

## January, 2020

### 4. National Seminar on 'Protecting & Assessing the Innovative Ecosystem' on 6<sup>th</sup>-7<sup>th</sup> January 2020 at the Academic Auditorium, K.M. College

Kirori Mal College organized a National Seminar on 06 and 07 January 2020 on '**Protecting & Assessing the Innovative Ecosystem**' jointly under the aegis of DBT Star College Scheme & IQAC in the Academic Auditorium of the college.

The poster is for a National Seminar at Kirori Mal College. It features the college's logo on the left and the Department of Biotechnology logo on the right. The text is centered and provides details about the seminar's theme, dates, venue, and speakers. A large orange arrow with 'IPR' written on it points towards the speaker list. At the bottom, it mentions that tea and lunch will be provided in the canteen lawn and lists the coordinators.

**Kirori Mal College**

**National Seminar**  
on  
**"Protecting & Assessing the Innovative Ecosystem"**  
under the aegis of *DBT Star College Scheme & IQAC*  
6<sup>th</sup> - 7<sup>th</sup> January, 2020  
Venue: Academic Auditorium, Kirori Mal College

**SPEAKERS**

6 <sup>th</sup> January, 2020 Session: 9.30am-2.00pm	7 <sup>th</sup> January, 2020 Session: 10.00am-1.00pm
➤ <b>Dr. Parul Varshney</b> 'Patents'	➤ <b>Dr. Pratibha Singh</b> Dy Advisor NAAC, Delhi 'NAAC- The New System'
➤ <b>Mr. Raghav Sharda</b> 'Designs'	➤ <b>Dr. Kumar Kartikeya Yadav</b> 'Plagiarism'
➤ <b>Mr. Pulkit Doger</b> 'Trademarks'	➤ <b>Mr. Mahesh Yadav</b> 'Intellectual Property Rights: What it means?'
➤ <b>Dr. Prosenjit Chattopadhyay</b> 'Patent prosecution'	

**IPR**

Tea and Lunch will be provided in the Canteen lawn

**Coordinators**  
DBT Star: Dr. Anita K. Verma  
IQAC : Dr. Anshu

### Detail Report

Dr Sangeeta introduced the two-day seminar on 6<sup>th</sup> Jan 2020. Being the Co-ordinator of the DBT star College scheme, Dr Anita K. Verma presented the scheme to the audience and briefly explained that the scheme offers support to colleges to improve the values of academic and intellectual freedom, creativity and innovation, cooperation and Communication and accountability. For both innovation and accountability, the seminar had immense significance for the participants.

The Convenor, IQAC, Dr Anshu apprised the participants of the importance of innovation and IPR with context to the new NAAC scheme. Our Principal, Dr. Vibha S. Chauhan, welcomed Dr. Prasenjit and his entire team by gifting them planters. She stressed on the fact that the maintenance of proper balance and fine tuning of academic excellence with academic integrity, protection and exploitation of intellectual property rights is becoming extremely important for the universities. She said it would be good to propagate innovative culture and focused on the fact that creation of intellectual property is the need of the hour in colleges.



**Eminent speakers at the conference**

The programme included talks on importance of IPRs and their protection, Patenting procedures and patent informatics, patent searches, role of innovation and invention in the

academia-industry collaborations, trademark and copyright protection, issues of do's and don'ts for a researcher in the context of publishing and patenting. The resource persons included IPR experts from Indian Patent Office and Dr. Prosenjit Chattopadhyay, a joint partner in intellectual property rights team of Lakshmi Kumaran & Sridharan and his team.

His expertise was in pharmaceuticals, polymers, petrochemicals, protein conjugates, nanomaterial and intellectual property right. He explained filing and drafting patent portfolios for chemical compounds. Being a chemist, he clearly explained the difference between process and product of a chemical compound and the difference between new discovery and right to claim patent by the discoverer. Elucidating the concept of novelty, he gave examples of haldi and neem, both of which are already being patented but if mixture of two is used as a remedial compound then the person has right to get his work patented. The highlight of the talk was that any patent should be registered before publishing it on any open forum like publishing research paper or thesis.

The seminar showcased how Intellectual property rights (IPR) have become imperative in the aspect of everchanging trade environment that is characterized by global competition, short product cycle, high innovation risks, requirement for swift changes in technology, high investments in research and development (R&D), and necessity for highly skilled human resources. With the opening-up of technology development and services intellectual property rights (IPR) have become more vulnerable to infringement causing inadequate return to the knowledge creators. It was attended by enthusiastic participants including faculty and students. The vote of thanks was given by Dr Reena.

## **22. DBT-BIRAC Leadership Dialogue at NII on 8<sup>th</sup> January,2020**

Under **DBT-BIRAC Leadership Dialogue Series** initiated by DBT, a lecture was delivered by **Dr. Eric Green**, Director, National Human Genome Research Institute. Around 17 students

from Department of Zoology attended the lecture at National Institute of Immunology, New Delhi on 8th January, 2020, that was held at the NII Auditorium

List of students: Prem, Jatin, Dev, Anupriya, Varun, Sneha, Amrita, Abhey, Rizwana, Jessica, Kaustubhi, Amisha, Arti, Sapna, Saksham, Nancy, Vishnupriya







**Inaugural Session of ETFC-2020**



Eminent Speakers at the conference on Day 1.



**Plenary Speaker: Prof V S Chauhan, Poster session in progress and the entire team of ETFC-2020 on Day 2**

#### **24. Hands on training on Oyster Mushroom cultivation on 10<sup>th</sup> Jan 2020.**

Department of Botany, Kirori Mal College organised a hands-on workshop on Oyster Cultivation” under the aegis of DBT Star College Scheme, on 10<sup>th</sup> Jan 2020. The workshop was attended by 40 students from B.Sc. (H) Botany and B.Sc. (Program) Life science and held in BL-3 and the mushrooms were kept in the mushroom cultivation shed of bamboo sticks was constructed on the terrace above the Botany Department supported by DBT star college scheme.

#### **[Detail Report](#)**

Dr. Rajni Gupta and Dr. Yamal Gupta explained the characteristic features and taxonomy of mushrooms. The term mushroom is used for edible sporophore (fruiting body), which is usually

umbrella shaped and bear thin bladelike gills on the under surface of the cap from which the spores are shed. Also, since mushrooms lack chlorophyll and cannot produce their own food, they can grow saprophytically or sometimes symbiotically, they can even be cultured upon organic matter as food. Since mushrooms are variable in size and shape, some varieties may produce fruit bodies below the ground and a large number of species growing wild in nature, and many are edible, some are highly poisonous, hence, it was important to make the students understand the difference between poisonous and edible mushrooms. Oyster mushroom cultivation was chosen because of the ease of cultivation method and can be grown on large scale using minimum resources.

Oyster mushroom can be grown on a large number of bio-wastes mainly having cellulose and lignin. Oysters are commonly known as 'Dhingri', belong to the genus *Pleurotus* and family Basidiomycetes. The fruiting body of this mushroom is shell, fan or spatula shaped, maybe of different shades of white, pink, cream or light brown depending on the species. Mushroom cultivation is beneficial, as it directly provides bio-conservation of solid waste into edible mushrooms. Since these mushrooms contain cellulolytic enzyme, they can easily grow on such type of substrate viz. straw of paddy, wheat and ragi, stalk and leaves of maize, millets and cotton, used citronella leaf, sugarcane bagasse, saw dust, jute and cotton waste, dehulled corncobs, pea nut shells, dried grasses, sunflower stalks, used tea leaf waste, discarded waste paper and synthetic compost of button mushrooms etc. The choice of growth medium selected was wheat husk as it is easily available at low cost. Further, Dr Rajni demonstrated different steps involved in raising the cultures. Oyster mushroom spawn was mixed in the sterile husk and then filled in PP bags of 33X18 cm size with small holes in them for air exchange. The bags were placed in a dark room at a temperature of 20-24°C for about 20-25 days for the running of hyphae onto the husk. Within 30 days, the students harvested approximately six kilograms of mushroom.



**Pictures of Mushroom cultivation shed showing Oyster mushroom of different varieties grown in bags containing wheat husk and spawn. Different sizes and colour of fruiting body of Oyster mushroom is clearly visible.**

The workshop concluded with increasing awareness of nutritive and medicinal value of mushrooms, that can help to convert agro-wastes into human food. Their cultivation can provide labour employment as they are fast growing and are responsible for production of quality food. Mushrooms represent untapped source of nutraceuticals and valuable palatable food.



- A. The fruit body of oyster mushroom growing profusely. B. Pink oyster fruiting body. C. Fully mature oyster mushroom**

**25. Seminar-Cum-Workshop was organized by Department of Physics under the aegis of DBT Star College Scheme on “How To Use Digital Storage Oscilloscope?” on 24<sup>th</sup> Jan 2020**

A seminar-cum-workshop was organised by Department of Physics under the aegis of DBT Star college scheme on 24<sup>th</sup> January, 2020 at in PL2E. Mr. Gaurav Piplani was invited to deliver a lecture on “**Digital Storage Oscilloscope**” for Faculty members and the non-teaching staff the Physics Department.



**Mr. Gaurav Piplani’s lecture attended by Faculty and technical staff**

The Physics Department has bought eight DSOs from the Non-recurring grant provided under DBT Star College Scheme. In order to have an optimal utilization and good maintenance of them, this event was organised for both teaching and non-teaching staff of the Physics department. Mr. Gaurav, a technical expert dealing with DSOs, conducted the presentation. All the knobs in the front panel of a DSO were introduced with their proper functioning. All the advanced features related to measurement techniques, synchronization of data speed and simultaneous

measurements in different channels of DSO were elaborated. Also, the analysis of the data obtained by using in-built numerical techniques like FFT was explained. The USB port in DSO was made to read already prepared data file and plot it along with showing numerical calculations. This was accompanied by hands-on training for teaching and non-teaching faculty of the Physics Department which was a great fun and learn experience for all. The session concluded with vote of thanks by Dr. O.P. Sharma (TIC, Physics) over high tea.

**26. “Opportunities in ornamental fish culture; aquarium set-up & feed preparation”**

**On 30<sup>th</sup> Jan 2020, in Department of Zoology.**

The Department of Zoology, Kirori Mal College organised a hands-on workshop on “*Opportunities in Ornamental Fish Culture: Aquarium set-up & feed preparation*” under the aegis of DBT Star College Scheme, on 30<sup>th</sup> Jan 2020. The workshop was especially designed to enhance awareness on the advantages of studying Aquarium Fish Keeping and develop skill among the students. The workshop was attended by 99 participants from five different colleges, SGBT Khalsa, Shivaji college, Kalindi College, Swami Shradhanand College and Ramjas College accompanied by three faculty members from other Colleges. Ph.D scholars from the Department of Zoology, University of Delhi also attended the workshop.



**Kirori Mal College  
University of Delhi**



***“Opportunities in Ornamental Fish Culture  
Aquarium set-up & feed preparation”***

**One day hands-on workshop on nurturing  
entrepreneurship opportunities among students**

**30<sup>th</sup> January, 2020  
Time-10.00 a.m.**

**Organised by  
Department of Zoology  
(under the aegis of DBT Star College Scheme)**

**Invited Speaker: Dr Sushma  
Topic : Ornamental Fish Nutrition**



**Venue: ZL1  
Department of Zoology,  
Kirori Mal College,  
University of Delhi,  
Delhi 110007**

**Organized by  
Dr. Lukram Ingochouba Meetei  
Dr. Khangembam Cherita Devi**

**Co-Ordinator  
DBT Star College Scheme  
Dr. Anita K. Verma**

**Teacher-in-charge  
Dr. Anjali Priyadarshani**

**[Detail Report](#)**

The programme was initiated by a welcome note on the significance of the workshop on Skill Enhancement Course by co-ordinator of DBT Star College Scheme, Dr. Anita K. Verma, followed by the introduction of invited resource person Sushma Kumari from RDS College, Muzaffarpur, by Teacher-in- Charge, Department of Zoology, Dr Anjali Priyadarshani. The inaugural lecture was on “**Ornamental Fish nutrition**” that introduced the students to the various aspects on nutrition focusing on source of rich colour pigment food for fish. As the ornamental properties of fish are very much influenced by the feed that enhances develops and

maintains the colour of the fish. The inclusion of different plant extracts in the feed to enhance the colour were also discussed.

The introductions were followed by hands-on practice on Aquarium set up and feed preparation. The session on feed formulation and preparation was conducted by Dr. Lukram I. Meetei who spoke on **“Feed Formulation and Preparation of Artificial diets using Pearson Square Method for Ornamental Fishes”** followed by demonstration of feed formulation exercise and preparation using different ingredients. All the participants were given hands-on-training.

The other session on **Aquarium set-up** was carried out by Dr. K. Cherita Devi simultaneously in ZL1, where the participants were divided into four groups and each group was given an aquarium along with the accessories, like filter, aeration pump, diffuser stones, heater etc. Every group was allowed to creatively setup their aquarium. The participants were taught the different methods for fabricating aquarium with advantages and disadvantages of each method.

The importance of selecting right material with proper dimensions were explained. Apart from the material, the information on the right choice of the position was illustrated. The essential components required in a closed aquatic system was explained. The importance of maintaining optimum temperature, dissolved oxygen and other parameters of water were explained. The role of each components was dealt with the functional correlation to maintain the aquarium.

In the other session, the participants were introduced to Pearson’s square method and taught to prepare the fish feed using the above protocol. The participants were allowed to mix different compositions of fish meal powder and wheat flour to make feed formulations. They were made to understand the importance of adding multivitamins, minerals along with plant extracts to enhance colour of the fish.

At the end of the session, participants and organizers were distributed with certificates and the workshop was successfully concluded after collecting the feed-back forms from the participants. The feedback on various aspects of the workshop was taken from the participants. The Faculty and students were satisfied with its usefulness and were overwhelmed by the information provided during workshop.



**Collage of the inaugural lecture, as well as the various activities of the workshop**