

## **SEMINARS 2021-22**

### **RashtriyaPoshanMaah Celebrations-2021**

#### **1. National e-seminar “Holistic Nutrition for Healthy Nation” Converging towards a healthy walk through life Under DBT Star College Scheme**

**23<sup>rd</sup> & 24<sup>th</sup> September, 2021**

The Department of Biochemistry, Bhavan's Vivekananda College, Sainikpuri, organized a two-day National e-Seminar to celebrate the RashtriyaPoshanMaah Celebrations-2021 as a part of the Nutrition and Dietetics course. The event also commemorates the 75<sup>th</sup> Independence year “AzadikaAmruthMahotsav”. The seminar was organized under DBT-Star college scheme and is to create awareness among students to highlight the importance of nutrition in the maintenance of health, growth and development during different stages of life and also for the prevention and treatment of diseases. There was a good response with a participation of 302 students and faculty from various institutions all over the country.

On the first day of the seminar the key note address was delivered by Dr. Sridevi A Singh, Director, CSIR-CFTRI, Mysuru, Karnataka and spoke on the theme of the e-Seminar **“Holistic Nutrition for Healthy Nation” Converging towards a healthy walk through life**. She has emphasized on the importance of agriculture, importance of nutraceuticals, personal nutrition, effects of anti-nutritional factors, protein digestibility and amino acid score of common food proteins, harmful effects of highly processed foods and also stressed upon the fact that how nutrition can revert back illnesses and deficiency disorders. Dr. Sridevi emphasized that deliberations during the seminar should reach the common public by information dissemination through academicians, R&D scientific panels and most importantly through young students, researchers and budding entrepreneurs.

In the Technical Session-I, Dr. Srijaya, Associate Professor, Food & Nutritional Sciences, Sri Sathya Sai Institute of Higher Learning, Puttaparthi spoke on “Fetal programming and

developmental origins of adult disease”. She stressed upon the importance of preconceptual nutrition for preparing towards healthy pregnancy.

In the Technical Session-II, Dr. M. Nagalakshmi, Senior Medical Officer, Nature Cure Hospital, Hyderabad spoke on “Influence of Yoga for Holistic Health”. She stressed on the importance of physical activity and different yogasanas in maintaining a healthy life. The afternoon session had presentation of research based e-posters which were presented by the participants.

The second day program on 24-09-21 started with an event on 3-5 min short video on “Low cost nutritious recipe for pregnancy”. There was a good participation of students from various colleges.

In the Technical Session-III Prof. VijayaKhader (Rtd), Former Dean Faculty of Home Science, Acharya N. G Ranga Agricultural University, Hyderabad, delivered a lecture on “Role of Nutrition in Building a Healthy Nation”. She has highlighted on various ways in obtaining good nutrition and emphasized its importance in elevating the health status of an individual.

The Technical session-IV was followed with a lecture by Dr. Uma Chitra, Faculty (M.Sc. Applied Nutrition), ICMR – NIN, Hyderabad on “Nutrition during Adolescence”. She spoke on the significance and importance of nutrition during different stages of adolescence and urged on the importance of implementing daily physical activity along with optimum nutrition. This session was followed by Onsite fireless cooking competition where the in-house students prepared different recipes highlighting the nutritional significance of each. In the last session, there was an e-poster presentation on yogasanas for specific ailments. The participants presented posters highlighting the significance of particular yoga poses which can treat certain diseases and this event received a very good participation.

The program on second day concluded with a valedictory function chaired by Prof. BalaKishan, Dean, Faculty of Science, Osmania University, Professor of Geography, Hyderabad. All the competitions were judged by experts in the specific areas who encouraged the students for their active participation. Winners of all the events were declared in the valedictory and were awarded the e- certificates.

The national seminar was a grand success with very informative and enriching sessions and was received with great enthusiasm by the participants all over India.



Address by Sri.D.Prabhakar Rao chairman, BVB, Sainikpuri Kendra



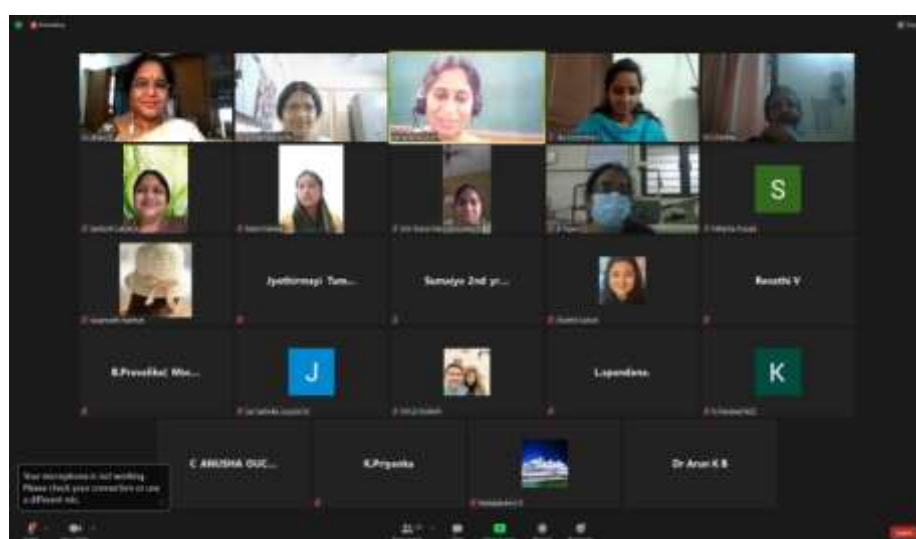
Opening remarks by Mrs.S.Vanitha at the inauguration of the national seminar



Convenor, Dr.A.Sai Padma, giving the convenor's message



Keynote address by the chief guest, Dr.Sridevi.A.Singh, Director, CSIR-CFTRI, Mysuru, Karnataka



Faculty and participants at the inaugural programme



Research based e-poster presentation

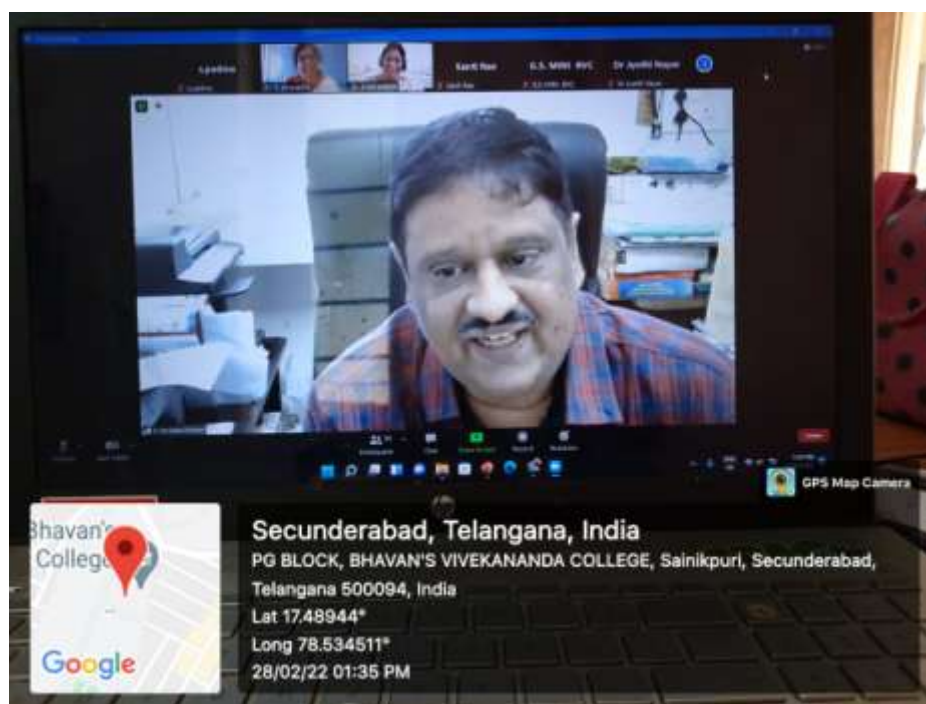
## REPORT

### NATIONAL SCIENCE DAY- 2022

National Science Day-2022 was celebrated in online mode by the Faculty of Physical Sciences and Life Sciences of Bhavan's Vivekananda College, to mark the discovery of the Raman effect by Indian physicist Sir C. V. Raman on 28<sup>th</sup> February, 1928, for which Sir C.V. Raman was awarded the Nobel Prize in Physics in 1930. The theme of National Science Day-2022 is 'Integrated Approach in Science and Technology for a Sustainable Future'.

As a part of the programme, a lecture was delivered by Dr. S. Venkata Mohan, Senior Principal Scientist, CSIR-Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad. Sir briefed the importance of the day and explained about harnessing clean and green energy and low carbon chemicals/ materials by developing the novel strategies for a sustainable technologies through a nexus approach. Sir's topic included biomass as feed stock- A way towards circular economy, linear to circular economy untapped opportunities, biorefining value from industrial waste, self-sustainable algal biorefinery model, self- sustained design on photo biorefinery for the closed loop production of fuels and chemicals working under DBT Tata Innovation fellowship.

All the Science faculty members have put in efforts to make the program a grand success with a good participation from students.



**Self-sustained Design of Photo-Biorefinery for the Closed Loop Production of Fuels and Chemicals - DBT Tata Innovation Fellowship**

Secunderabad, Telangana, India  
 FGMR+6H5, Vivekanandapuram Colony, Sainikpuri, Secunderabad, Telangana  
 500056, India  
 Lat 17.490544°  
 Long 78.534106°  
 28/02/22 01:28 PM

**Self-Sustainable Algal Biorefinery Model**

Secunderabad, Telangana, India  
 FGQM+RRM BVC Harvest Pit, Defence Colony, Sainikpuri, Secunderabad, Telangana 500094, India  
 Lat 17.489559°  
 Long 78.534665°  
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## **Workshops**

### **1. Value Added Course**

**Institute of Genetics & Hospital for Genetic Diseases, Osmania University  
Begumpet, Hyderabad**

**on**

**Clinical, Molecular Diagnostic Methods and Genetic Counselling**

**4<sup>th</sup>, 5<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> & 11<sup>th</sup> October, 2021 (2021-22)**

The Department of Biochemistry has organized a five-day Value-added course on “Clinical, Molecular Diagnostic methods and Genetic Counselling” for the second and final year students of B. Sc (MBBCC) in collaboration with Institute of Genetics and Hospital for Genetic Diseases from 4<sup>th</sup>, 5<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> & 11<sup>th</sup> October, 2021. This course was organized under DBT- Star College Scheme for the benefit of undergraduate students. Total of 28 students have got trained in this program. The areas covered during the course was Clinical Genetics, Cytogenetics, Environmental Toxicology, Molecular Biology, Clinical Biochemistry and Genetic counselling.

The value-added course started with briefing about Institute by Dr.Srilekha, in identifying the patients with any genetic defect and provide further counselling.

In the Clinical Genetics division, students were made to be aware about the various prenatal diagnostic methods, importance of pedigree analysis for the purpose of Genetic counselling to the patients who may have a prehistory of genetic diseases. Students were explained about Tissue Engineering, Nano Robotics, Applications of biotechnology in medical fields, Prenatal disorders, Invasive and Non-invasive prenatal testing and its diagnosis. Reasons responsible for autoimmune diseases (Rh incompatibility, Diabetes mellitus, congenital heart diseases) were covered. Students had been upskilled with various diagnostic parameters for many syndromes and disorders as well- like microarray, exome sequencing, [Biochemical screening, Double marker combined screening, quadruple marker test done in first trimester and h-hCG in second trimester]

Dr. B. Vijaya Lakshmi, explained about the Wilson disease and protein associated with it. Wilson disease protein is associated with ATP7B gene located on human chromosome 13, consisting 21 exons. ATP7B gene provides the instructions for making a protein called copper transporting ATP2. If this is produced less than normal, it lowers the level of ceruloplasmin. She also taught about the Globin variants present in haemoglobin from embryonic stage to adult stage.

Dr. Deepika from Department of Molecular Biology had explained the kinds of diagnosis to be done before concluding the type of syndrome. Ma'am mentioned the two

ways of molecular diagnosis as Qualitative (done to check if the patient is either positive or negative to the test done) and Quantitative diagnosis (described both diagnostic and therapeutic molecular imaging like Single nucleotide polymorphism, etc). In the Molecular Biology division, isolation of DNA was done with blood sample of students and the isolated DNA was separated using Agarose gel electrophoresis in the toxicology division.

In the cytogenetics division, students were made to understand about the methodology and the importance of karyotyping, FISH and Spectral karyotyping in detecting chromosomal abnormalities. The course was highly informative and educative.

**No of Students: 28 (BSc II and III-year MBBCC)**

**No of Faculty members: 05**







## 2. Report on the training program on

### **“Basic Techniques in cell and Molecular biology”**

Conducted at Centre for cellular and Molecular biology from  
14<sup>th</sup> March-17<sup>th</sup> March, 2022.  
Under DBT Star college scheme

The Department of biochemistry organized a four day training programme on “Basic techniques in cell and Molecular biology” from 14<sup>th</sup> -17<sup>th</sup> March, 2022 in association with Centre for Cellular and Molecular Biology,(CCMB). This programme was conducted under DBT star college scheme for the second and final year students of B. Sc (MBBCC). Eight students were trained for four days in techniques like DNA isolation, PCR amplification, Agarose gel electrophoresis of DNA, cell culture, and SDS-PAGE of proteins. The students were provided with hands-on training in all the techniques.

On day 3, the students were taken on a visit to the ATAL incubation centre. They were explained about the different schemes available for start up as well as for development of Proof of concept (PoC). The students were given an overview of the various facilities available at the Atal Incubation centre.

The students were then taken for a half day visit to the various labs at Centre for Cellular and Molecular biology (CCMB), Tarnaka, Hyderabad. At CCMB, student were shown various high end equipment related to microscopy, protein characterization, and Proteomics. The students were also taken on a vist to the Drosophila Lab, where they were explained about the culturing, maintenance and breeding of Drosophila. They were also explained about the genetic studies that were being carried out on Drosophila. The students were also shown a video on the activitesof LACONES(Lab for conservation of endangered species) and explained about the techniques used for tracking and identification of animals.

On the day 4, the programme ended with a valedictory note and distribution of participation certificates.



Dr.A.Sai Padma, Head, Dept of Biochemistry, BVC along with DrB.Sravanthi, CCMB



Students performing experiments at the training



Visit to Atal incubation centre at CCMB annexe

Students performing electrophoresis



Students performing cell culture experiments



Video presentation on Lacones



Students visiting labs at CCMB

## Exhibition

### 1. World Diabetes Day-2021

The world Diabetes Day is celebrated on 14<sup>th</sup> November of each year. Established in 1991 by the International Diabetes Federation with support from WHO in response to growing concerns about the health and economic threat posed by diabetes. World Diabetes Day became an official UN day in 2006. “Access to Diabetes Care” is the theme for World Diabetes Day 2021. To mark this occasion, the Department of Biochemistry, Bhavan’s Vivekananda College of Science, Humanities and Commerce under the DBT -Star college scheme and Science club Activity has organized activities on 15<sup>th</sup> November, that included,

- Awareness Rally by the students and staff.
- e-Lecture on “Diabetes-Prevention and management”: 2.30-3.30pm Dr. K. Srinivas Rao, Diabetologist.
- Students’ e-Poster presentation on “Know About Diabetes”: 3.30-4.30pm.

There was a huge participation of nearly 200 students and faculty which included NCC, NSS wings and others. The rally started from the college premises at 1.30 pm to Neredmet cross roads and back to college to bring awareness about Diabetes in the community around. An e-lecture on “Diabetes- Prevention and Management” was delivered by Dr.K.Srinivas Rao, Diabetologist. The lecture was well received by the audience.

The program ended with e-poster presentation on “Know about Diabetes”. Total 29 posters from students of undergraduate and post graduate programs participated in the competition. The program was a grand success with good awareness programs.







## 2. Poster presentations by B.Sc students

Four B.Sc (MbBcC) students presented literature based e-posters at **Two day International e-conference on “Microbial pathogenesis and recent advances in diagnosis of OMICRON”** organized on February 4<sup>th</sup> and 5<sup>th</sup> February, 2022, by Department of Microbiology, Palamuru university, Mahbubnagar, Telangana.

- 1) Poojitha Eluri - A Review on Globally Emerging and Reemerging of Animal Vv viruses
- 2) Sagar Dakua & S Vanitha - A study on the action of Antiviral drugs
- 3) Naman Chauhan - Clinical infections and Vaccines
- 4) M Likhith Bharadwaj - A Comparative study on the Transmission of Zoonotic viruses: H5N1 Influenza, MERS - CoV, Ebola virus and Zika virus

