

## **Name of School of Studies / Institute: Center for Basic Sciences**

**July 2018- June 2019**

### **Name of Activity : Plantation Day**

**Date: 2<sup>nd</sup> August, 2018**

Plantation day was held at Center for Basic Sciences on the occasion of Pt. Ravishankar Shukla Jayanti. Prof. H. K. Pathak, all the faculty members, Students of CBS were participated in the program.

### **Name of Activity : National Science Day**

**Date: 12<sup>th</sup> and 18<sup>th</sup> March 2019**

National Science Day; NSD is celebrated on 28<sup>th</sup> February to honor the discovery of the ‘Raman Effect’, which led to Sir C.V. Raman winning the Noble Prize. Under this occasion, two days (12<sup>th</sup> & 18<sup>th</sup> March 2019) celebration was organized at Center for Basic Sciences, Pt. Ravishankar Shukla University Raipur. The event was catalyzed by Chhattisgarh Council of Science and Technology (CCOST). CCOST is the nodal agency of Chhattisgarh to support and catalyze the celebration of the NSD throughout the state, particularly in education and scientific institutions. The theme of NSD-2018 is “Communicating Science for All”, which has been chosen to communicate science to different segments of communities of Chhattisgarh state. There was enthusiastic participation for all the competitions from the students. The award function commenced at 1.00PM, 18<sup>th</sup> March 2019 with the gracious presence of Prof. Keshari Lal Verma, Hon’ble Vice Chancellor, Pt. Ravishankar Shukla University Raipur as Chief Guest, Prof. Rama Pande, Former Head, School of Studies in Chemistry, Pt. Ravishankar Shukla University Raipur as Special Guest, Prof. H. K. Pathak, Director, Center for Basic Sciences, Pt. Ravishankar Shukla University Raipur. The function began with the lamp lightening ceremony and welcome of the guests. Welcome address was delivered by Dr. Bhanushree Gupta, Convener of the event. Presidential address was given by Prof. H. K. Pathak, Director, Center for Basic Sciences, Pt. Ravishankar Shukla University Raipur. Further a presentation was given by Dr. G. P. Sahu on “Overview of Center for Basic Sciences”. Then Prof. Pande addressed the students and encouraged to be scientific researchers with scientific attitude. Prof. Verma appreciated the

achievements of students and motivated to follow their dreams. Announcement of the results was done by Dr. Smita Sharma and Dr. Laxmikant and prizes and certificates were distributed to all the winner participants. At last, vote of thanks was proposed by Dr. G. S. Gautam. The whole program was conducted by Dr. Veenu Joshi.

## **July 2019 – June 2020**

### **Name of Activity : Know your University**

**Date: 8<sup>th</sup> to 12<sup>th</sup> July, 2019**

Students of 1<sup>st</sup> semester visited to the various departments of the university under “KNOW YOUR UNIVERSITY” program. They visited all the departments, labs, library, hostels and auditorium of the university to be familiar with the entire campus.

### **Name of Activity: Plantation Day**

**Date: 2<sup>nd</sup> August, 2019**

To realize the responsibility towards the environment, the students and faculty members of CBS contributed their bit for the “GO GREEN GO CLEAN” initiative and on the occasion of Pt. Ravishankar Shukla Jayanti they planted plants and trees in the campus. On this prestigious occasion, the department was visited by former Union Minister Mr. Sharad Yadav. He interacted with students and enthusiastically participated in the plantation campaign.

### **Name of Activity : Invited Talk on “Indian Space Program and Outreach Activities”**

**Date : 19<sup>th</sup> August, 2019**

Dr. Rajshree Vinod Bothale, General Manager, Outreach Facility NRSC, Hyderabad visited Center for Basic Sciences, Pt Ravishankar Shukla University, Raipur along with Dr. Vinod Bhothale, Scientist, ISRO. Dr . Rajshree Bhothale addresses the students and delivered a popular science lecture on **Indian Space Program and Outreach Activities** on August 19<sup>th</sup> 2019 at CBS Seminar Hall. She explained the audience about the space mission carried out by ISRO in a very lucid manner. She outlined the technical advancement of India in space programs starting

from the period of launch of Aryabhata to the recent launch of Chandrayan 2 event of moon mission exploration. Her explanation of remote sensing activities of ISRO through satellites was very scintillating and informative for audience. The lecture was followed by a wonderful question answer session. Prof. S. K. Pandey, Prof. M.L. Naik, Prof. K.K. Ghosh, Prof. Ninad Bodhankar and Prof N. K. Chakradhari were present to grace the occasion. Members of Vigyan Sabha Dr. Aditya Chandrakar, Dr. Y. K Sona, Mr. B. K. Lal, Mr. Vishwas Meshram, Mrs Anu Meshram, Mr Laxmikant Agrawal, students of SoS Geography, SoS in Physics and Astrophysics, Savitri Bai Phoole School and the faculty of CBS were present in the occasion. Prof. K. K. Ghosh, Director, CBS extended vote of thanks to the dignitaries and audience.

**Name of Activity :** Invited Talk on “ **Design of Simple molecules in Search of New Chemotherapeutics.**”

**Date :** 31<sup>st</sup> August, 2019

Dr. R P. Tripathi, Dean & Course Co-ordinator (Medicinal Chemistry), National Institute of Pharmaceutical Education and Research, Raebareli delivered a popular lecture on **Design of Simple molecules in Search of New Chemotherapeutics**. He also interacted with students of CBS. Prof K. K. Ghosh, Director, CBS, all the faculty members were present.

**Name of Activity: Triveni Sangam: Induction 2019, Hindi Diwas, Teachers Day**

**Date: 14<sup>th</sup> September, 2019**

Center for Basic Sciences, Pt. R.S.U. organized a programme of Hindi Diwas, Induction Day and Teachers Day together. The programme was named “Triveni Sangam”. Programme was began with lamp lighting of goddess saraswati. Prof. K. K. Ghosh, Director, CBS addressed all the teachers, staff and students with his enlightened speech. Dr. Ghosh explained the significance of “Narwa, Garuwa, Ghurwa and Bari” and its scientific aspects in a very lucid manner. Prof. Ghosh motivated the students to make their effort towards study along with extra-curricular activities. Dr. G. P. Sahu and Dr. Laxmikant addressed the students and guided them regarding science and research field. One of the students Parmeshwar Dewangan recited a beautiful poem on “Narwa, Garuwa, Ghurwa and Bari”. At the end of the programme Harsh Sharma delivered vote of thanks. Dr. Smita Sharma was the coordinator and Jinsen Jose, Sanu Awasthi conducted the programme. All the teachers and staff of CBS were present to make the event successful.

**Name of Activity: Deeksharambh (Induction Programme)**

**Date: 19<sup>th</sup> & 20<sup>th</sup> September, 2019**

Deeksharambh is initiated by University grants commission associated with a purpose to help students acclimatize with the new surroundings, develop bond with fellow students and teachers, sensitivity towards various issue of social relevance and imbibe human values, so as to become the responsible citizens. Ensuring a well designed Induction programme helps both teachers and students for setting the pace of fruitful teaching learning experiences. With this aim Center for Basic Sciences, Pt. RSU organized two day induction program for new admitted students which was started followed by a interactive session with Prof. K. K. Ghosh, Director CBS. He addressed the new students and delivered a motivational speech to draw their attention towards their academic interests as well as cultural and social activities.

Introduction about university, examination system of CBS, description of course curriculum and time table were explained by Dr. Govind Prasad Sahu (Asst. Prof. Mathematics, CBS). Dr. Laxmikant Chaware (Asst. Prof. Physics, CBS) addressed the students with sharing the achievements and participation of the senior students in various events, organized by Pt. R. S.U. as well as the other institutions. A mentoring session was held. Under this session open thinking towards the self discussion on universal human values, students aspiration, family expectation, relationship in family were discussed by the faculties and new students. Lecture on general organic chemistry by Prof. N. N. Karade, Dept of Chemistry, RTM University, Nagpur has been delivered. Students shared their experience. Students visited to the various departments of the University along with library, Auditorium and NCNR.

**Name of Activity: A elocution on “वर्तमान परिप्रेक्ष्य में महात्मा गाँधी के विचारों की प्रासंगिकता”**

**Date : 28<sup>th</sup> September, 2019**

A elocution completion organized at CBS on the occasion of 150<sup>th</sup> birth anniversary of Mahatma Gandhi and the winner of this event was Ku. Akanksha Sahu, 5<sup>th</sup> Semester.

**Name of Activity: Parent Teacher Meet**

**Date: 12<sup>th</sup> October, 2019**

Parents teacher meeting program held at CBS, PRSU to discuss academic behavioral well being and to clarify any related quires or concern about their performance.

**Name of Activity : Constitutional Day**

**Date : 26<sup>th</sup> November, 2019**

“Constitution of India- Awareness Programme” was organized in Center for Basic Sciences in which a lecture on Indian Constitution was delivered by Dr. Priya Rao, Asst. Prof. of Law, School of Studies in Law, PRSU. It was an interactive session. The faculties and students of CBS were present during the program.

**Name of Activity : National Science and Mathematics Day 2020**

**Date: 13<sup>th</sup> and 14<sup>th</sup> March, 2020**

National Science Day has been celebrated on 13<sup>th</sup> of March 2020 and National Mathematics Day was preponed and celebrated on second half of 13<sup>th</sup> of March due to tentative lockdown of COVID-19.

**July 2020 – June 2021**

**Name of Activity: International Webinar on Chemistry 2020**

**“ Recent trends in Medicinal Chemistry”**

**Date: 27<sup>th</sup> and 28<sup>th</sup> July, 2020**

The two day webinar aimed to provide a platform to all the participants particularly to students to have an idea of recent trends in medicinal chemistry amid COVID-19. The first day was devoted to medicinal chemistry. In the wake of pandemic crisis, the theme of second day was on “COVID-19”. Whole world is reeling under the unprecedented Covid-19 crises. Students are also facing the crisis which is hitting the proper functioning of their routine studies. Hence, it was planned to give an opportunity to participants to get aware of global pandemic COVID-19 and to create awareness regarding precautions and safety measures. Students listened and interacted with eminent scientists and psychologist to share and resolve their queries.

The inaugural day of webinar was begun at 11.00 AM with introductory remarks by Dr. Bhanushree Gupta, Convener. The welcome address was delivered by Prof. Kallol K Ghosh,

Chairman and Director, Center for Basic Sciences. Prof. Girish Kant Pandey, Registrar, Pt. Ravishankar Shukla University Raipur, was also present especially to address the virtual gathering. Prof. Keshari Lal Verma, Hon'ble Vice Chancellor, Pt. Ravishankar Shukla University Raipur graced the occasion with his presidential remarks. First speaker of the webinar, Dr Govind Raju delivered his plenary lecture on "Molecular Probes for Theranostics". He discussed the new emerging technique theranostics and architectonics in his lecture. Participants enthusiastically asked their queries for the technique and got satisfactory answers by Dr Raju. The second speaker, Dr Vinod Kumar Tiwari gave his plenary lecture on "Synthetic Chemists and Our Society". Dr Tiwari addressed the importance of synthetic chemistry in our daily life and made participants aware about many therapeutic organic compounds available. After the interaction of participants with Dr Tiwari, vote of thanks was proposed by Dr Veenu Joshi on behalf of organizing committee. The commencement of the final day of webinar on theme "COVID-19" was done by Dr Bhanushree Gupta, Convener. Prof. Kallol K Ghosh, Chairman and Director, Center for Basic Sciences welcomed all the speakers and participants and spoke about the theme "COVID-19". The first lecture was delivered by Dr Kuldeep Singh, Department of Health Sciences, Sargent College, Boston University, Boston USA on "COVID-19: Epidemiology, Effect on the Cardiovascular System and Possible Treatments". Dr. Singh delivered a thorough lecture and gave an insight of novel corona virus, its structure, spread, therapeutic measurements and current status of vaccine. Second, lecture was given by Dr. Snehil Gupta, (M. D. Psychiatry), Assistant Professor, AIIMS Bhopal on "Common Psychological Issues Among the University Students amidst COVID-19 Pandemics and its Remedies". He addressed all psychological issues rose during lockdown among students and faculties. Dr Gupta emphasized to adopt spirituality, yoga and meditation to overcome mental pressure and other negativities. At the end of the webinar vote of thanks was proposed by Dr Bhanushree Gupta, Convener.

**Name of Activity: National Webinar on Advances in Biological Sciences 2020**

Date: 7<sup>th</sup> and 8<sup>th</sup> August, 2020

National Webinar on Advances in Biological Science has been organized on 7-8<sup>th</sup> Aug 2020 by **Center for Basic Sciences, Pt. Ravishankar Shukla University, Raipur. C.G.** and **supported by the Public Outreach Center of the university.**

Webinar was started by the introductory remarks of Dr. Veenu Joshi, Convener of the webinar. Welcome address was delivered by Prof Kallol K. Ghosh, Director, Center for Basic Sciences & Chairman of the webinar. Hon'ble Vice Chancellor of the university, Prof. Keshari Lal Verma ji, Patron of the webinar has graced the occasion with the presidential address. There were total five lectures in this two days webinar, by the eminent speakers from various reputed institutes who shared their knowledge and research work in their field of expertise.

**Dr. Sourav Datta** from Dept of Biological Sciences, Indian Institute of Science Education & Research, Bhopal delivered talk on '**How Plants Cope with Environmental Stress**' in which he explained about the molecular mechanism of model plant Arabidopsis dealing with abiotic stress conditions. His findings can be further applied to other plants for improving the yield of the plants and enabling the plant to cope up with environmental stresses.

**Prof. Anil Prakash**, from Department of Microbiology, Barkatullah University, Bhopal has given talk on '**Mitigating the Impact of Stress on Plant Productivity using Plant Growth Promoting Microbes**' and thrown light on the use of microbes like Pseudomonas and Talaromyces (fungi) for improving the plant growth. He emphasized on the use of biofertilizers for promoting the plant growth and dealing with stress.

**Dr. Amit Tripathi**, Scientist C, DBT, Ministry of Science & Technology, Government of India delivered talk on '**Recent Advances in Genome Editing Technologies**' and explained various gene editing techniques especially, the use of CRISPR technology which can be also helpful in dealing with covid 19 issue.

**Dr. Zenu Jha**, Professor, Indira Gandhi Agricultural University, Raipur on talked about '**Advances in Haploid Production in Rice**' and thrown light on the recent techniques for the haploid plant production with emphasis on rice plant.

**Dr. Maryam Sarwat** from Amity Institute of Pharmacy, Noida has talked about '**Molecular Signalling During Neurodegenerative Disorders**' in which she shared her research work on the molecular mechanism of effects of curcumin, which is a component from haldi on dealing with cadmium toxicity and neurodegenerative disorders.

At the end of the webinar, Vote of Thanks was given by the member of organizing committee Dr. Bhanushree Gupta and Dr. Smita Sharma. There were total 645 participants registered for this webinar from various parts across the country from places like Orissa, MP, Rajasthan, Chandigarh,

Uttarakhand, J&Kashmir, Nagaland, Kerala, Cochin, Trivandrum, Pondicherry, Karnataka, Maharashtra etc.. This webinar was live telecasted on YouTube and watched with about 588 views.

**Name of Activity: Deeksharambh 2020 (Induction Program)**

**Date : 25<sup>th</sup> November, 2020**

The online induction program “Deeksharambh 2020” was held on 25<sup>th</sup> November 2020 at Center for Basic Sciences, PRSU, Raipur.