्थियों को उनके सफल प्रशिक्षण के उपरान्त प्रमाण पत्र भी वितरित किए गए। इस अवसर पर छात्र-छात्राओं ने अपनी उत्कृष्ट सांस्कृतिक प्रस्तुतियों से समा ही बांध दिया। संस्थान के 17वें वार्षिकोत्सव का उद्घाटन डॉल्फिन एजुकेशनल सोसाइटी ऑफ इंडिया के अध्यक्ष श्री रमेश गर्ग ने ज्ञान की देवी माँ सरस्वती की प्रतिमा के समक्ष दीप प्रज्वलित कर किया। कार्यक्रम का शुभारम्भ राष्ट्रीय



एनुअल-डे के अवसर पर प्रमाण पत्र वितरण

गान "जन गण मन अधिनायक.....", तथा सृजनात्मक एवम् सृजिता द्वारा प्रस्तुत भरतनाट्यम नृत्य के साथ हुई। कार्यक्रम में संस्थान के निदेशक डा. अरुण कुमार ने सभी अतिथियों को स्वागत किया। इस अवसर पर संस्थान की प्राचार्या डॉ. शैलजा पन्त ने वर्ष 2017-18 के लिए शैक्षिक, शिक्षणेत्तर, सांस्कृतिक, खेलकूद, समाज-सेवा तथा शोध कार्यों पर आधारित संस्थान की वार्षिक रिपोर्ट प्रस्तुत की कार्यक्रम में डॉल्फिन एजुकेशनल सोसाइटी के अध्यक्ष श्री रमेश गर्ग, डॉल्फिन इन्स्टिट्यूट के चेयरमैन श्री अरविन्द गुप्ता, ओ.एस.डी. श्रीमती आरती गुप्ता, श्री मुकेश गुप्ता, ड्रग मैनुफैक्चरिंग एसोसिएशन ऑफ

उत्तराखण्ड के अध्यक्ष श्री प्रमोद कलानी, श्रीमती रेखा कलानी, संस्थान की प्राचार्या डॉ. शैलजा पन्त, निदेशक डॉ. अरुण कुमार, अतिरिक्त निदेशक श्री वी.के. नागपाल, सह निदेशक श्री सुनील कौल, डीन-स्टूडेंट्स वैलफेयर श्री विपुल गर्ग, स्पोर्ट्स ऑफीसर श्री एन.के. जोशी, सभी ग्राम प्रधान क्रमशः-माण्डुवाला श्री प्रदीप यादव, भाऊवाला श्री प्रवीन चौहान, कांसवाली कोठरी श्री राजकुमार रौतेला, कोठरा, कल्याणपुर श्री राजपाल पंवार, क्षेत्र पंचायत सदस्य भगवानपुर श्री यशपाल नेगी, एलुमनाई, शिक्षकों तथा छात्र-छात्राओं के साथ अन्य अनेक गणमान्य अतिथियों ने शिरकत की।



दीप प्रज्वलित करते हुए मुख्य अतिथि

रितिक शर्मा और रितविका मुखोपाध्याय बैस्ट ब्वाय और बैस्ट गर्ल ऑफ द इयर



बैस्ट ब्वाय एवं बैस्ट गर्ल ऑफ द इयर के प्रतिभागी

एनुअल डे के दौरान बहुप्रतीक्षित और रोमांच से भरे पलों में से एक बैस्ट ब्वाय और बैस्ट गर्ल ऑफ द इयर की घोषणा रही। इसमें शैक्षिक उपलब्धि, कक्षा में उपस्थिति, अनुशासन, सांस्कृतिक एवम् शिक्षणेत्तर गतिविधियों में उपलब्धि, खेलकूद तथा समाज सेवा के कार्यों में भागीदारी आदि सभी मानकों के आधार पर बैस्ट ब्वाय तथा बैस्ट गर्ल ऑफ द इयर का चयन

किया गया। बी.एस.सी. फॉरेस्ट्री फाइनल इयर की छात्रा रितविका मुखोपाध्याय ने उपरोक्त सभी मानकों के आधार पर सर्वाधिक अंक हासिल करते हुये बैस्ट गर्ल ऑफ द इयर का खिताब हासिल किया। वहीं बी.एस.सी. बायोटेक्नोलॉजी फाइनल इयर के छात्र रितिक शर्मा को बैस्ट ब्वाय ऑफ द इयर के लिये सर्वोत्तम पाया गया।

रितविका मुखोपाध्याय और रितिक शर्मा के शांत सरल स्वभाव, नेतृत्व क्षमता, सकारात्मक दृष्टिकोण, व्यवहार कुशलता तथा पढ़ाई व सामाजिक कार्यों में बेहतरीन सामन्जस्य को मध्य नजर रखते हुये भी दोनों को इन पुरस्कारों के लिए सुयोग्य माना गया। इसके लिए उन्हें ट्रॉफी, प्रमाण पत्र तथा सोनी कम्पनी का म्यूजिक सिस्टम पुरस्कार स्वरूप प्रदान किया गया।

फिजियोथैरेपी डिपार्टमेंट ने कब्जाई ओवर ऑल चैम्पियनशिप ट्रॉफी



- उत्कृष्ट प्रदर्शन से फिजियोथैरेपी डिपार्टमेंट बना ओवर ऑल चैम्पियन।
- हॉलीवुड कल्चर डिपार्टमेंट रहा रनर अप।

फिजियोथैरेपी डिपार्टमेंट को ओवर ऑल ट्रॉफी देते हुए मुख्य अतिथि

डॉल्फिन इन्स्टिट्यूट में 19 से 24 फरवरी, 2018 तक एनुअल वीक-सृजन का आयोजन किया गया। इसमें इन्टरडिपार्टमेंटल कल्चरल और स्पोर्ट्स एक्टिविटीस में सर्वश्रेष्ठ प्रदर्शन के आधार पर फिजियोथैरेपी विभाग ओवर ऑल चैम्पियन बना। इसमें पोस्टर प्रजेन्टेशन, ग्रुप डांस-वैस्टर्न स्टाइल, ड्यूट सांग, माइम एक्टिंग, स्किट एण्ड ड्रामा, डांस-थीम बेस्ड, डिबेट-इंग्लिश, माइम एक्टिंग, फ्लावर पॉट अरेन्जमेंट, नुक्कड़ नाटक, रंगोली, सोलो

डांस-इंडियन, अंताक्षरी, डांस-डिपार्टमेंटल च्वाइस तथा पैन्टिंग में सर्वश्रेष्ठ प्रदर्शन के आधार पर फिजियोथैरेपी विभाग ने सर्वाधिक 77 अंक हासिल किये। स्पोर्ट्स एक्टिविटीस में फॉरेस्ट्री डिपार्टमेंट बेहतरीन रहा पर ओवर ऑल पर्फार्मेंस में तीसरे स्थान पर चला गया। हॉलीवुड कल्चर डिपार्टमेंट ने सबको चौंकाते हुये कल्चर व स्पोर्ट्स एक्टिविटीस में शानदार प्रदर्शन करते 73 अंकों के साथ रनर अप का खिताब हासिल किया।

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From Chairman's Desk...



Give respect to get respect

Respect has great importance in everyday activities and is an essential part of human life. ... It's an unspoken way of communication, building unshaken and strong relations between people respecting each other. Respecting others is a silent way to express our feeling for them. When a person shows respect for others, he has same value for himself.

Everyday discourses and practice reminds us that respect and self-respect are personally, socially and morally important. Their role in our lives as individuals, as people living in complex relations with other people, and surrounded by a plethora of other beings and things on which our attitudes and actions have tremendous effects, cannot, as these discussions reveal, be taken lightly.

Some people, particularly younger generation, think that showing respect to someone means that you are degrading yourself. They take respect as a sign of weakness or inadequacy which may demean one's self respect. But it is absolutely wrong notion about the basic trait or emotion which makes us a real human being. Each one of us wants to be respected in our lives. Nobody likes to get humiliated. When others criticize us or speak behind our backs, and if we get affected or react to them in any way, it would mean that our self esteem is very fragile and based on a weak foundation.

We base our self esteem on the opinions of others, but what we forget is that every person will have a different opinion about us and we can never really know what others are thinking, because we're not connected to their minds. Even if we do know what others are thinking, aren't they entitled to have their opinion? Why should we allow their opinion to shake our self esteem and lose our inner stability? Stop worrying about what others think of you. Once you know who you are and your true self, you need not depend on the opinion of others.

Self esteem and self respect are intimately linked. One is not possible without the other. All of us have been taught how to respect others, but are we taught how to respect ourselves? Not Really! Because of this, our relationships lack harmony and our lives are filled with both inner and outer conflicts. Lack of self respect has brought about disharmony and negativity in our lives. Hence, if we can maintain self respect, we will be able to remain stable and positive. Then, there would be no 'tit for tat' attitude in our lives, no misunderstandings and no disharmony.

The only way to build and strengthen self respect is to practice respecting others, regardless of what they are like or what they are up to. By doing so, we are creating respect within ourselves for the self. This is because when we give respect to a person, we also create an image of them in our mind. In doing so, we are experiencing respect in a real way and incidentally, respect for the self is also experienced by us from within. So, follow the golden principle — "Give respect to gain respect."

- Arvind Gupta
Chairman

पढ़ाई के अतिरिक्त सामाजिक कार्यों में भी बढ़चढ़कर करें भागीदारी

- **वार्षिकोत्सव में मुख्य अतिथि डॉल्फिन एजुकेशनल सोसाइटी ऑफ इण्डिया के अध्यक्ष श्री रमेश गर्ग ने युवाओं को दिए कैरियर के टिप्स**



मुख्य अतिथि श्री उमेश गर्ग छात्रों को सम्बोधित करते हुए

डॉल्फिन इंस्टिट्यूट के वार्षिकोत्सव में मुख्य अतिथि श्री रमेश गर्ग ने डॉल्फिन स्टूडेंट्स वेलफेयर कमेटी के द्वारा चलाए जा

रहे समाज सेवा के कार्यों की भूरी-भूरी प्रशंसा की। उन्होंने कहा कि आज का युग मल्टीटैलेन्ट पर्सनलिटि का है और छात्र अपने आप को केवल पढ़ाई तक सीमित न रखें बल्कि स्पोर्ट्स, कल्चरल, सोशल सर्विसेज में बढ़-चढ़कर भागीदारी करें। उन्होंने बताया कि युवाओं के लिए आज अनेक क्षेत्र हैं जिनमें वे अपने कैरियर को ढाल सकते हैं। उन्होंने आगे कहा कि स्वच्छ भारत अभियान इसका एक बहुत अच्छा उदाहरण है।

Faculty Felicitations



Dr. Arun Kumar receiving award with others

1. **Dr. Arun Kumar**, Director Dolphin Institute was felicitated with a Citation and a Medal, namely, Col. Dr F.C. Fraser Oration Award on 21st March 2018 for his outstanding contribution in the field of Odonatology. The award was conferred on him during the conference entitled "Dragonfly (Insecta: Odonata) bioecology and

distribution dynamics v/s environment amelioration, with special reference to Global warming and climate change" from 21st to 23rd March 2018. A Bio-bibliography of Dr. Arun Kumar was also released during the conference.

2. **Shri K S Barman**,

Assistant Professor, Department of Agriculture was felicitated with Young Scientist Award in 2nd International Conference on Food & Agriculture, 2018, held at Dhanbad, Jharkhand from March 29 to 31, 2018.



Young Scientist Award

Indian Nobel laureates 1998 Noble Prize in Economic Science Amartya Sen

Prize motivation: "for his contributions welfare economics".

Work: Which are the most important and fundamental resources in a community and how should we divide them? One focus of Amartya Sen's research is how individuals' values can be considered in collective decision-making and how welfare and poverty can be measured. His efforts stem from his interest in questions of distribution and, in particular, the lot of society's poorest members.

Life : Amartya Sen was born into a Baidya family in Santiniketan, Bengal,



Amartya Sen

in India. His father was a professor of Chemistry in Dhaka (now part of

Bangladesh), where Amartya also received his first education. After university studies in Kolkata, India and at Cambridge, UK, where he received his PhD in 1959, he has held professorships in India and at Oxford and Cambridge universities, as well as in the US, including at Harvard University.

Background

Born: 3rd November 1933

Place of Birth: Santinekatan, India

Residence: USA

Affiliation at the time of award: Trinity College, Cambridge, U.K.

सांस्कृतिक प्रस्तुतियों में छात्र-छात्राओं ने बांधा समा

17वें एनुअल डे उद्घाटन-2018 के अवसर पर छात्र-छात्राओं ने एक से बढ़कर एक सांस्कृतिक कार्यक्रम पेश किए और अपनी प्रस्तुतियों से समा ही बांध दिया। इसमें अतिथि स्वागत गीत के साथ शुरुआत हुई तथा सरस्वती वंदना, नटराज नृत्य, मनीशा एवम् गुप द्वारा प्रस्तुत गढ़वाली लोकनृत्य, जोपी गुप द्वारा प्रस्तुत सूफी डांस, मंगस्तबम गुप द्वारा प्रस्तुत मणिपुरी लोकनृत्य तथा मशरत गुप द्वारा प्रस्तुत कश्मीरी लोकनृत्य में दर्शक मंत्रमुग्ध हो गए। अर्चना द्वारा प्रस्तुत मणिपुरी शास्त्रीय नृत्य, फौजी परिवारों के



सरस्वती वन्दना



मणिपुरी लोकनृत्य प्रस्तुति

पारिवारिक जीवन पर आधारित आरजू गुप द्वारा प्रस्तुत नेपाली लोकनृत्य, नांगजम गुप द्वारा प्रस्तुत वैस्टर्न डांस, पोतू गुप द्वारा प्रस्तुत पंजाबी मिक्स तथा स्नेहा गुप द्वारा प्रस्तुत वॉलीबुड मिक्स शाम को यादगार बनाने में कामियाब रहे।

इस अवसर पर पंकी गुप ने पंजाबी डांस, शैली गुप ने राजस्थानी लोकनृत्य, बाबी गुप

ने पंजाबी डांस, फुरपा गुप ने वैस्टर्न डांस तथा उमा गुप ने इंडियन डांस में छात्र-छात्राओं को झूमने पर मजबूर कर दिया। कार्यक्रम में प्रस्तुत देश के विभिन्न प्रांतों तथा पश्चिमी पहनावे पर आधारित फैशन शो में छात्र-छात्राओं ने अपने दमदार, आकर्षक व सौन्दर्य से परिपूर्ण व्यक्तित्व का खूब प्रदर्शन किया व खूब तालियां बटोरी।

मेधावी तथा जरूरत मन्द छात्र-छात्राओं को मिली छात्र वृत्तियां

- वर्ष 2017 के 18 टापर्स को 90,000 की छात्रवृत्ति
- आर्थिक रूप से अक्षम मेधावी छात्रों को 20,000 की छात्रवृत्ति

17वें वार्षिकोत्सव में वर्ष 2017 के 18 टापर्स को रु. 90,000 की छात्रवृत्ति प्रदान की गयी। इनमें से प्रत्येक को रु. 5,000 के चेक प्रदान किए गए। वहीं मेधावी आर्थिक रूप से अक्षम 4 छात्र-छात्राओं को 20,000 की छात्रवृत्ति दी गयी।

विभिन्न श्रेणियों में विशेष पुरस्कार

एलुमनाई : कु. केजांग बांगमो - रायल फॉरेस्ट सर्विसेज, भूटान

श्री केंचु - रायल फॉरेस्ट सर्विसेज, भूटान

श्री फरहान अली-एक्सीक्यूटिव-रिसर्च एण्ड डेवलपमेंट (बायोटेक) आई.जी.एल.

कु. साफिया हसन - असिस्टेंट प्रोफेसर - राजकीय आटोनोमस कॉलेज, ऋषिकेश

श्री अमित पृथ्वी - मैनेजर-क्यू. ए., पैथकाइंड डाइग्नोस्टिक प्रा.लि., दिल्ली

श्री अब्दुल्ला - क्यू. सी. ऑफीसर, मैनकाइंड फार्मा, पौन्टा साहिब

कु. सिम्पी करनवाल - टैक्निकल एरिया सैल्स मैनेजर, बायो मेरिकस इंडिया, दिल्ली

रंगोली : दीपक - बी.पी.टी.

फोटोग्राफी:

1. सौरभ मण्डल-एम.एस.सी. माइक्रोबायोलॉजी

2. गंगा महेश्वर रेड्डी - बी.एस.सी. एग्रीकल्चर

3. अनिल यादव - बी.एस.सी. एम.एल.टी. स्टार फैंकल्टी - डॉ. सी.एस. पाण्डे, हेड, एग्रीकल्चर डिपार्टमेंट

स्टार स्टाफ

1. टैक्निकल - सुजीत टी.के., आई.टी. हेड
2. नानटैक्निकल - पुष्कर सिंह नेगी, फ्रंट ऑफिस कोर्डिनेटर



टापर्स को चेक देते हुए मुख्य अतिथि

निर्दोश कुमार तथा जिमी नोनी बैस्ट प्लेयर ऑफ द इयर 2017-18

- **फॉरेस्ट्री ने जीती स्पोर्ट्स ट्रॉफी तथा एग्रीकल्चर डिपार्टमेंट रहा खरअप**

डॉल्फिन एनुअल वीक सृजन-2018 में स्पोर्ट्स एक्टिविटीस में फील्ड इवेंट्स तथा ट्रैक इवेंट्स में सभी विभागों ने बढ़-चढ़कर भागीदारी की। फील्ड इवेंट्स में बास्केट बाल, बालीबाल, फुटबाल, क्रिकेट, खो-खो, कबड्डी, रस्सा कस्सी तथा मार्च पास्ट आदि खेले गये। वहीं ट्रैक इवेंट्स में 1500 मीटर व 800 मीटर रिले रेस, 100 मीटर रेस, लांग जम्प, डिस्कस थ्रो, शॉटपुट, बैडमिन्टन, टेबल टेनिस, शतरंज आदि इवेंट्स आयोजित किए गए। फॉरेस्ट्री डिपार्टमेंट ने फील्ड व ट्रैक इवेंट्स में शानदार प्रदर्शन



बैस्ट प्लेयर्स ऑफ द इयर को सम्मानित करते मुख्य अतिथि

करते हुये सर्वाधिक 40 अंक हासिल किये तथा स्पोर्ट्स ट्रॉफी अपने नाम कर ली। एग्रीकल्चर डिपार्टमेंट ने फॉरेस्ट्री को कड़ी टक्कर दी और 38 अंकों के साथ दूसरे स्थान पर रहा। कार्यक्रम में ग्लोर्ज ए

मैनर तथा स्वाति शर्मा को पुरुष व महिला वर्ग में बैस्ट एथलीट ऑफ द इयर का पुरस्कार दिया गया। वहीं मियाम पेटिन और पी0सी0 लालहरू-आईसंगा को हे0न0ब0ग0वि0वि0 की टीम की ओर से शानदार खेल दिखाने के लिए पुरस्कृत किया गया। इस अवसर पर टी0 सैन्टीचुवा लेजर, साक्षी जलोत्रा, चन्द्रशेखर, सरिता चान्याल, धर्मेन्द्र, अपूर्वा, युदेन और प्रियंका को स्पोर्ट्स कैप्टेन, स्पोर्ट्स वाइस कैप्टेन और स्पोर्ट्स कोर्डिनेटर के दायित्व निर्वहन के लिए पुरस्कृत किया गया।



DSWC NEWS

डॉल्फिन इन्स्टिट्यूट में एनुवल वीक “सृजन” का आयोजन

- ➔ डॉल्फिनाइट्स ने मनाया 17 वाँ एनुअल वीक “सृजन-2018”
- ➔ डॉल्फिन एजुकेशनल सोसाइटी के अध्यक्ष श्री रमेश गर्ग ने किया उद्घाटन
- ➔ अन्तर्विभागीय स्पोर्ट्स, कल्चरल और शिक्षणेत्तर प्रतियोगिताएं रही एनुअल वीक का मुख्य आकर्षण

डॉल्फिन (पी0जी0) इन्स्टिट्यूट ऑफ बायोमेडिकल एण्ड नेचुरल साइन्सेज के परिसर में 17 वे एनुवल वीक, सृजन-2018 का शुभारम्भ दिनांक 19 फरवरी, 2018 को हुआ। इसमें मार्च पास्ट के माध्यम से छात्र-छात्राओं ने अपने-अपने हाउस ड्रेस में दमखम दिखाया तथा सांस्कृतिक कार्यक्रमों में एक से बढ़कर एक प्रस्तुतियां देकर माहौल को संतरीगी बना दिया। कार्यक्रम में सृजन-2018 के प्रतीक के रूप में गुब्बारे भी छोड़े गये।

कार्यक्रम का उद्घाटन डॉल्फिन एजुकेशनल सोसाइटी के अध्यक्ष श्री रमेश गर्ग ने किया। उन्होंने इस अवसर पर प्रसन्नता व्यक्त की कि

संस्थान पढाई के साथ-साथ, खेल-कूद और शिक्षाणेत्तर गतिविधियों पर भी सम्पूर्ण ध्यान दे रहा है, उन्होंने कहा कि इन गतिविधियों से छात्र की छिपी हुई प्रतिभा सामने आती है और व्यक्तित्व का सर्वांगीण विकास होता है।

कार्यक्रम में 8 विभागों के छात्र-छात्राओं क्रमशः फॉरेस्ट्री, एग्रीकल्चर, हॉटीकल्चर, माइक्रोबायोलॉजी, बायोटेक्नोलॉजी, फिजियोथैरेपी, मेडीकल लैब टैक्नोलॉजी तथा मिक्स (फिजिक्स केमिस्ट्री, फार्मास्यूटिकल केमिस्ट्री, बायोकेमिस्ट्री, जूलॉजी, बॉटनी, बी0एड0, कामर्स) ने अपनी अपनी हाउस ड्रेस व झंडे के साथ

फ़ानदार मार्च पास्ट कर मुख्य अतिथि को सलामी दी, परेड का नेतृत्व स्पोर्ट्स कैप्टेन (ब्वाइज) टी0 सेन्टीचुबा जमीर तथा स्पोर्ट्स कैप्टेन (गर्ल) प्रियंका ने किया। कार्यक्रम में सांस्कृतिक कार्यक्रमों की प्रस्तुत श्रंखला ने समा ही बांध दिया, थंक् यू सृजित ने गणेश बंदना तथा छात्र-छात्राओं के विभिन्न समूहों द्वारा प्रस्तुत नेपाल, गढवाली, नागा, आसामी, मराठी तथा राजस्थानी लोकनृत्यों में एक से बढ़कर एक प्रस्तुतियां दी जिनकी सभी ने भूरी-भूरी प्रशंसा की। इस अवसर पर सृजन-2018 के शुभारम्भ के प्रतीक के रूप में गुब्बारे भी



एनुअल वीक का शुभारम्भ

छोड़े गये। उद्घाटन कार्यक्रम का वेलफेयर श्री विपुल गर्ग तथ स्पोर्ट्स संचालन डी0एस0डब्लू0सी0 की छात्र ऑफिसर श्री एन0 के0 जोशी ने बताया कि सदस्य कु0 अंकिता बेलवाल तथा कु0 सृजन-2018 कार्यक्रमों के आयोजन निम्न कीर्ति पाण्डे ने किया। डीन स्टूडेन्ट्स प्रकार से होंगे।

व्यस्त गतिविधियों का सप्ताह रहा एनुवल वीक- 2018

- ➔ छात्र-छात्राओं ने स्पोर्ट्स, कल्चरण और शिक्षणेत्तर गतिविधियों में दिखाया दमखम
- ➔ स्पोर्ट्स ट्रॉफी के लिये फॉरेस्ट्री तथा एग्रीकल्चर में रही कांटे की टक्कर

संस्थान में 17वें एनुअल वीक में अन्तर्विभागीय स्पोर्ट्स, कल्चरण और शिक्षणेत्तर गतिविधियां 19 से 23 फरवरी, 2018 तक आयोजित की गयी। जैसे-जैसे सप्ताह आगे बढ़ा प्रतिभागियों में एकल, युगल व समूह मुकाबलों में पदक व अंक प्राप्त करने की होड़ ने मुकाबलों का

अत्यन्त रोमांचक बना दिया। इसमें स्पोर्ट्स ट्रॉफी के लिये फॉरेस्ट्री, एग्रीकल्चर, माइक्रोबायोलॉजी तथा फिजियोथैरेपी जूझते हुए नजर आए। वहीं ओवर आल ट्राफी के लिये फिजियोथैरेपी, हॉलीकल्चर तथा माइक्रो-बायोलॉजी के बीच कांटे की टक्कर देखने

को मिली। इनमें से मुख्य प्रतियोगिताएं-डिबेट, विवज, पोस्टर, कोलाज, पेन्टिंग, काटून, रंगोली, मेंहदी, फेस पेन्टिंग, फ्लावर अरेन्जमेंट, सलाद मेकिंग, मिमिकरी, सांग्स, डान्स, स्क्रिप्ट, इनडोर एवम् आउट डोर गेम्स, फील्ड इवैन्ट्स, ट्रैक इवैन्ट्स आदि रही।

इण्टरडिपार्टमेंटल कल्चरल एण्ड स्पोर्ट्स एक्टिविटीज 2017-2018 के परिणाम

पोस्टर प्रजेन्टेशन “सक्सेस स्टोरी आफ इंडियन स्पेस रिसर्च प्रोग्राम”

- सुरभि एवं अरपन कर - फिजियोथैरेपी डिपार्टमेंट (विजेता), मुमयाम

रूकबो एवं कनॉग डरंग - हॉल्टिकल्चर डिपार्टमेंट (उपविजेता)

रंगोली - पूजा बेसूरा एवं भावना - पैथोलॉजी डिपार्टमेंट (विजेता),

दिबिया यज्ञा एवं नीतू - हॉल्टिकल्चर डिपार्टमेंट (उपविजेता)

मेहंदी - नेहा यादव एवं विजया भारती - मिक्स डिपार्टमेंट (विजेता),

नाजमीन शहनाज एवं दावा चमू - पैथोलॉजी डिपार्टमेंट (उपविजेता)

विवज - आशुतोष लोहानी एवं संजीव बिसवास - फॉरेस्ट्री डिपार्टमेंट

(विजेता), कल्याणव्रता पाल - माइक्रोबायोलॉजी डिपार्टमेंट (उपविजेता)

अन्ताक्षरी - आदित्य झा एवं शुभम त्यागी - पैथोलॉजी डिपार्टमेंट

(विजेता), गुजन थापा एवं इंशा मुज्जफर - मिक्स डिपार्टमेंट (उपविजेता)

माइम एक्टिंग - डिम्पल एवं गुप (विजेता), राकेश एवं गुप -

फिजियोथैरेपी डिपार्टमेंट (उपविजेता)

ड्यूट सांग - मनीष एवं पूजा खूंद - फिजियोथैरेपी डिपार्टमेंट, प्रितम राय

एवं सुरभि वशिष्ठा - मिक्स डिपार्टमेंट (विजेता) शितिज एवं नीतिका -

फिजियोथैरेपी डिपार्टमेंट (उपविजेता)

सोलो सांग - प्रीतम राय - मिक्स डिपार्टमेंट (विजेता), सुरभि वशिष्ठा -

मिक्स डिपार्टमेंट (उपविजेता)

नुक्कड़ नाटक - अंकिता एवं गुप - एग्रीकल्चर डिपार्टमेंट (विजेता),

सुमन एवं गुप - फिजियोथैरेपी डिपार्टमेंट (उपविजेता)

डांस-थीम बेस्ड - चन्द्रशेखर एवं गुप - फिजियोथैरेपी डिपार्टमेंट

(विजेता), गौरव बलूनी एवं गुप - एग्रीकल्चर डिपार्टमेंट (उपविजेता)

स्क्रिप्ट एण्ड ड्रामा - सुमन नेगी एवं गुप - फिजियोथैरेपी डिपार्टमेंट (विजेता),

गुप डिस्कसन - कनॉग डरंग एवं तामे तानिया - हॉल्टिकल्चर डिपार्टमेंट

(विजेता), कुमार आशु करन एवं अंकिता बेलवाल - एग्रीकल्चर

डिपार्टमेंट (उपविजेता)

सोलो डांस इंडियन - अर्चना - बायोटेक्नोलॉजी डिपार्टमेंट (विजेता),

श्रिजिता - माइक्रोबायोलॉजी डिपार्टमेंट (उपविजेता)

सोलो डांस वैस्टर्न - आदित्य देबबर्मा - माइक्रोबायोलॉजी डिपार्टमेंट

(विजेता), सरीता चमयाल - बायोटेक्नोलॉजी डिपार्टमेंट (उपविजेता)

डांस - इंडियन (डिपार्टमेंटल वाइस) - मनीष एवं गुप - फॉरेस्ट्री

डिपार्टमेंट (उपविजेता)

फलावर पाट अरेन्जमेंट - नंगबिया कुमी एवं रिनचिन यंगलिन -

हॉल्टिकल्चर डिपार्टमेंट (विजेता), अविनाश मिश्रा एवं अंजु पाण्डे -

फिजियोथैरेपी डिपार्टमेंट (उपविजेता)

स्पोर्ट्स एक्टिविटीज:

बास्केटबाल (पुरुष) - एग्रीकल्चर डिपार्टमेंट (विजेता), हॉल्टिकल्चर

डिपार्टमेंट (उपविजेता)

बास्केटबाल (महिला) - फॉरेस्ट्री डिपार्टमेंट (विजेता), हॉल्टिकल्चर

डिपार्टमेंट (उपविजेता)



मार्च पास्ट

डिपार्टमेंट, बाँबी न्यूपेन एवं गुप - एग्रीकल्चर डिपार्टमेंट (विजेता), सन्नी

एवं गुप - हॉल्टिकल्चर डिपार्टमेंट (उपविजेता)

डांस - “वैसटर्न गुप, डास - इंडियन एण्ड वैस्टर्न” - मनीषा एवं गुप -

फिजियोथैरेपी डिपार्टमेंट (विजेता), यनीलोमी एवं गुप - फॉरेस्ट्री

डिपार्टमेंट (उपविजेता)

डिबेट - इंग्लिश “स्माटफोन अ बून ऑर ए क्रश फॉर यूथ” - प्रनिशा राय

- मिक्स डिपार्टमेंट (विजेता), साक्षी राय - फिजियोथैरेपी डिपार्टमेंट (उपविजेता)

डिबेट - हिन्दी “स्वच्छ भारत एक सत्य या केवर परिकल्पन” - गौरव -

मिक्स डिपार्टमेंट (विजेता), आशुतोष लोहानी-फॉरेस्ट्री डिपार्टमेंट (उपविजेता)

कार्टून डिजाइनिंग - एंडोम मिरी - फॉरेस्ट्री डिपार्टमेंट (विजेता), मैबन

लिपिका - हॉल्टिकल्चर डिपार्टमेंट (उपविजेता)

फेस पेंटिंग - शोहनी - माइक्रोबायोलॉजी डिपार्टमेंट (विजेता), गौरव

यादव - माइक्रोबायोलॉजी डिपार्टमेंट (उपविजेता)

पेपर आर्ट - कौशल एवं ज्योति चौहान - मिक्स डिपार्टमेंट (विजेता),

संजनेबम बोनी एवं संगजेमतोशी इमचेन - एग्रीकल्चर डिपार्टमेंट (उपविजेता)

सलाद मेकिंग- रोनिया लिंग एवं रिनचिन यंगलिन-हॉल्टिकल्चर डिपार्टमेंट

(विजेता), सोनिया एवं तपी कानिया - हॉल्टिकल्चर डिपार्टमेंट (उपविजेता)

कोलाज - जरनी ऑफ इंडियन सिनेमा - नंगबिया कुमी एवं रोनिया लिंग-

हॉल्टिकल्चर डिपार्टमेंट (विजेता), ईशा कोल एवं मेघना रूपरेना -

माइक्रोबायोलॉजी डिपार्टमेंट (उपविजेता)

पेंटिंग - सौरभ मंडल - माइक्रोबायोलॉजी डिपार्टमेंट (विजेता), दिपतयन

राय - मिक्स डिपार्टमेंट (उपविजेता)

फलावर पाट अरेन्जमेंट - नंगबिया कुमी एवं रिनचिन यंगलिन -

हॉल्टिकल्चर डिपार्टमेंट (विजेता), अविनाश मिश्रा एवं अंजु पाण्डे -

फिजियोथैरेपी डिपार्टमेंट (उपविजेता)

स्पोर्ट्स एक्टिविटीज:

बास्केटबाल (पुरुष) - एग्रीकल्चर डिपार्टमेंट (विजेता), हॉल्टिकल्चर

डिपार्टमेंट (उपविजेता)

बास्केटबाल (महिला) - फॉरेस्ट्री डिपार्टमेंट (विजेता), हॉल्टिकल्चर

डिपार्टमेंट (उपविजेता)



दौड़ का एक दृश्य

बालीबाल (पुरुष) - मिक्स डिपार्टमेंट (विजेता), एग्रीकल्चर डिपार्टमेंट (उपविजेता)

बालीबाल (महिला) - फॉरेस्ट्री डिपार्टमेंट (विजेता), एग्रीकल्चर डिपार्टमेंट (उपविजेता)

क्रिकेट (पुरुष) - बायोटेक्नोलॉजी डिपार्टमेंट (विजेता), पैथोलॉजी डिपार्टमेंट (उपविजेता)

फुटबाल (पुरुष) - हॉल्टिकल्चर डिपार्टमेंट (विजेता), एग्रीकल्चर डिपार्टमेंट (उपविजेता)

कबड्डी (पुरुष) - मिक्स डिपार्टमेंट डिपार्टमेंट (विजेता), हॉल्टिकल्चर डिपार्टमेंट (उपविजेता)

खो-खो (पुरुष) - एग्रीकल्चर डिपार्टमेंट (विजेता), फॉरेस्ट्री डिपार्टमेंट (उपविजेता)

खो-खो (महिला) - माइक्रोबायोलॉजी डिपार्टमेंट (विजेता), बायोटेक्नोलॉजी डिपार्टमेंट

(उपविजेता)

टग ऑफ वार (पुरुष) - मिक्स डिपार्टमेंट (विजेता), एग्रीकल्चर डिपार्टमेंट (उपविजेता)

टग ऑफ वार (महिला) - फिजियोथैरेपी डिपार्टमेंट (विजेता), मिक्स डिपार्टमेंट (उपविजेता)

बैडमिन्टन (पुरुष) सिंगल - फॉरेस्ट्री डिपार्टमेंट (विजेता), फिजियोथैरेपी डिपार्टमेंट

(उपविजेता)

बैडमिन्टन (महिला) सिंगल - हॉल्टिकल्चर डिपार्टमेंट (विजेता), फिजियोथैरेपी डिपार्टमेंट

(उपविजेता)

बैडमिन्टन (पुरुष) डबल - फॉरेस्ट्री डिपार्टमेंट (विजेता), हॉल्टिकल्चर डिपार्टमेंट (उपविजेता)

बैडमिन्टन (महिला) डबल - हॉल्टिकल्चर डिपार्टमेंट (विजेता), मिक्स डिपार्टमेंट (उपविजेता)

टेबल टेनिस (पुरुष) सिंगल - फॉरेस्ट्री डिपार्टमेंट (विजेता), एग्रीकल्चर डिपार्टमेंट (उपविजेता)

टेबल टेनिस (महिला) सिंगल - फिजियोथैरेपी डिपार्टमेंट (विजेता), माइक्रोबायोलॉजी डिपार्टमेंट (उपविजेता)

टेबल टेनिस (पुरुष) डबल - डिपार्टमेंट (विजेता), फॉरेस्ट्री डिपार्टमेंट (उपविजेता)

टेबल टेनिस (महिला) डबल - फिजियोथैरेपी डिपार्टमेंट (विजेता), एग्रीकल्चर डिपार्टमेंट (उपविजेता)

चेस (पुरुष) - पैथोलॉजी डिपार्टमेंट (विजेता), बायोटेक्नोलॉजी डिपार्टमेंट (उपविजेता)

चेस (महिला) - फिजियोथैरेपी डिपार्टमेंट (विजेता), हॉल्टिकल्चर डिपार्टमेंट (उपविजेता)

80 मीटर दौड़ (पुरुष) - फॉरेस्ट्री डिपार्टमेंट (विजेता), फॉरेस्ट्री डिपार्टमेंट (उपविजेता)

50 मीटर दौड़ (महिला) - माइक्रोबायोलॉजी डिपार्टमेंट (विजेता), माइक्रोबायोलॉजी डिपार्टमेंट (उपविजेता)

4x80 मीटर रिले दौड़ (पुरुष) - फॉरेस्ट्री डिपार्टमेंट (विजेता), एग्रीकल्चर डिपार्टमेंट (उपविजेता)

4x50 मीटर रिले दौड़ (महिला) - एग्रीकल्चर डिपार्टमेंट (विजेता), फिजियोथैरेपी डिपार्टमेंट (उपविजेता)

1500 मीटर दौड़ (पुरुष) - माइक्रोबायोलॉजी डिपार्टमेंट (विजेता), फिजियोथैरेपी डिपार्टमेंट (उपविजेता)

800 मीटर दौड़ (महिला) - बायोटेक्नोलॉजी डिपार्टमेंट (विजेता), हॉल्टिकल्चर डिपार्टमेंट (उपविजेता)

लांग जम्प (पुरुष) - बायोटेक्नोलॉजी डिपार्टमेंट (विजेता), फॉरेस्ट्री डिपार्टमेंट (उपविजेता)

लांग जम्प (महिला) - हॉल्टिकल्चर डिपार्टमेंट (विजेता), एग्रीकल्चर डिपार्टमेंट (उपविजेता)

डिसकस थ्रो (पुरुष) - पैथोलॉजी डिपार्टमेंट (विजेता), फॉरेस्ट्री डिपार्टमेंट (उपविजेता)

डिसकस थ्रो (महिला) - हॉल्टिकल्चर डिपार्टमेंट (विजेता), फॉरेस्ट्री डिपार्टमेंट (उपविजेता)

शोटपुट (पुरुष) - फॉरेस्ट्री डिपार्टमेंट (विजेता), बायोटेक्नोलॉजी डिपार्टमेंट (उपविजेता)

शोटपुट (महिला) - हॉल्टिकल्चर डिपार्टमेंट (विजेता), फॉरेस्ट्री डिपार्टमेंट (उपविजेता)

जेवलीन (पुरुष) - एग्रीकल्चर डिपार्टमेंट (विजेता), मिक्स डिपार्टमेंट (उपविजेता)

कार्यक्रम में संस्थान के चेयरमैन श्री अरविन्द गुप्ता, प्राचार्य डा० शैलजा पन्त, निदेशक डा० अरुण

कुमार, डीन स्टूडेन्ट्स वेलफेयर श्री विपुल गर्ग, अतिरिक्त निदेशक श्री एस० के नागपाल, सह

निदेशक श्री सुनील कौल, डा० श्रुति शर्मा तथा श्रीमती मालती साहनी के साथ विभागाध्यक्ष, शिक्षक

तथा छात्र-छात्राएं उपस्थित थे।



माइन एक्टिंग

Glimpses of "Srijan" 2018



Shri Ramesh Garg lighting the inaugural lamp



The President and the Chairman release the balloons



Shri Ramesh Garg declaring Open the Srijan- 2018



Marathon Race



Naga Dance



Marchpast by the students



Poster Presentation



Judges during Fruit chat competition



Participant making painting



A scene of fruit chart competition



Disc- throw



Colorful mehandi designs



Inaugural Bharat-Natyam



Participants of mime



Punjabi Group Dance



Paper art competition



Kabbadi



Debate

Glimpses of "Udan" 2018



Student welcoming President Shri Ramesh Garg



President Shri Ramesh Garg lighting the inaugural lamp



Principal Dr Shailja Pant presenting bouquet to Shri Ramesh Garg



Welcome of Guests



Principal Dr Shailja Pant presenting annual report



Shri Ramesh Garg declaring "Udan - 2018" open



Dr Arun Kumar presenting memento to Shri Ramesh Garg



Mime - drama



Manipuri dance - drama



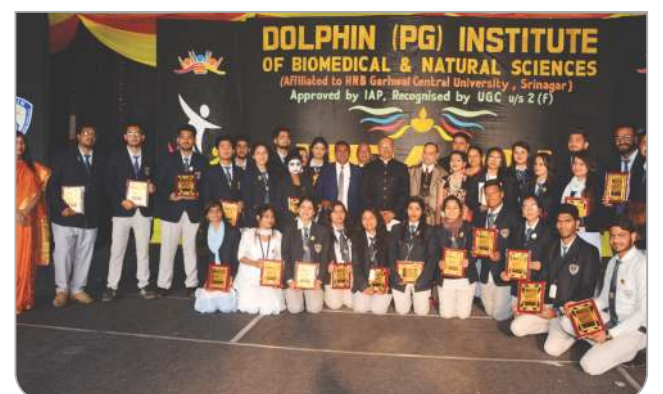
Large Audience "Udan - 2018"



Participant Awarded



Toppers felicitation



DSWC Team honoured



Winners - Sports Trophy - Forestry



Winners - overall Championship - Physiotherapy



Fashion show

पं. विश्व मोहन भट्ट ने डॉल्फिन इन्स्टिट्यूट में दी मंत्रमुग्ध प्रस्तुतियां स्पिक मैके के सहयोग से आयोजित हुआ कार्यक्रम

इन्स्टिट्यूट के परिसर में स्पिक मैके और डॉल्फिन स्टूडेंट्स वैलफेयर कमेटी के संयुक्त तत्वावधान में आयोजित रंगारंग कार्यक्रम का आयोजन 12 फरवरी, 2018 को अत्याधुनिक सुविधाओं से सुसज्जित नवनिर्मित सभागार में किया गया। यह सभागार 300 दर्शकों के बैठने की सुविधा के साथ हर प्रकार की आधुनिक तकनीक से लैस है।

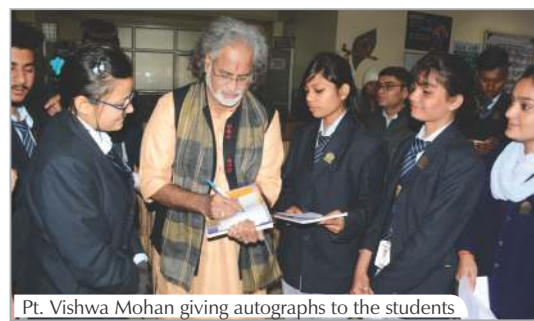
कार्यक्रम के द्वारा नवनिर्मित सभागार का उद्घाटन ग्रेमी अवार्ड विजेता, पदम श्री व पदम भूषण पं० वि व मोहन भट्ट ने किया। कार्यक्रम में पं० विश्वमोहन भट्ट, पं० राजकुमार मिश्रा तथा पं० राहुल मिश्रा की



Chairman, Principal, Director Faculty & Students with Pt. Vishwa Mohan

जुगलबंदी ने समा बांध दिया। उन्होंने इस अवसर पर तबला वादक पं० राजकुमार मिश्रा एवम् पं० राहुल मिश्रा के साथ मिलकर एक से बढ़कर एक प्रस्तुतियां दीं। उन्होंने मोहन वीणा पर वन्देमातरम तथा जन गण मन आदि बजाकर समा बांध दिया। साथ ही स्वनिर्मित मोहन वीणा से सम्बन्धित प्रश्नों के उत्तर भी दिये। इस अवसर पर उपस्थित शिक्षकों तथा छात्र-छात्राओं ने उनकी प्रस्तुतियों पर प्रसन्नता व्यक्त

की तथा करतल ध्वनि से उनका आभार व्यक्त किया। संस्थान के चेयरमैन श्री अरविन्द गुप्ता ने उनकी प्रस्तुतियों के लिये आभार व्यक्त किया साथ ही स्पिक मैके के प्रयासों की भी सराहना की। इस अवसर पर संस्थान की प्राचार्या डॉ० शैलजा पन्त, निदेशक डॉ० अरूण कुमार, डीन स्टूडेंट्स वैलफेयर श्री विपुल गर्ग, डॉ० श्रुति शर्मा, अतिरिक्त निदेशक प्रशासन श्री वी०के० नागपाल, सहनिदेशक श्री सुनील कौल, श्रीमती मालती साहनी तथा श्री सुधीर भारती के साथ शिक्षक एवम् छात्र-छात्राएं उपस्थित थे।



Pt. Vishwa Mohan giving autographs to the students

Dolphinites get the pride of standing 1st in academics in HNB Garhwal University Inter Collegiate academic & Cultural competition (2017-18)

The Inter Collegiate Academic and Cultural competition of HNB Garhwal Central University (2017-18) was held from 13th to 15th March 2018 at Srinagar Campus. As many as 18 Colleges affiliated to the University participated in various events. A contingent of 30 students (as per University norms) from the Institute participated in different academic and cultural events. Our college won the Inter college academic trophy by scoring highest aggregate points by winning most of the following events namely – Poster making, painting, cartoon, folk dance, classical dance, mime acting, folk song, light music, classical singing and western song. The winners were as follows: Poster competition – Arpan Kar (MPT: 1st Year) – 1st; Painting – Sourav Mandal (M.Sc. Microbiology: 2nd Semester) 1st; Classical Dance- Sreejita Mitra (B.Sc. Medical Microbiology: 1st year) 1st; Debate (Against)- Ankita Belwal (B.Sc. Agriculture: 4th Semester) 1st; Debate (Favour)- Anjali Singh (Bachelor of Physiotherapy: 3rd Year)



Winner Dolphinites at HNBGU campus

3rd ; Cartoon making – Andome Miri (B.Sc. Forestry: 4th Semester) 2nd, Quiz– Ankita Belwal and Hritik Sharma (B.Sc. Biotechnology: 6th Semester) 3rd , Mime – Mayank (Bachelor of Physiotherapy: 2nd Year) and group – 3rd. Gaurav Baluni (B.Sc. Agriculture: 4th Semester) and group from the Institute presented the group dance depicting the three week-long 'Nanda Devi Raj Jat' which is a pilgrimage and festival of Uttarakhand, which was widely appreciated by the audience. The

Dolphinites provided a very tough fight to the participants from other colleges. The able leadership and guidance by DSW & his team, namely, Sri Vipul Garg, Aditya Swaroop, Ms. Perna Bahuguna and Dr. Pallavi Bhatia is worth acknowledging. Shri Arvind Gupta, Chairman Dolphin Institute praised the achievements of the students and the 14 winners were awarded with a wrist watch each by him. A special ceremony was arranged to welcome the team Dolphin in the above competition.



Winner Dolphinites at HNBGU Campus



Dolphin Institute felicitated the winners from Uttarakhand in All India Senior Ranking Badminton Tournament

All India Senior Ranking Badminton Tournament was organised by the Government of Uttarakhand in association with Uttarakhand Badminton Association from 16th to 18th February 2018 at Dehra Dun. Ms. Kuhoo Garg from Uttarakhand played brilliantly and won Gold medal in the tournament;



All India Senior Ranking Badminton Tournament Scene



Physiotherapist team assisting players

while Bodhit Joshi from Uttarakhand won Bronze Medal. The Institute felicitated both the winners with cash

prize of Rs. 80000/- to Kuhoo Garg for 1st rank and Budhit Joshi with Rs. 20000/- for 3rd position.

Titbit > Fan-Throated Lizards

V. Deepak from the Indian Institute of Science believed that with a biodiversity as rich as India's, it was impossible to have just two species of fan-throated lizards since 1829. After scouring 81 locations across 160,000 sq. km, he discovered 5 new species of fan-throated lizards in the drier parts of India. These brightly colored lizards live on the ground. Only the males have a fan-shaped, multi-hued fold of skin on their throats, which bloat to attract the opposite sex during the mating season. The dewlap (fan) can be puffed due to the presence of a cartilaginous structure below the skin. During the breeding season, the males climb heights such as top of boulders



of trees and then arch their backs and puff out the fan-throat. As they live on dry soil with little vegetation, they begin to skitter about their hind legs during the day when the heat increases. Three of the new species discovered belong to the genus Sitana whereas the remaining two to a new genus that Deepak called Sarada, the local name for the fan-throated lizards. The study was published this year in Contributions to Zoology journal.

High-Quality Carbon From Bougainvillea Flowers Can Help Make Phone Batteries Cheaper

“Since these flowers are available in abundance during all seasons and at all places, regardless of the geography, we decided to experiment with them.”

Bougainvillea vines are ubiquitous in Indian cities with their paper-like flowers and thorns underneath that you can easily miss. Previously known for their ability to resist pollutants in the air, a group of scientists in Pune have now found out that they can extract high-quality carbon from these flowers which would help in making super-capacitors- devices that can store large amounts of energy, reports Indian Express.

Scientists from Centre for Materials for Electronics Technology (C-MET) and Savitribai Phule Pune University (SPPU) have managed to extract graphene, a type of carbon, by drying and chemically treating the Bougainvillea flowers. The graphene can then be used in super-capacitors which have a wide range of use including in Lithium and Sodium ion batteries. They can be used to charge mobile phones and e-vehicles.

The scientific study was published in the Nanoscale Journal in April this year. “Since these flowers are available in abundance during all seasons and at



all places, regardless of the geography, we decided to experiment with them,” said Bharat Kale, the director of C-MET, Pune, to Indian Express. Additionally, their variety of mineral composition like magnesium, calcium and potassium can help make the batteries last longer as well as make the extraction process easier. But more importantly, since the graphene is obtained from bio-waste, the resulting super-capacitors will be cost-effective. The scientists are now on the final legs of these super-capacitor trials.

For every kilogram of Bougainvillea flower used, 300 gm of graphene can be extracted. Since only few milligrams are required for each supercapacitor, if everything goes well this discovery can indeed make the batteries cheaper and long-lasting!

Now, Kashmir's Discarded Walnut Shells Can Be Used to Make Batteries! Sodium-ion batteries are significantly cheaper than lithium-ion varieties

Kashmir's lofty mountains and majestic slopes, together with the temperate are ideally suited for walnut production, and it is no wonder that Kashmiri walnuts are famous worldwide for their superior taste. Naturally, a lot of organic waste, by way of walnut shells, is also generated.

A team of scientists from the Indian Institute of Science, Education and Research (IISER), carried out a study and found that 63,000 hectares of land is used for walnut cultivation in Kashmir. Of the total 36,000 tonnes of organic waste generated from the farm produce, 15,000 tonnes is contributed by walnut shells alone.

Walnut shells can be used in making cheaper batteries.

The team, led by Satischandra Ogale, went to work processing the nutshell, to obtain high-quality



Batteries from Walnut carbon, usually used in the anode part of the sodium-ion battery. Although these batteries are similar to the standard lithium-ion batteries, they are much cheaper, because of the abundance of sodium over lithium in nature.

At the lab testing stage, the scientists were able to extract around 300-400 mg of battery-grade carbon from one gram of powder obtained from the walnut shell, which makes them believe that they have possibly stumbled upon the best solution for Kashmir's great walnut organic waste problem.

Editor's Column ...

Importance of Moral values in the life of a student

Moral Values are the worthy ideals or principles that one follows to distinguish the right from the wrong. These ideals or virtues are considered important in building up the character of an individual.

Moral Value refers to the good virtues such as honesty, integrity, truthfulness, compassion, helpfulness, love, respectfulness, hard-work, etc.

Positive moral values are important because they allow us to have an overall feeling of peace and joy. Moral values can give meaning and purpose to our life. We are able to direct our behavior towards beneficial and fulfilling activities.

Incorporating the moral value of honesty in our life makes us trustworthy. We will have a clear conscience because we can respect our self. The people that we come into contact with will be able to count on us to be fair and sincere. Our integrity will allow us to advance in both our personal and professional life. There are more opportunities for us to fully experience life when we are an honest person.

In addition to honesty, we also need to incorporate the moral value of compassion into our life. Compassion allows us to have sympathy for the misfortunes of other people.

The moral value of courage gives us the determination to face anything that impedes our progress through life. We will also be able to overcome any obstacles because we won't let fear hold us back.

In life it is essential to our survival to have modesty especially in respect to courage. Modesty allows us to realize what our limits are. It helps us to stay focused and keeps us from becoming overconfident and reckless.

Lastly, it is also important to incorporate the moral value of forgiveness in our life. Forgiveness allows us to move past hurtful or damaging situations. It allows us to abandon feelings of anger or resentment against others or our self. We can be emotionally healthy when we practice forgiveness because it keeps us from holding onto pain and resentment.

Students are the future of India. The future of our country depends upon the moral values imparted to them during their student life. Moral lessons should be properly implemented among students in school and colleges.

Seminar/Workshop/Conferences attended



Agriculture Students in the seminar

Department of Agriculture

Dr. C.S. Pandey, Associate Professor & Head, Department of Agriculture along with Dr. N.C. Pant and Shri Shailendra Tiwari, Assistant Professors attended the National Conference on 'Current Research and Development in Plant Science Research Meet (PSRM)-2018' organised by PLANTICA Association of Plant Science Research, Dehradun on January 28th, 2018.

M.Sc. Agronomy 4th Semester and B.Sc. Agriculture 6th semester students along with Dr. Manoj Kumar Bansala and Dr. Deepali Singh attended seminar to find ways to preserve the rivers in Uttarakhand, organized jointly by Graphic Era University, Dehradun and



Uttarakhand Science Education & Research Centre (USERC) on 23rd Feb., 2018.

Department of Pathology

Shri Aditya Swarup and Ankit Johari, from Department of Pathology along with the students of B.Sc. Medical Lab Technology attended the National

Conference on "Current Challenges for Tuberculosis Management", organized by S.G.R.R. Medical College, Dehradun on 24th March, 2018 in commemoration of World Tuberculosis Day.

Department of Forestry

UG & PG students and faculty members from Department of Forestry attended One day workshop on "Ecosystem services and its main-streaming in Developmental Planning process in the State of Uttarakhand" on 28th March at "Himalayan Environmental Studies and Conservation Organization (HESCO)" Dehradun.

Navnit Shukla, B.Sc. Forestry 3rd Year presented a poster entitled "Degradation of Pteridophytic diversity with reference to impact assessment & solution for sustainable livelihood" in the National Symposium on 'Pteridological studies in India: Perspective & Modern approaches to Environment and Climate change' 22-23 February 2018, Naharlagun, Arunachal Pradesh.

Watching Blood Moon

An observatory comprising Astromaster 130mm was installed in the college campus by the Department of Physics in the late evening of 31 / 0 3 / 2 0 1 8 to commemorate the rare celestial event "Super Blue Blood Moon". The activity was undertaken to guide the students how to analyze the layers of the stars and to watch the rare celestial event which has occurred after 150 years. The students availed the opportunity to the full extent.



Deptt. of Physics participated in Science Day celebrations

The Institute was invited by the Uttarakhand State Council for Science & Technology to participate in 'Innovative Science Model Exhibition' at Rajbhawan Uttarakhand to commemorate the National Science Day on 28th Feb, 2018.

The exhibition was inaugurated by Dr. K.K Paul Hon'ble Governor Uttarakhand and Eminent Scientist Dr. Anil Kakodkar, former Chairman, Atomic Energy Commission, India. He also delivered the key note address on the Science Day. The exhibition was visited by the Vice Chancellors of various Universities of Uttarakhand along with teachers and students from

a large number of schools and colleges.

Students and faculty from the P G Department of P h y s i c s participated in the programme.

Two working model based on the principles of 'Remote Voice Sensing Switching Device (RVSSD)' and 'Optically Character Recognition based Assistive Reading System (OCRBARS)' were exhibited in the programme. The Models were widely appreciated by the visitors



Dr Arun Kumar and Dr Raturi with Hon'ble Governor Dr K.K. Paul & Dr. Anil Kakodkar

and the guests. The credit for developing the models goes primarily to Kaushal Balmiki and Girija, both students of M.Sc. Physics 2nd Semester. The guidance was ably provided by the faculty, namely, Dr. Aasheesh Raturi and Shri Praveen Lakhera.

Seminar/Workshop/Conferences Organized

3Days National Conference on

"Dragonfly (Insecta: Odonata) bioecology and distribution dynamics v/s environment amelioration, with special reference to Global warming and climate change"

Department of Zoology

Organised a 3 day conference entitled "Dragonfly (Insecta: Odonata) bioecology and distribution dynamics v/s environment amelioration, with special reference to Global warming and climate change" from 21st to 23rd March 2018. The conference put forward many novel subjects for discussion and the interest shown by participants, especially students and young researchers was unparallel. Main features of the conference included: (i) A total of 32 Abstracts were received and printed in an exquisite Abstracts Booklet (46 pp.), (ii) A number of dragonfly researchers

representing eight

S t a t e s / U T s

participated (e.g.,

Delhi, Gujarat,

Himachal Pradesh,

Kerala, Punjab,

Rajasthan, Tamil

Nadu, Uttarakhand

and Uttar Pradesh),

besides of course one

Odonatologists from Germany, (iii)

First time in the history of science of

Odonatology three prominent Awards

were given away with a Citation and a

Medal, namely, (a) Col. Dr F.C. Fraser

Oration Award (to Dr Arun Kumar,

Director, DIBNS), (b) Prof. Dr B. Kiauta

Lifetime Achievement Award (to

Prof. Manu Thomas Mathai, MCC,

Chennai), and (iii) Dr S.K. Sangal

Young Scientist Award (to Ms

Kalavanti Mokaria, GEER

Foundation, Gandhinagar, Gujarat),

(iv) A total of 18 lectures were

delivered attracting huge interest

from participants, (v) release of Bio-



Seminar on Dragonflies

bibliography of Dr Arun Kumar, Director Dolphin Institute, a novel and unique feature across the world conferences, (vi) release of an elegant Abstracts Booklet with watermark of Neurobasis chinensis on title page and (vii) the most heartening, educative and fulfilling field tour to Asan Conservation Reserve to get acquainted with the dragonflies of Doon Valley .

The credit of success of the Conference goes to the dedicated faculty and a large contingent of students from Zoology Department for meticulously planning and executing each and every aspect of the conference.

2 DAYS HANDS ON WORKSHOP ON KINESIO TAPING

Department of Physiotherapy

Organised a two days hands on workshop on 'Kinesiology Taping' from 13 to 14 March 2018. The Kinesio® Taping Method is a therapeutic taping technique not only offering your patient the support they are looking for, but also rehabilitating the affected condition as well. The taping techniques were demonstrated by Dr. Piyush Jain, MPT (Ortho), Ph.D. (Cont), who is an Industrial Ergonomics Adviser, and clinical



Demonstration of KINESIO TAPPING



Delegates at KINESIO TAPPING workshop

physiotherapist with experience in orthopaedic and sports rehabilitation. He is the author of the book 'Manual of Kinesiological Taping and dry needling'. He has conducted about 50 workshops around the country and abroad on the subject. 47 students and clinical physiotherapists from our and other physiotherapy institutes of Dehradun and Delhi participated in the workshop.

Dr Jain explained about The Kinesio Taping® Method, a definitive

rehabilitative taping technique that is designed to facilitate the body's natural healing process while providing support and stability to muscles and joints without restricting the body's range of motion as well as providing extended soft tissue manipulation to prolong the benefits of manual therapy administered within the clinical setting. Latex-free and wearable for days at a time, Kinesio® Tex Tape is safe for populations ranging from paediatric to geriatric, and successfully treats a variety of orthopaedic, neuromuscular, neurological and other medical conditions. The participants had a great hands on session and practiced dry needling techniques in the presence of Dr Jain.

Dolphin Institute launched Calendar 2018

Continuing the practice of encouraging various talents in our students, this year the Institute brought out Annual Calendar 2018 on the theme "India's wildlife". It was launched in January 2018.

The unique feature of the calendar is the set of 12 wildlife photographs, one for each month of the year, snapped by the students of the Institute during their wildlife excursion tours to the various National Parks and Wildlife



sanctuaries of the country. The theme and quality of the photographs are excellent and the calendar comprising these photographs is worth possessing.

Guest Lectures

Department of Agriculture

Dr. R.P. Kala, Retd. Regional Manager, Uttarakhand Forest Development Corporation, Dehradun delivered a guest lecture on "Agro forestry – a tool for optimum resource utilisation" to the UG and PG students of Agriculture on 24th March, 2018.



Guest Lecture by Dr. R.P. Kala

Dr. G.P. Juyal, Retd. Principal Scientist & Head, Engineering & Hydrology, ICAR- Indian Institute of Soil and Water Conservation, Dehradun delivered a guest lecture on "Bioengineering Measures for Soil Erosion Control" to UG & PG Students of Agriculture" 29th March, 2018.



Guest Lecture by Dr. G.P. Juyal

Department of Botany

Dr. H.B. Vasistha, Former Scientist and Head, Restoration Ecology Division, FRI, Dehradun delivered a guest lecture on 'Ecosystem Restoration: Strategies, plans, passive and active restoration' to the UG & PG students of



Dr. K.P. Tripathi presenting memento to Dr. Vashist

Botany and Forestry departments on 24th March 2018. The emphasis was on ecosystem restoration and its applications in rehabilitation, reclamation and restoration of lands affected by landslides, mining, and dumping sites affected with alkalinity and acidity. The lecture was followed by an interactive session.

Department Physics

The Department of Physics organized a guest lecture on 'Computational Physics' for the students of M.Sc. Physics on 09/02/2018. The speaker for the lecture was Dr. Nikhil Rajput from the Department of Computer Science, Ramanujan College, Delhi University. There were two session's, of which first was theory and second was practical session. Dr. Nikhil Rajput discussed the basic concepts of computer, C-programming and use of computational technique in Physics.



Department of Biochemistry, Shri Ram Murti Medical College, Bareilly on 8th January 2018.

Department of Physiotherapy

Department of Physiotherapy organised a guest lecture on 'Geriatric Rehabilitation' on 13/03/2018 for both PG & UG students. The lecture was



Students with Dr. Jogi Jons

delivered by Dr. Jogi Jons, HOD, Department of Physiotherapy, Yashoda Group of Hospitals, Delhi.

Dr. Jons spoke about Geriatric Rehabilitation and its three concerned areas, i.e., normal aging due to disuse and deconditioning, cardiovascular problems like vascular disease and stroke, and skeletal problems including osteoporosis and osteoarthritis conditions such as knee and joint replacements. Physiotherapists use rehabilitation to work toward the goal of returning the patient to a pre-injury quality of life and may use physical, occupational, and speech therapies.

Department of Zoology

Dr. B. K. Tyagi, Former Director in-Charge, Cent. Res. Med. Entomology, I.C.M.R., Madurai, TN, India delivered a guest lecture on "Forensic a n d Veterinary Entomology" on 19th March 2018 to the students of M. Sc. Zoology.



Department of Pathology

Department of Pathology organized Guest lecture on "Hemoglobin Biochemistry and its disorders" by Dr. Sanjay Bhat, Associate Professor,

Neta Ji Bose's Jayanti Celebrated

Dolphin Students Welfare Committee commemorated the 121st birth anniversary of Neta Ji Subhash Chandra Bose on 23rd January 2018. A programme was organized to pay homage to the great freedom fighter and to remember the contributions of Neta Ji in Indian freedom struggle. Principal of the institute, Dr. Shailja Pant paid tribute to Neta Ji and told students that Subhash Chandra Bose is one of the most celebrated freedom fighter of India. He added that Neta Ji was a charismatic influencer of the youth and earned the nick name 'Netaji' by



Faculty & Students at Netaji Jayanti celebration

establishing and leading the Indian National Army (INA) during India's struggle for independence. Dean DSW Sh. Vipul Garg said that his sudden disappearance post 1945, led to surfacing of various theories, concerning the possibilities of his survival. Faculty, staff and students of the institute joined the programme in large numbers.

Saraswati Puja performed in the campus



Faculty & Students in Saraswati Puja celebration

Institute Celebrated Basant Panchami on 22 January 2018. The programme was organised under the aegis of the Dolphin Students Welfare Committee. Faculty, staff and students of the institute worshiped Devi Sarswati, the Goddess of Intelligence, on this occasion. The students

rendered a number of melodious Bhajans in the programme. Dr. Shailja Pant, Principal, Dr. Arun Kumar, Director, DSW Shri Vipul Garg, Coordinator, I. Q. A. C. Dr. Shruti Sharma along with faculty, staff and students actively participated in the programme.

Faculty and students of the Institute undertook Swachhata Abhiyan and Swachhata ki Shapath

Our Institute in collaboration with news daily Amar Ujala held Swachhata Abhiyan and Swachhata-ki-Shapath at 50 different places in



Faculty & Students taking oath on Swachhta Abhiyan

Dehradun district between January and March 2018. The programmes were organised under the mission 'Swachha Bharat Abhiyan'. To fulfil the mission student members of the Dolphin Students Welfare Committee visited different localities with their

teachers and officials of Amar Ujala. They gathered the residents and local influential persons of the area and motivated them to keep their locality clean. The students also took Swachhata ki Shapath to keep their neighbourhood clean.

Educational Tours



Dr. Tripathi with students of M.Sc. Botany in Sal Forest

Department of Botany

Students of M.Sc. Botany IV Semester undertook a field visit to Sal forest Sudhowala, Dehradun on 05.02.2018 to learn about the forest conservational methods. They also learnt about the biomass and productivity estimation techniques, plant species diversity, distribution and dominance of the natural forest ecosystem. Students were accompanied by Dr. K.P. Tripathi, Head, Department of Botany.

Students of B.Sc. Biotechnology II semester undertook a field visit to Sal forest Sudhowala, Dehradun on 29.03.2018 to learn about the soil sampling methods and also collected soil samples from various spots of the study site to estimate the physical and chemical characteristics of natural sal forest soil. Besides, they also learnt the

collection methods for plant specimens in herbarium preparation. Students were accompanied by Dr. K.P. Tripathi, Head Department of Botany.

Department of Zoology

Students of M.Sc. Zoology IV semester visited Fish Farm, Dhakrani on 13th and 15th March 2018 to learn the techniques of fish farm maintenance, breeding requirement, and breeding technique of common carp and use of drag net in a pond.

Students of M.Sc. Zoology IV semester visited Asan Conservation Reserve on 23/03/2018 for learning how to study dragonflies in their natural habitats. They were divided into small groups and one group each was attached with individual dragonfly scientists from different part of countries during 1st Indian dragonfly Conference hosted by Dolphin Institute.

Department of Horticulture

B.Sc. Horticulture IV and VI semester students visited Rajeshwari Nursery, Jogiwala on 24th March, 2018 for identification of ornamental plants, fruit plants and seed production of some of the vegetables under the guidance of nursery experts.

The students were accompanied by Dr. Ritu Pandey, Shri Sanjay Singh Negi, Sachin Devlal and Shri Anil Panwar, Assistant Professors, Horticulture Department.

Little Birds



Little birds are hopping around,
On the tree and above the ground,
Together they hop and flop,
Making sounds without a stop,
They come nigh my window,
One by one or in a row,
Perhaps to say "how do you do?"
Frequently they come and go.
Joyfully they flock and chirp,
In their beak, holding a turf.
If at them, I closely gaze
They fly away in different ways.

- Sushil Kumar

New Faculty who joined between January-March 2018

1. Dr. Katar Singh Barman, Ph.D. Horticulture, M.Sc. (Ag.), NET joined as Assistant Professor in Department of Agriculture.
2. Mr. Manish Kumar, M.Sc. Forestry, joined as Assistant Professor in Department of Forestry.
3. Mr. C.S. Pandey, M. Com, joined as Asst. Professor in Deptt. of Commerce.
4. Dr. Manoj Kumar Bansala, Ph.D. M.Sc. (Ag.), joined as Assistant Professor in Dept. of Agriculture.

5. Dr. Vineeta Pandey, Ph.D., M.Sc., joined as Assistant Professor in Deptt. of Agriculture.
6. Dr. Deepali Singh, Ph.D., M.Sc. (Ag.), joined as Assistant Professor in Department of Agriculture.
7. Dr. Jitendra Kumar Meena, Ph.D. Horticulture, M.Sc., NET joined as Assistant Professor in Department of Agriculture.
8. Mr. Ankit Kapoor, joined as Placement Executive in the Training and Placement Cell.
9. Ms. Vartika Bisht, joined as Assistant in Placement Executive the Training and Placement Cell.

Celebrating Important Days

69th Republic Day...

Management, faculty, staff and students of the Institute celebrated 69th Republic Day with full pomp and show. Shri Arvind Gupta, Chairman of the Institute hoisted the National Flag at 10.00 hr in the premises of the institute. In his address Chairman paid glowing tributes to the freedom fighters of India's Independence movement and the great visionaries who drafted the Indian constitution. He announced that from now onwards the institute will start with Saraswati Vandana followed by National Anthem at 09.40 hr daily. All staff, faculty and students will stand in attention at their respective places till the end of the National Anthem. He further emphasized that the Swaccha Bharat Abhiyan started by Government of India was not possible until we are not conscious to clean our

homes, colonies, mohallas, villages, and cities. He advised the DSWC to start the 'Swacchata Abhiyan' at 100 nearby localities and also to publicise 'Swacchata Ki Shapath' to make people aware about the importance of cleanliness.

Students presented a variety of cultural programmes on the occasion, including patriotic songs. Ankita Belawal of Agriculture department read a poem devoted to the Indian Freedom Fighters, while Gaurav



Flag hoisting at 69th Republic Day

Baluni expressed his views on the significance of Republic Day. Additionally Shivani, Khitiz and Preetam sung melodious patriotic solo songs, while Apoorva and group presented a patriotic group song. Shejal, Pravi, Manisha, Preeti and Mangio presented a group dance. The function was organised by the faculty members of DSWC, viz., Shri Vipul Garg, Ms. Perna Bahuguna and Dr. Pallavi Bhatia. Sweets and delicious food items were also distributed to participants.



Presentation of Patriotic Song before the dignitaries

World Forestry Day



Shri Arvind Gupta with Prof. Ganga Singh presenting prizes to the students

World Forestry Day was observed on by the students of Forestry Department on 21st March 2018 in the Institute. The Chief Guest for the occasion was Professor Ganga Singh, Additional Director, Indira Gandhi National Forest Academy Dehradun. Sri Arvind Gupta, Chairman Dolphin Institute, Principal Dr. Shailja Pant, laid emphasis on developing awareness about the role of trees in the Urban life.

As part of the programme following competitions were organised for the students from different departments, i.e., A) Photographic competition with the theme "City & Forest"; B) e-Collage competition with theme



Faculty at the World Forestry Day

"Urban forests & People's role in its preservation"; C) Sale your Forest Business idea with topic "Trees for city life". The winners of various activities were Anandhu P. C., Md. Favas, Harihara Prasad, Teresa Taku, Ravi Kiran, Nidhi Singh and Navneet Shukla.

World Sparrow Day

Students of Forestry Department carried out rapid sparrow survey in following human and environmentally disturbed urban and sub-rural sites in Dehradun namely Doonga village, Manduwala Village, Ekta Vihar and vicinity on Sahastradhara Road, Panditwari, Tea-estate and Premnagar. Ekta Vihar and vicinity at Sahastradhara is considered as hotspot with a population of 320 sparrows, followed by Manduwala with 189 individuals and Panditwari with 89 sparrows. Students and faculty took pledge to protect the species from different anthropogenic and environmental impacts.

Training & Placement Cell

Industrial Training

Industrial training was arranged by the Training & Placement Cell from 15th to 31st March 2018 for the following 3 students in Kalindi Pharma Ltd. Dehradun.

1. Sagar Chaudhary- M. Sc. Pharma-ceutical Chemistry-

Final Year






2. Gaurav Kumar- M. Sc. Pharma-ceutical Chemistry- Final Year
3. Rabina- M. Sc. Biochemistry- Final Year

Placements between January to March 2018

Sl.N.	Student	Course	Company in which selected	Branch
1.	Baskinath Pandey	M.Sc. Microbiology- Final Year	Planet Herbs Life Sciences, Dehradun	Q.C.
2.	Joyshree Maji	M.Sc. Microbiology- Final Year	Planet Herbs Life Sciences, Dehradun	Q.C.
3.	Ashish Rawat	M. Sc. Microbiology 2016 Batch	Planet Herbs Life Sciences, Dehradun	Q.C.
4.	Kanika Sood	M. Sc. Microbiology- 2017 Batch	Planet Herbs Life Sciences, Dehradun	Q.C.
5.	Satyendra K. Singh	M. Sc. Pharma Chemistry- Final Year	Saintlife Pharma Ltd., Dehradun (Joined)	Q.C.
			Windlass Biotech Ltd., Dehradun	Q.C.
			Sidmak Laboratories (India) Pvt. Ltd., Dehradun (Joined)	Q.C.
6.	Rakesh Gupta	M. Sc. Pharma Chemistry- Final Year	Windlass Biotech Ltd., Dehradun	Q.C.
			Sidmak Laboratories (India) Pvt. Ltd., DDun (Joined)	
7.	Pankaj Nawani	M. Sc. Microbiology- Final Year	Rushan Pharma Ltd., Dehradun	Q.C.
8.	Sagar Chaudhary	M. Sc. Pharma Chemistry-Final Year	Windlass Biotech Ltd., Dehradun	Q.C.
9.	Shubham Chaudhary	M. Sc. Pharma Chemistry-Final Year	Windlass Biotech Ltd., Dehradun	Q.C.
10.	Bony Khan	M. Sc. Microbiology- Final Year	Windlass Biotech Ltd., Dehradun	Q.C.
11.	Saurabh Nagarkoti	M. Sc. Microbiology- Final Year	Windlass Biotech Ltd., Dehradun	Q.C.
12.	Manvendra K. Kushwaha	M. Sc. Pharma Chemistry (2nd Year)	Devansh Testing & Res. Lab Pvt. Ltd., Roorkee	Q.C.
			India Glycols Ltd., Dehradun (Joined)	R & D
13.	Surbhi Vashisht	M. Sc. Biochemistry (2nd Year)	Avon Beauty Products Pvt.Ltd., Dehradun	Q.C.

Academic Achievements

COLLEGE TOPPERS

B.Sc. Agriculture- 2th Sem.  TANUJA BINADI 80.50%	B.Sc. Forestry- 6th Sem.  MEENAKSHI BACHEHI 83.83%	B.Sc. hORTICULTURE- 6th Sem.  RONIKA LINGGI 81.33%
M.Sc. Biochem.3rd-4th Sem.  NEHA BISHT 8.63 CGPA	M.Sc. Microbio. 3rd- 4th Sem.  ANURAG 8.23	

संस्थान में स्वामी विवेकानन्द जयंती का आयोजन



Faculty & Students celebrating Swami Vivekanand Jayanti

इन्स्टिट्यूट के परिसर में स्वामी विवेकानन्द की 155वीं जयंती पर उनका भावपूर्ण स्मरण किया गया। कार्यक्रम का शुभारम्भ संस्थान के निदेशक डा. अरुण कुमार ने स्वामी विवेकानन्द के चित्र पर मालापर्ण व पुष्पांजलि के साथ किया। इसके पश्चात् संस्थान के शिक्षकों, कर्मचारियों व विद्यार्थियों ने स्वामी विवेकानन्द के चित्र पर पुष्पांजलि कर अपने श्रद्धासुमन अर्पित किए। इस अवसर पर अपने संबोधन में डा. अरुण कुमार ने कहा कि स्वामी विवेकानन्द युगद्रष्टा और युवाओं के लिये प्रेरणा स्रोत रहे हैं और उनके विचार आज भी प्रांसागिक

हैं। उन्होंने आगे कहा कि इसी देश के युवा स्वामी विवेकानन्द ने भारत के आध्यात्मिक दर्शन को विश्व पटल पर रखा और आज के युवा उनके बताए मार्ग पर चलकर भारत का भाग्य बदल सकते हैं। स्वामी विवेकानन्द की जयंती के अवसर पर संस्थान की छात्र कल्याण समिति के द्वारा देहरादून के विभिन्न अस्पतालों में मरीजों को फल वितरित किए गए। कार्यक्रम में संस्थान के निदेशक डॉ. अरुण कुमार, डा. संजय अग्रवाल, डीन स्टूडेंट्स कैलफेयर श्री विपुल गर्ग, श्रीमती मालती साहनी, डॉ. श्रुति शर्मा, शिक्षक तथा छात्र-छात्राएं उपस्थित थे।

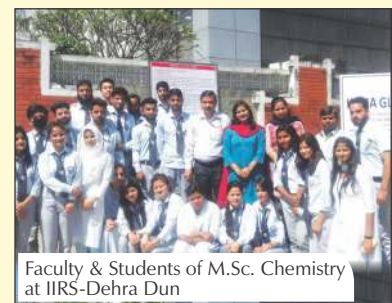
IIRS appreciated the efforts of the Dolphinites

The Indian Institute of Remote Sensing (IIRS) Dehradun, which conducted a 3 months online certificate course on Basics of Remote Sensing "Geographical Information System & Global Navigation Satellite System" for the students of Dolphin Institute, organised an international meet on 27 February 2018 to share the importance of "Geographical

Information System and Global Navigation Satellite System", where in it was also broadly discussed about the efforts being made by other institutions in conducting the above course for their students and faculty. Efforts made by Shri Vipul Garg, Dean- DSW was felicitated with a certificate in the programme in appreciation of organizing the course at Dolphin Institute.



Industrial Visit



Faculty & Students of M.Sc. Chemistry at IIRS-Dehra Dun

Students of M. Sc. Chemistry 2nd and 4th semester undertook an Industrial trip to Indian Glycols Limited (IGL), Selaqui, Dehradun on 16th March, 2018. Departmental faculty namely Dr. Suman Rawat, Mrs. Ankita Sati and Dr. Raju and T&P Officer Shri Vijay Panwar accompanied the students.

Placements

1. **Ms Tshering Choden**, B.Sc. Forestry (Batch: 2012-2016) has been selected as "Forestry Officer" under the Ministry of Agriculture and Forestry, Bhutan.
2. **My Aghato Sumi**, M. Sc. Forestry (Batch: 2013-15) has been selected as Inspector in Land Resource Department, Nagaland State.
3. **Vikas Seth**, B.Sc. Forestry (Batch: 2011-2015) has been selected as Forest Range Officer in Uttar Pradesh Forest Department.

Health/Physiotherapy Camps

1) **Department of Physiotherapy** provided physiotherapy services during 'All India Senior Ranking Badminton championship' held at three different venues in Dehradun, i.e., Sports Stadium JP Academy, Sports Stadium Raipur and Badminton Academy Parade Ground between 13th and 18th February 2018. Physio teams comprising Dr. Vivek Chauhan, Dr. Richa Agrawal, Dr. Deptee Warikoo and Dr. Pragyasha along with MPT



Physiotherapy Camp

students, Akansha Gaur, Muktanand, Madhu, Pratigya, Mrigank, Abhineet, Abhishek and Rajesh treated athletes with muscular spasms, strains, ligament sprains, tendon injuries and bruises. It was indeed a great experience for team Physio and they provided special consultation for injury prevention, strength maintenance and endurance to the athletes.

2) **Department of Physiotherapy** again provided its services to the participants of 'National Tennis Federation Open Juniors Tournament' from 16th to 18th February 2018. The team included Dr. Deptee Warikoo, Dr. Vivek Chauhan and Dr. Richa Agrawal along with MPT students, Akansha Gaur, Muktanand, Yashwant,



Madhu, Pratigya, Mrigank, Abhineet, Abhishek and Rajesh. Participants with acute injuries and sprains were treated on the spot. Evening sessions on sport's fitness were also conducted. The participants had special praises for the Physio team, which indeed was moral boosting.

Resource Persons

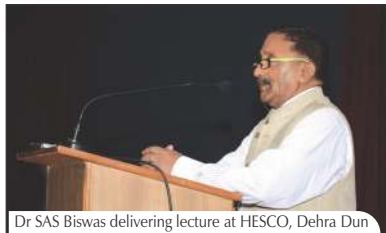
Department of Physics



Department of Forest Products, Kasetsart University in Bangkok invited Dr. Aasheesh Raturi, Head of the Physics Department, Dolphin Institute for a guest lecture on "Spectroscopic Assessment of Wood Properties" on 15th March 2018. Approximately 200 students including Post Graduate and Ph.D. Students, and the faculty from the Forestry and Biophysics Departments attended the lecture. Dr. Raturi focussed on use of spectroscopic technique as a non destructive tool for assessment of

properties of biological materials. On completion of talk Dr. Raturi was felicitated by Prof. Nikhom Laemsak, Dean and the Faculty of the Forestry Department. In course of the visit Dr. Raturi explored the possibility of student exchange programme between Dolphin Institute and Kasetsart University.

Department of Forestry



Dr. Sas Biswas, HOD Forestry delivered a lecture on "Ecosystem Services and Human Wellbeing" in ne day workshop at HESCO, on 28th March, 2018.

Department of Zoology



A popular lecture on "Asan Conservation Reserve: A suitable habitat for dragonflies and migratory waterfowls" was delivered by Dr. Arun Kumar, Director on 22nd March 2018 during the 1st Indian Conference of Odonatology on "Dragonfly (Insecta: Odonata) bioecology & distribution dynamics v/s environment amelioration, with special reference to Global warming and Climate change".

An additional state of the art auditorium Inaugurated

A new Auditorium has been constructed on the 3rd floor in the Central Block with a seating capacity for 225 persons. It is Centrally Air Conditioned and has state of art technology of lighting and sound system along with over head LCD projector and a green room.

The auditorium was inaugurated on 12th February 2018 by Pandit Vishwa Mohan Bhatt, Padma Shri, Padma



Vibushan by rendering mesmerizing recitals on Mohan Veena along with Pandit Raj Kumar Mishra and Pandit Rahul Mishra.

Automation and Modernization of the College and Hostel Campus

- Each of the 56 class rooms have been provided with over head LCD projector, CPU along with latest audio system.
- Each class room has also been provided Biometric attendance facility to enable students and faculty to mark attendance before the beginning of a lecture/period.
- The entire college campus and the three girls Hostels are now under CCTV surveillance with high resolution cameras and recording facility.
- A solar plant has been installed and commissioned in the college



campus recently. The college campus now generates Solar Electricity through 100Kw rooftop solar plant, a step towards Green building concept.

Shejal Kanyal was felicitated by the Chairman

Shejal Kanyal student of department of Physiotherapy was selected in YOUTH PARLIAMENT organized by daily news paper DAINIK JAGRAN. She was elected as Minister of Defence & External Affairs and she took very good initiatives during the Parliament session and presented strongly the vision of the Government on different issues which was praised by everyone. She was awarded with a certificate by DAINIK JAGRAN and Chairman of the institute also praised her efforts and felicitates her.



डॉल्फिन में होली महोत्सव का भव्य आयोजन

विगत वर्षों की भांति इस वर्ष भी संस्थान में होली मिलन समारोह का आयोजन किया। 28 फरवरी, 2018, को आयोजित कार्यक्रम में विभिन्न मनोरंजक गतिविधियां, खान-पान, म्यूजिक तथा रंग - अबीर गुलाल की व्यवस्था की गई थी। संस्थान के चेयरमैन श्री अरविन्द्र गुप्ता, ओ.एस.डी. श्रीमती आरती गुप्ता, प्राचार्या डॉ. शैलजा पन्त, विभागाध्यक्ष, शिक्षक, स्टाफ सभी ने होली कार्यक्रमों, खान-पान का भरपूर आनन्द उठाया तथा एक दूसरे को रंग लगाकर होली की शुभकामनाएं दीं। इस अवसर पर आयोजित कार्यक्रमों व उनके विजेताओं का विवरण इस प्रकार है-

बर्स्ट द बैलून - डॉ. विदित त्यागी

म्यूजिकल कार्नर - श्री विजय रतन पंवार



होली महोत्सव की गतिविधियां



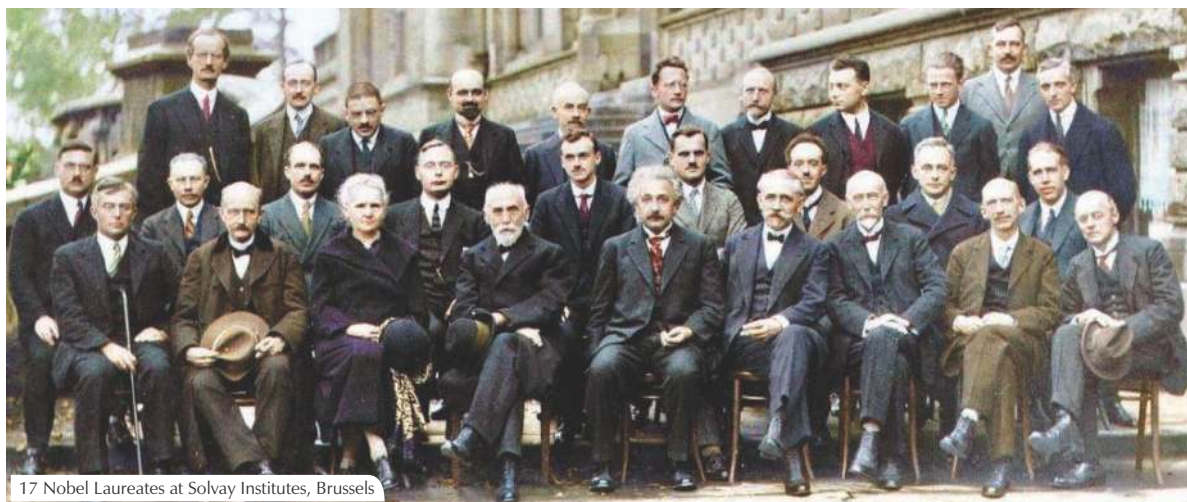
ईट द बिस्किट - डॉ. शालिनी आनन्द, श्रीमती निधि डालमियां

फ्रूट चाट - श्री आदित्य स्वरूप, श्री उदय कुमार, श्री लेशराम लेनिन

शब्द जाल तंबोला - डॉ. बी.पी.एस. रावत, डॉ. मनोज बंसाला, श्रीमती गीता गोयल

कैंटर पिलर - डॉ. मन्दीप कौर एण्ड ग्रुप प्रतियोगिता के सभी विजेताओं को संस्थान के चेयरमैन श्री अरविन्द्र गुप्ता ने आकर्षक उपहार भेंट किए। कार्यक्रम में गतिविधियों की विभिन्न तथा उनके शानदार निर्देशन व संचालन की सभी ने भूरी-भूरी प्रशंसा की। इसके लिए डॉ. बीना जोशी भट्ट व श्रीमती मालती साहनी को विशेष पुरस्कार दिए गए।

A Get Together of 17 Nobel Laureates



17 Nobel Laureates at Solvay Institutes, Brussels

Front row: Irving Langmuir, Max Planck, Marie Curie, Hendrik Lorentz, Albert Einstein, Paul Langevin, Charles-Eugène Guye, C.T.R Wilson, Owen Richardson.

Middle row: Peter Debye, Martin Knudsen, William Lawrence Bragg, Hendrik Anthony Kramers, Paul Dirac, Arthur Compton, Louis de Broglie, Max Born, Niels Bohr.

Back row: Auguste Piccard, Émile Henriot, Paul Ehrenfest, Édouard Herzen, Théophile de Donder, Erwin Schrödinger, JE Verschaffelt, Wolfgang Pauli, Werner Heisenberg, Ralph Fowler, Léon Brillouin.

Curie, the only woman in attendance, was also the only one among them to win a Nobel Prize in two separate disciplines: chemistry and physics.

The International Solvay Institutes for Physics and Chemistry, located in Brussels, were founded by the Belgian industrialist Ernest Solvay in 1912, following the historic invitation-only. 1911 Conseil Solvay, considered a turning point in the world of Physics. The Institutes coordinate conferences, workshops, seminars, and colloquia.

Following the initial success of 1911, the Solvay Conferences (Conseils Solvay) have been devoted to outstanding preeminent open problems in both physics and chemistry. The usual schedule is every three years, but there have been larger gaps.

Fifth Conference:

Perhaps the most famous conference was the October 1927 Fifth Solvay International Conference on Electrons and Photons, where the world's most notable physicists met to discuss the newly formulated quantum theory. The leading figures were Albert Einstein and Niels Bohr. 17 of the 29 attendees were or became Nobel Prize winners, including Marie Curie, who alone among them, had won Nobel Prizes in two separate scientific disciplines.

This conference was also the culmination of the struggle between Einstein and the scientific realists, who wanted strict rules of scientific

method as laid out by Charles Peirce and Karl Popper, versus Bohr and the instrumentalists, who wanted looser rules based on outcomes. Starting at this point, the instrumentalists won, instrumentalism having been seen as the norm ever since, although the debate has been actively continued by the likes of Alan Musgrave.

The world's brightest scientific minds posed for this 1927 photo after historic debates about quantum mechanics (17 of the 29 attendees were or became Noble Prize winners) Fifth conference participants, 1927.

Compiled by **Dr. Arun Kumar**
Chief Editor, Dolphin Insight

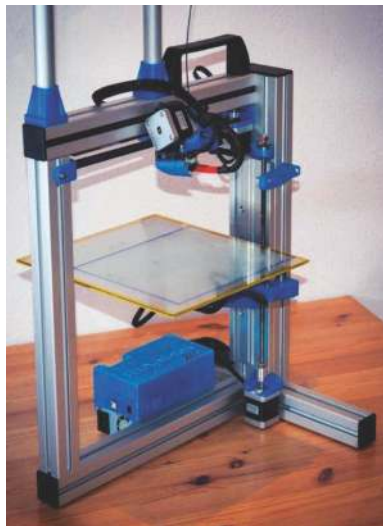
FACULTY CORNER

3D Printing: Modern technique for printing

3D printing is a form of additive manufacturing technology where a three dimensional object is created by laying down successive layers of material. It is a mechanized method whereby 3D objects are quickly made on a reasonably sized machine connected to a computer containing blueprints for the object. The 3D printing concept of custom manufacturing is exciting to nearly everyone. This revolutionary method for creating 3D models with the use of inkjet technology saves time and cost by eliminating the need to design; print and glue together separate model parts. Now, we can create a complete model in a single process using 3D printing. The basic principles include materials cartridges, flexibility of output, and translation of code into a visible pattern. 3D Printers are machines that produce physical 3D models from digital data by printing layer by layer. It can make physical models of objects either designed with a CAD program or scanned with a 3D Scanner. It is used in a variety of industries including jewellery, footwear, industrial design, architecture, engineering and nano construction, automotive, aerospace, dental and medical industries, education and consumer products.

Current 3D Printing Technologies

There are several ways to 3D print. All these technologies are additive,



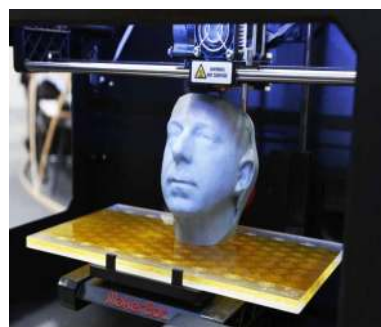
differing mainly in the way layers are build to create an object. Some of most common printing techniques are:

Stereo lithography - Stereo lithographic 3D printers (known as SLA or Stereo Lithography Apparatus) position a perforated platform just below the surface of a vat of liquid photo curable polymer. A UV laser beam then traces the first slice of an object on the surface of this liquid, causing a very thin layer of photopolymer to harden. The perforated platform is then lowered very slightly and another slice is traced out and hardened by the laser. Another slice is then created, and then another, until a complete object has been printed and can be removed

from the vat of photopolymer, drained of excess liquid, and cured.

Fused deposition modelling - Here a hot thermoplastic is extruded from a temperature-controlled print head to produce fairly robust objects to a high degree of accuracy. The FDM technology works using a plastic filament or metal wire which is unwound from a coil and supplying material to an extrusion nozzle which can turn the flow on and off. The nozzle is heated to melt the material and can be moved in both horizontal and vertical directions by a numerically controlled mechanism, directly controlled by a computer-aided manufacturing (CAM) software package. The object is produced by extruding melted material to form layers as the material hardens immediately after extrusion from the nozzle. This technology is most widely used with two plastic filament material types: Acrylonitrile Butadiene Styrene and Polylactic acid. Though many other materials are available ranging in properties from wood fill to flexible and even conductive materials.

Selective laser sintering (SLS) - This builds objects by using a laser to selectively fuse together successive layers of a cocktail of powdered wax, ceramic, metal, nylon or one of a range of other materials. It uses a high power laser to fuse small particles of plastic, ceramic or glass powders into a



mass that has the desired three dimensional shape. The laser selectively fuses the powdered material by scanning the cross-sections (or layers) generated by the 3D modeling program on the surface of a powder bed. After each cross-section is scanned, the powder bed is lowered by one layer thickness. Then a new layer of material is applied on top and the process is repeated until the object is completed.

Multi-jet modelling (MJM)- This again builds up objects from successive layers of powder, with an inkjet-like print head used to spray on a binder solution that glues only the required granules together. The VFlash printer, manufactured by Canon, is low-cost 3D printer. It's known to build layers with a light-curable film. Unlike other printers, the VFlash builds its parts from the top down.

Contributed by:

Er. Praveen Lakhera
Department of Physics

Distinguished Alumni

PRAVEEN KUMAR:

completed his M.Sc. in Microbiology from the Institute in 2007 -2009



batch. Started his career with- Vadilal Industries Ltd., Bareilly as Microbiologist from September 2010 to February 2014. Moved over to Devyani Food Industries Ltd., Baddi (H.P.) as Senior Microbiologist from February 2014 to May 2014. G.D. Food Mfg. (I) Pvt. Ltd., Amritsar when they employed him as Microbiologist and Quality-in-Charge from May 2014 to April 2017. Thereafter, he joined Himalayan Food Park Pvt. Ltd., Kashipur, Uttarakhand as Microbiologist & Quality-in-Charge and from May 2017 to Dec 2017. Presently he is working with Patanjali Ayurved Ltd., Delhi NCR as Quality Assistant Manager since December, 2017 and till date.

Research Publications

Pant, N. C., Dhoundiyal, R., Kumar, M., Dwivedi, U., Singh, J.P. and Agrawal, S. (2018) Fenugreek (*Trigonella foenum-graecum* L.) A potential source of dietary fibers and steroidal sapogenin (Diosgenin). International Journal of Chemical Studies, 6(2): 612-618.

STUDENT'S CORNER

Artificial Intelligence

In my definition,

"Artificial Intelligence is the true empirical use of the beauty of science, to make a possible elementary and fundamental creations! By mimicking the way, just the Nature do"

As a human being, we are always fascinated by the beauty and glimpse of nature, and it was science by which we explains the beauty of natures. We as a humans are stepping in the ladder of science and each steps introduces us to the new dimensions which always fascinated us and forced to think that the world is not just what we look, It was not only materialistic but far beyond it and this experience is always makes the true scientist to fall in love with the nature.

Once, the idea of AI was just only the in the Science Fiction story and scientific heresy, but now using past knowledge and hard working of scientists and engineers and their curiosity makes the AI real today. We are not far on the point of time in future far, where AI is parallel compared with humans, Nature created us !, and now we created new species called AI. Many scientists and Physicist believes that in near future it was irreverent to make the difference between Humans and AI.

Today we have powerful language through which we can talk with nature i.e. the language of numbers and logics, which we called computer language. Talking about the power of computer language is a different story which cannot be understood using single definition. This Language is the major key for humans to make AI possible.



Neural network

A neural network is, in essence, an attempt to simulate the brain. Neural network theory revolves around the idea that certain key properties of biological neurons can be extracted and applied to simulations, thus creating a simulated (and very much simplified) brain. The first important thing to understand then, is that the components of an artificial neural network are an attempt to recreate the computing potential of the brain. The second important thing to understand, however, is that no one has ever claimed to simulate anything as complex as an actual brain. Whereas the human brain is estimated to have something on the order of ten to a hundred billion neurons, a typical artificial neural network (ANN) is not likely to have more than 1,000 artificial neurons.

ALVINN - Autonomous Land Vehicle In a Neural Network

ALVINN is a system being designed at Carnegie Mellon University to learn basic rules of driving, and like all nets, improve with experience.

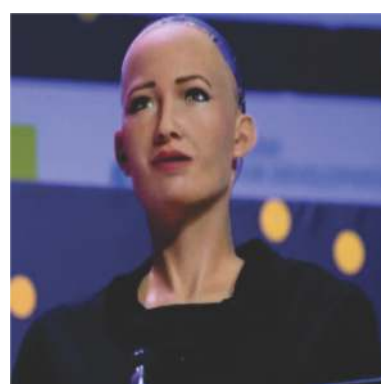
We live in a simulation?

In 2003 Oxford University Professor Nick Bostrom published Are You Living In A Simulation?, an argument stating there's a high likelihood that we're all pieces of code created in a

computer simulation. Bostrom's theory isn't the first to posit that humans live on a hard-drive somewhere on a great cosmic computer, but it did popularize the idea by putting it in a way that appeals to scientists. Physicists are particularly drawn to the theory, and they continue to discuss it nearly 15 years later. The theory is best broken down and understood using Bostrom's 'trilemma', which is the crux of his assertions:

1. The fraction of human-level civilizations that reach a post-human stage is very close to zero
2. The fraction of post-human civilizations that are interested in running ancestor-simulations is very close to zero
3. The fraction of all people with our kind of experiences that are living in a simulation is very close to one.

Sophia



Sophia was created by Hanson Robotics in collaboration with AI developers, including Google's parent company Alphabet Inc, who built her voice recognition system, and

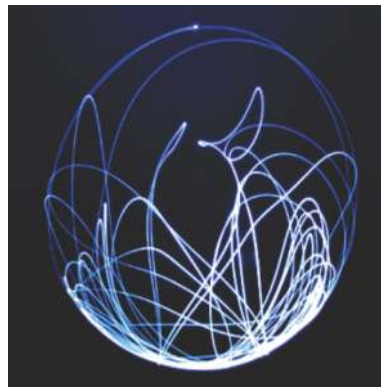
SingularityNET, which powers her brain.

Sophia was activated on April 19, 2015. The robot, modeled after actress Audrey Hepburn, is known for her human-like appearance and behavior compared to previous robotic variants. According to the manufacturer, David Hanson, Sophia uses artificial intelligence, visual data processing and facial recognition. Sophia also imitates human gestures and facial expressions and is able to answer certain questions and to make simple conversations on predefined topics (e.g. on the weather). Sophia uses voice recognition (speech-to-text) technology from Alphabet Inc. (parent company of Google) and is designed to get smarter over time. Sophia's intelligence software is designed by SingularityNET. The AI program analyses conversations and extracts data that allows her to improve responses in the future.

Eureqa

Eureqa is a proprietary A.I.-powered modeling engine originally created by Cornell's Artificial Intelligence Lab and later commercialized by Nutonian, Inc. The software uses evolutionary search to determine mathematical equations that describe sets of data in their simplest form.

Hod Lipson, invented Eureqa, believing machines could extract meaning from data automatically. Eureqa is an artificial intelligence-powered "Virtual Data Scientist" that automatically builds predictive and analytical models, and allows domain experts to rapidly iterate on them. TechCrunch has called Eureqa one of



the first examples of Machine Intelligence – the subfield of A.I. that automates the discovery and explanation of answers from data.

In the October 2011 edition of "Physical Biology", Lipson described a yeast experiment that predicted seven known equations. This took place after Lipson had asked scientists from different disciplines to share their work to test Eureqa's versatility.

The program was named Eureqa after Archimedes' famous expression "Eureka!", with the k replaced by a q to evoke the word equation.

The machine works by doing random equations with the data through a process known as "evolutionary search". Most of the equations do not yield anything useful, but a few of the equations will make more sense than the others and those few will be used as the basis of a new round of several billion more equations until a result is reached. This has been used to discover formula with "invariant relationships", such as laws of nature.

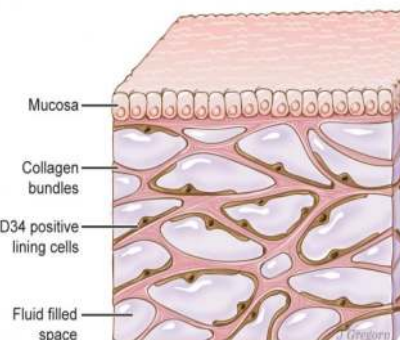
- Kaushal Prasad Balmiki

Msc. Physics, Sem-II, DIBNS

SCIENTIFIC ADVANCEMENTS

New Organ Discovered In Human Body After It Was Previously Missed By Scientists

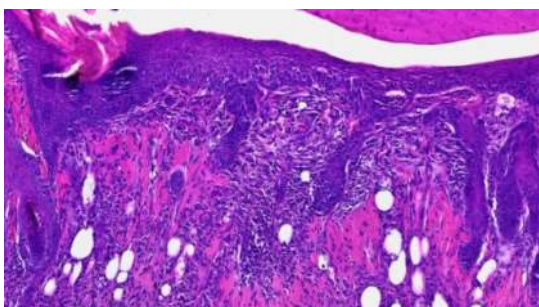
American researchers proposed a previously unrecognised, fluid-filled space inside and between tissues as a new organ called 'interstitium'. Earlier understood as densely packed barrier-like collagen walls, researchers described the fluid organ as "shock absorbers" for tissues. The new anatomic structures may be important in cancer study and functioning of tissues and organs. (<https://www.independent.co.uk/news/health/new-organ-human-body-interstitium->



cancer-skin-scientists-discovery-new-york-a8275851).

Nanofiber Dressings Promote Skin Regeneration and Wound Healing

Harvard University researchers developed wound dressings using naturally occurring proteins in animals to aid in tissue regeneration. The researchers made soy-based nanofibres consisting of plant cellulose and fibrous fibronectin, inspired from foetal skin. Wounds treated with fibronectin dressing showed 84% tissue restoration within



20 days, compared to 55.6% in standard dressing. (<https://www.nanowerk.com/nanotechnology-news/newsid=49725>).

IITR Discovers Antibacterial Mechanism of Natural Compound Obtained From Plant Species

Researchers at the Indian Institute of Technology Roorkee discovered the antibacterial properties of a natural compound chlorogenic acid, an aromatic compound found in many plant species including coffee. The team used X-ray crystallography techniques to probe into the bacterial metabolic pathways and identified the molecular basis of bacterial inhibition caused by chlorogenic acid. (<http://indiaeducationdiary.in/iit-roorkee-unravel-antibacterial-mechanism-natural-compound-obtained-plant-species-including-coffee/>).



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Breakthrough as Scientists Grow Sheep Embryos containing Human Cells

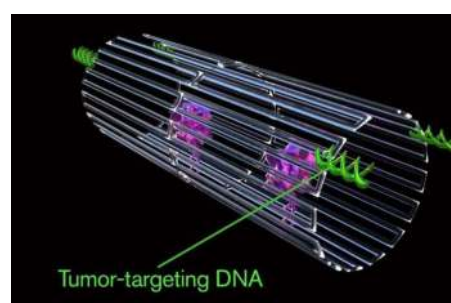
In a first, Stanford University scientists have successfully grown sheep embryos containing human cells, paving the way for organs to be grown in animals which can be transplanted into humans. Met with protests by animal rights activists and bioethicists, the experiment was terminated before 28 days as the US law prohibits developing cross-species embryos, called chimera, for longer durations. (<https://www.theguardian.com/science/2018/feb/17/breakthrough-as-scientists-grow-sheep-embryos-containing-human-cells>)



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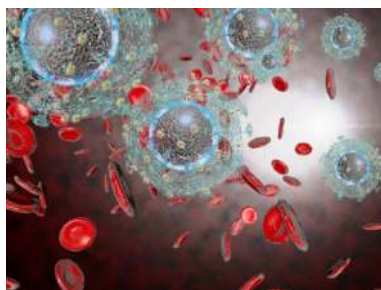
DNA 'Nanobots' could Help Kill Cancer by Choking off Its Life Blood

China and US-based researchers developed the first fully autonomous DNA robotic system that can shrink cancerous tumours by choking their blood supply. The nanobot was made from a DNA origami sheet, 90 nanometres by 60 nanometres in size, with a blood-clotting enzyme attached to the surface. The system successfully stopped tumour growth in mice injected with human cancer cells. (<https://phys.org/news/2018-02-cancer-fighting-nanorobots-tumors.html>)



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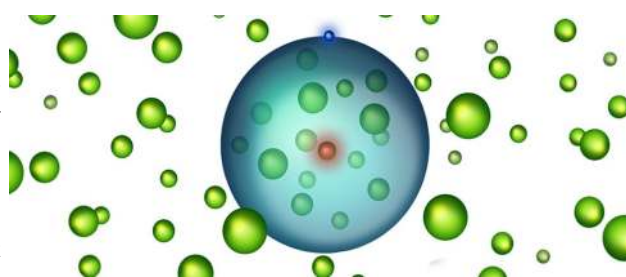
Novel Antibody Suppresses HIV in Monkeys: Study



An antibody developed by US-based researchers successfully suppressed an HIV-like virus in monkeys for six months. After infecting the rhesus macaques, researchers administered them with antiretroviral therapy for 96 weeks. Further, infusing them with the antibody and an immune stimulant showed successful suppression in half of the group without additional treatment. (http://www.business-standard.com/article/pti-stories/novel-antibody-suppresses-hiv-in-monkeys-study-118030500608_1)

Physicists Just Stuffed an Atom Full of Atoms and Created A Brand New State of Matter

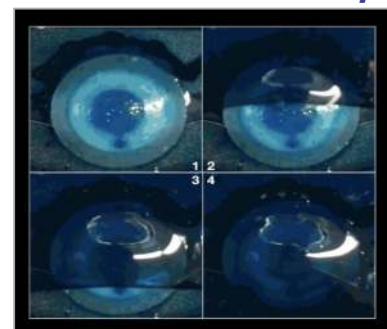
Austria and US-based scientists created a new exotic state of matter where an electron orbits a nucleus at a great distance, while other atoms are bound inside the orbit. Called "Rydberg polarons", the state was achieved by combining 'Rydberg atoms', which have a single electron lifted into a highly excited



state, and 'Bose-Einstein condensates', dense cloud of ultracold atoms. (<https://www.sciencealert.com/exotic-new-matter-rydberg-polaron-molecule-bose-einstein-condensate>).

First-Ever Artificial Eyelid Mimics the Blink of an Eye

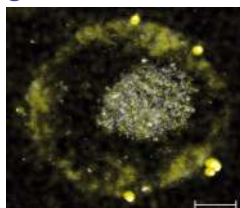
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Bacteria Produce Gold by Digesting Toxic Metals

Australia and Germany-based researchers uncovered the mechanism by which bacteria *C. metallidurans* digests toxic compounds and excretes gold pellets, almost nine years after its discovery. The rod-shaped bacteria live in the soil and flush out toxic metals using an enzyme, which is suppressed in the presence of gold. The gold accumulates as nanometre-sized "nuggets" which are then released. (<https://www.sciencealert.com/bacteria-produce-gold-nuggets-cupriavidus-metallidurans>).



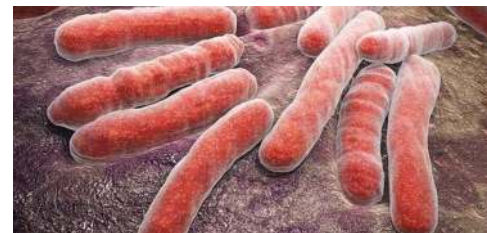
Manipur Scientist Introduces Hottest Indian Hybrid Chilli

A Manipur scientist claimed to have successfully synthesised the hottest Indian hybrid chilli. The latest hybrid is derived from *Capsicum frutescens* cultivar, *Capsicum chinense* cv, and the hybrid of the two. Christened "Kishore's fireball," the average pungency of the hybrid chilli is 287,400 heat unit on the Scoville scale with capsaicin content of 1.80%. (<https://www.hindustantimes.com/india-news/scientist-produces-hottest-hybrid-chilli/story-7L8zHeljDGUDYAhpY4tQkN.html>).



Scientists Discover Antibiotic-Producing Bacterium

University of Hyderabad researchers discovered a new antibiotic-producing bacteria species, isolated from an aquatic plant *Hydrilla* in their campus lake. The species, *Planctopirus hydrillae*, could help overcome the challenge of antibiotic resistance in disease-causing germs. The bacterium also cleans up ammonia waste, which is a growing environmental concern, said Professor



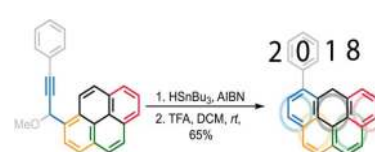
Venkata Ramana. (<https://timesofindia.indiatimes.com/home/science/scientists-discover-antibiotic-producing-bacterium/article-show/63222130>)

IITKGP Research Scholar Develops Battery Using Sewage Water

A research scholar at IIT Kharagpur developed a disposable and flexible battery powered by bacteria from sewage water as part of an innovation contest, the institute said in a statement. The battery, which won a cash award of ₹10 lakh, can produce power in the range of few microwatts but stacking multiple devices can further boost the power. (<https://www.hindustantimes.com/education/iit-kharagpur-research-scholar-develops-battery-using-sewage-water/story-83TOphylx4NT30LMvlfDCO>)



Olympic Ring-Shaped Molecule Created



Florida State University scientists developed a new process to create the 'olympicene' molecule, resembling the Olympic rings. The first olympicene molecule was unveiled by British chemists before the 2012 London Olympics. Olympicene is an organic carbon based molecule formed of five rings, of which four are benzene rings. It has 18 pi electrons in its ring system; as it is a flat molecule, this makes it an aromatic molecule. The central ring is not an aromatic ring. (<http://www.worldofchemicals.com/29/chemistry-articles/olympic-rings-inspires-chemical-molecule-olympicene>).

Cancer 'Vaccine' Eliminates 97% of Tumours with Amazing Success



A Stanford University study secured approval to conduct human tests for a cancer vaccine that had a 97% success rate in tests on mice. The vaccine had cured 87 of the 90 mice and the rest were cured after a second treatment. The experiment used two immune-stimulating agents to boost cancer-fighting T-cells, which gets suppressed in cancer patients. (<https://www.livescience.com/62161-cancer-vaccine-trial.html>)