

Jaiv-Patrika

# **BIOTECH NEWSLETTER**

Our goal is not just an environment of clean air and water and scenic beauty. The objective is an environment of decency, quality and mutual respect for all other human beings and all other living creatures.

# VISION

The vision of our department is to produce competent Biotechnologist's who can employ premium processes and applications which will profoundly influence existing paradigm of agriculture, industry, healthcare and restoration of environment providing sustainable competitive edge to present society.

# -Gaylord Nelson



### MISSION

- To provide Biotechnology educational Program with impetus to generate quality workforce.

- To create awareness about potentials of Biotechnology with socio-ethical implications.

- To instill spirit of innovation and creativity in young minds with sound research aptitude.

 To nurture confident individuals who are effective contributors towards growth of the nation.

Student Editors: Garim<mark>a Ahuja, Sakshi Taneja, Garima Sharma</mark>

Chief Editor: Dr. Abhila<mark>sha Shourie, HOD & Professor</mark> Editor: Dr. Rashmi Ram<mark>eshwari, Assistant Professor</mark> Co-Editor: Richa Yadav<mark>, Assistant Professor</mark>

# CONFERENCE ORGANISED

## One Day Workshop on Biotechnological Products: Innovation for Healthcare

A Day long workshop was organized by Department of Biotechnology on 7' June 2018. The workshop was in collaboration with Translational Health Science and Technology Institute (THSTI), Faridabad under Science Setu Programme. The workshop was inaugurated by Dr. Krishan Kant, ED & Dean, FET, MRIIRS & Dr. Abhilasha Shourie, Head of the Department, Biotechnology. Inaugurating the conference, Dr. Krishan Kant spoke of the need for India's universities to be among the world university rankings, which would be possible only if active research was promoted by the country's universities. He said that conferences on cutting edge topics such as the one on Healthcare & Innovation were a step in the right direction. Dr. Gaurav Batra (Assistant Professor, THSTI), Dr. Niraj Kumar (Scientist D, THSTI), Dr. Tarun Kumar Sharma (Innovative Young Biotechnologist Award Fellow, THSTI) were the speaker for the event. Debate Competition on Topic: Biotechnology: Is it a Bane or Boon for Healthcare?



#### Solution for Pollution-Focus NCR region

Club Environ and Molecular Biosciences Research Cluster organized an online competition wherein essay cum proposals were invited from students on the topic "Solution for Pollution-Focus NCR region". The proposals were to be submitted by 25.4.18. The idea was to motivate the students to look for solution which can be taken up in future as a stepping stone for pollution free NCR region. Students across UG and PG participated in the competition as a team with two members in each team. Professor Joseph Alexanand Davis was the judge for the competition who meticulously evaluated the proposals based on the purpose, scientific argument, content, effectiveness and structure. Ms. Akansha Kanujia of M.Sc Biotech II Semester bagged the first position and Ms. Priyanshi Batra, B.Tech Biotech IV Semester won the second position. Certificate of participation were given to all the participants and volunteers and prizes were distributed to the winners.

## "YOUR FUTURE IS CREATED BY WHAT YOU DO TODAY LET'S SHAPE IT WITH SUMMER TRAINING PROGRAM"

Summer Training of a student, Jerrin has been conducted in Plant Biotechnology

Lab under the guidance of Dr. Pushpa Tomar. For the helping hand, we thank Ms. Charu Rajpal (Research scholar) and Ms. Akansha Kanaujia (M.Sc II semester). The topic during the tenure was "Micropropogation of Indian Mustard (*Brassica juncea*). During



internship Jerrin gained a full spectrum of lab experience and built analytical, communication, and presentation skills. We wish him luck for future endevour.

#### Teaching Model Competition-14.3.2018

National Science Day is celebrated on 28th February every year to commemorate the discovery of Raman effects by Indian physicist Sir Chandrashekhara Venkata Raman on 28 February. Sir C.V. Raman was awarded Noble Prize in Physics in 1930 for the discovery of Raman effects. To celebrate National Science Day, Club Biotechnea and Molecular Biosciences Research Cluster organized "Teaching Model Competition" on 14th March 2018. The theme of the event was to design a teaching model in such a way so that the students can understand the basics of science. This was a team event where the number of participants was limited to three. In total, seven teams from B.Tech Biotech participated in the event. The event was judged by Dr. Joseph (Department of Biotechnology, MRIIRS), Dr. Kalpana Varshney (Department of Chemistry, MRIIRS) and Mr. Vinay (Department of Mechanical Engineering. MRIIRS). The competition was tough to be judged as the judges were in a dilemma whether to assess a model on its teaching or research ability. The Team of Drishti and Muskaan from B.Tech Biotech 2nd Sem bagged the first prize. Students of fourth semester viz., Taruna Dhingra, Tanmaya and Simran Verma were the runner's up. Certificate of participation were given to all the participants and volunteers and prizes were distributed to the winners.



# EVENTS

### Expert Lecture at YMCAUST, Faridabad

Dr. Abhilasha Shourie, Professor and HOD delivered an expert lecture entitled 'Carbon Budget and Climate Change Mitigation', in a one week Short Term Course



on 'Climate Change and Sustainable Infrastructure Development', at Department of Humanities and Sciences, YMCA University of Science and Technology, Faridabad on 7th June, 2018. The STC was sponsored by NITTTR, Chandigarh and about 50 faculty members from different institutes/universities participated.

#### Visit of Ecological Concern to Rakhi-Garhi

A team of 3 faculty members and 4 students visited village Rakhi Garhi, district Hisar, to explore the archeological site which is declared to consist of one of the oldest civilizations. The purpose was to make



the village people aware of its importance as historic heritage and educate them to keep the surroundings clean. The team also planned a project for solid waste management in the village and disseminated the information through local Panchayat. A meeting was conducted with large number of women to discuss and address the local issues as they were at the helm of affairs.

#### Vaisakhi Celebration at Manav rachna-20.4.2018

On the occasion of Vaisakhi Department of Students' Welfare organized a small "ETHNO WALK" for the faculty and staff of Manav Rachna Family. More than 80 faculty / staff members from MRIIRS, MRU and MRDC had participated. The theme was to bring out the beauty of their ethnicity and culture. The competition was judged by our chief guests of the day, Dr. Shivangi Maletia and Mr. Jaspreet Singh Rehan. 3 distinguished faculty members participated in the event Dr. Pushpa Tomar, Dr. Shilpa S. Chapadgaonkar, Dr. Nidhi Didwania. The Runner up position was bagged by Dr. Pushpa Tomar. In the end, Dr. Shivangi Maletia congratulated everyone for their efforts and wished them all the best in future for such events.



## **ALUMNI CONNECT ACTIVITIES**

#### B. Tech (BT), FET, MRIIRS [2008 - 2012], MBA, FMS [2014 - 2016]

Manav Rachna was delighted to welcome Ms. Gunjan Kaur and Ms. Charu Rajpal, Alumni of B.Tech (BioTech) [2008 - 2012] and Mr. Satya Shiv Goel, Alumni of MBA, FMS, [2014 - 2016] on 6.3.18. They were here for documentation support. Ms. Gunjan Kaur has her own E - Commerce venture in Dubai. Ms. Charu Rajpal is pursuing Ph. D. from Manav Rachna. They also had informal interaction with



Prof. I. K. Kilam and Ms. Gurjeet Kaur Chawla, DSW where they shared their career interests and also appreciated initiatives being taken by Manav Rachna. They also volunteered to help current students and guide them through their career progress.

#### B. Tech (BT), FET, MRIIRS [2009 - 2013]

Ms. Mickey Mehta, Alumni of B.Tech (BioTech), [2009 - 2013] was in the campus for interaction with the students on 7.3.18. She also had an informal interaction with Prof. I. K. Kilam and Ms. Gurjeet Kaur Chawla, DSW where she appreciated the efforts of her faculty members and their overall support in shaping her future. After completing her M.Tech from DCRUST she is currently working as a Research Associate in Expert lancing IP Services. She also had an informal



interaction with Prof. I. K. Kilam and Ms. Gurjeet Kaur Chawla, DSW where she appreciated the efforts of her faculty members and their overall support in shaping her future. She also had an informal interaction with Prof. I. K. Kilam and Ms. Gurjeet Kaur Chawla, DSW where she appreciated the efforts of her faculty members and their overall support in shaping her future.

#### B. Tech (BT), FET, MRIIRS [2007 - 2011]

Dr. Pushpa C. Tomar, Associate Professor had an informal interaction with Alumni Ms. Deepika Kheri and Mr. Nitin Khanna Batch. [2007 - 2011], FET,

MRIIRS in Singapore on 8' June 2018. Deepika is working as a Client manager with Accion Labs and Nitin is working as Regional sales Manager with Agilent Technologies. They both appreciated the efforts taken by their faculty members and the overall support in shaping their future. MRIIRS is



proud of them and wish them luck for future endevours.

#### B. Tech, FET, MRIIRS [13-17]

Manav Rachna was delighted to welcome Ms. Kanika Narula, Alumni of B. Tech (BT), FET, MRIIRS [2013 -2017], Mr. Abhishek Kaushik, Alumni of B. Tech (BT), FET, MRIIRS [2013 - 2017] on 26.3.18. They were highly appreciative of the faculty members who helped them shape their careers. During an informal interaction with Prof. I. K. Kilam, DSW and Dr. Pushpa Tomar (BT) they also shared their career plans and memories of Manav Rachna.



### **CONFERENCE/ WORKSHOP/ SYMPOSIUM ATTENDED**

## National conference on beating the Plastic Pollution: Challenges & Strategies

Molecular Biosciences Research Cluster head, Dr. Shilpa S. Chapadgaonkar chaired a technical session in national conference on the theme 'Beating the Plastic Pollution' on 4th June, 2018 at Delhi Technological University, Bawana, Delhi. The conference was organized by DTU in association with Green Institute for Research & Development (GIRD) on the occasion of World Environment Day 2018. A total of two papers of MRIIRS, one from MSc Biotechnology and another from MSc Energy and Environment were selected for publication in conference proceedings. Research paper entitled 'Microbial Consortia for plastic

degradation' authored by Ms. Akansha Kanaujia and Mr. Kinker Sen (MSc Biotechnology II semester) under the supervision of Dr. Shilpa S. Chapadgaonkar was presented and well appreciated by the



distinguished delegates of the conference. Ms. Swati Jain student of MSc (Energy & Environment IV semester) and Dr. Pushpa C. Tomar, presented a paper on 'Awakening the consciousness and conscience towards plastics' which drew an upbeat response from the audience.

## National Conference on Plant Growth Promoting Rhizobacteria (PGPR) for Sustainability of Agriculture and Environment

Research Scholar Ms. Vandana Nandal and Dr. Manu Solanki attended the national conference PGPR for sustainability of Agriculture and Environment held at Mizoram University, Aizawl, Mizoram from 11-12 May 2018.



They won III prize for poster presentation entitled 'Establishment of Zinc solubulizing bacteria in the Rhizoplane of Wheat (Tripicum aestivum).

## National conference on Recent Advances in Environmental Sciences (NCRAES-2018)

Ms. Richa Yadav, Assistant Professor attended national conference which was held at JNU on 22' March 2018. She presented a poster on "Nanotoxicology Studies on Human Cells and Their Effects in Therapeutics." Leading environmental scientists & research scholars exchanged and shared their views and research findings specific to environmental issues in India.

#### Workshop on Adobe Digital Disha Program

Dr. Abhilasha Shourie, Dr. Rajesh Ghangal and Dr. Arpita Ghosh attended workshop on Adobe Digital Program in collaboration with Adobe Systems India Pvt. Ltd. held at MRIIRS Campus on 12' April 2018. It was a 2 day workshop on the subject Adobe Digital Disha Program - A National Program to foster Digital Creativity Skills of Teachers and Students. The program will be conducted using Adobe Spark which is useful to create digital projects, profiles and research papers.

### VISITS

#### An Industrial Visit to Perfect Bake, Faridabad



Students of 6th Semester B.Tech (Biotech) along with Dr. Pushpa C. Tomar and Dr. Shilpa S. Chapadgaonkar visited Perfect Bread, Faridabad on 8<sup>th</sup> March.2018. The students got an excellent

opportunity to understand the large scale manufacture of bread, its packaging and quality control. The students asked many pertinent questions regarding the process. At the end the students were treated with delicious assorted breads which were promptly devoured by them. The students returned with a rich experience relevant to their Food Biotechnology Course.

# "The rewards for biotechnology are tremendous - to solve disease, eliminate poverty, age gracefully. It sounds so much cooler than Facebook. " -George M. Church



### B.TECH STUDENTS INDUSTRIAL, Visit to Sheel Biotech, Manesar 5<sup>th</sup> April 2018

Students of 8th Semester B.Tech (Biotech) along with Dr. Pushpa C. Tomar and Dr. Rajesh visited

Sheel Biotech, Manesar, Gurugram on

5<sup>th</sup> April, 2018. The students got an tand

the large scale production of different plants by micropropagation.



### **STUDENT RECOGNITION**

#### **INNOSKILL 2018**

Mr. Sanchit Sood (B.Tech Biotech VI Semester) and Ms. Shivani Khare (B.Tech Biotech IV Semester) under the guidance of Dr. Kapila Kumar had participated in INNOSKILL 2018 the annual technical fest of



MRIIRS and won 1<sup>st</sup> prize for the project entitled- "Detection and estimation of Vitamin D using Yeast Based Sensor" and were awarded with cash prize of Rs. 6000/-. They competed against 20 teams from different colleges and universities across Delhi NCR. The event was judged and evaluated by eminent personalities from industries.

#### STAR PERFORMER



In total 16 students from Biotechnology department participated in the placement drive. One student, Ms. Priyanka Aggarwal was selected for the position of Sales Account Manager (Sales, Entry) Rs. 9.83 LPA in Agilent Technologies. Agilent was here in Manav Rachna Campus on May 1st, 2018 for placement drive.

#### TECH FEST AT BENNETT UNIVERSITY

Bennett University, U.P organized the TECH fest "Create, Present, & Scintillate" on 27' April 2018. Ms. Prachi Sardana and Ms. Akansha Kanaujia (M.Sc II semester) secured 1st position in poster presentation competition.

