

***PROJECT COMPLETION REPORT  
(PCR)***

**NATIONAL SCIENCE DAY - 2023 CELEBRATIONS**

**Focal Theme: 'Global Science for Global Wellbeing'  
(National Science Day Celebrations)**

**National Science Day (NSD) -**  
**Focal theme " Global Science for Global Wellbeing"**

National Science Day is observed in India on February 28 every year to commemorate the discovery of the Raman Effect by Indian physicist Sir C.V. Raman on this day in 1928. This discovery was a significant milestone in the field of physics and earned Raman the Nobel Prize in Physics in 1930.

The objective of National Science Day is to create awareness and promote the importance of science and its application in everyday life, inspire students to pursue careers in science and related fields, and recognize the contributions of Indian scientists to the field of science.

On this day, various activities such as science exhibitions, seminars, workshops, and competitions are organized by educational institutions, government agencies, and non-profit organizations across the country to popularize science among students and general public. The theme for National Science Day changes every year and is chosen to reflect the current issues and challenges in the field of science. The theme of National Science Day 2023 is 'Global Science for Global Wellbeing'.



National Science Day is a great opportunity to celebrate the achievements of Indian scientists and inspire the younger generation to take an interest in science and contribute to the advancement of science and technology in the country. It is aimed at fostering the spirit of scientific temper among various sections of society by formulating activities in various formats based on the focal theme announced by the NCSTC, DST. NSD celebrations are oriented towards the entire scientific fraternity to rededicate themselves for the cause and development of science and its applications for the welfare of society and mankind.

NSD Celebrations shall be used as a platform to inform the students about the importance of Science in National Development and to sensitise them about the role played by Science in the making of Advanced Nations, about the efforts of Govt. of India in the promotion of Science in India and about the facilities being provided to meritorious science students for pursuing higher education in Science. These celebrations also aim at alleviation of superstitions prevailing in the society by fostering Scientific Temper among public from various sections of society.

Considering the reputation of the institute, faculty and relevance vis-à-vis budget proposed, TSCOST through various schools, universities, colleges, and educational institutions listed below celebrated Maths and Science Day by working together and spreading the understanding and learning of mathematics & science.

## NATIONAL SCIENCE DAY (NSD)

### Focal theme " Global Science for Global Wellbeing"

Sl. No.	Name of the Program Coordinator & Institution
1	Dr. Y. Sunila Kumari, Telangana Mahila Viswa Vidyalam Koti, Hyderabad
2	Dr. Annapoorna R.S.Butti, Mahatma Gandhi University, Nalgonda
3	Dr. Jugun Prakash Chinta, NIT, Warangal
4	Dr. A. Umarajashekhar, PJTSAU, Siricilla
5	Dr. M. Sampath Kumar, PJTSAU, Siricilla
6	Dr. G. Priyadarshini, PJTSAU, Siricilla
7	Dr V Bharathi, PJTSAU, Siricilla
8	Prof. Sandeeptha Burgula, Osmania University, Hyderabad
9	Dr Rama Krishna Kancha, CPMB, Osmania University, Hyderabad
10	Dr. A Sabitha Rani, Osmania University, Hyderabad
11	Prof. K Shailaja, Osmania University, Hyderabad
12	Prof. Dr. J Vishwanatham , Palamuru University
13	Dr. T. Savitha Jyoshna,, Kakatiya University, Warangal
14	Dr D Suman, Osmania University, Hyderabad
15	Dr M. Srinivas, Osmania University, Hyderabad
16	Dr Pulababala Ramesh, SR&BGNR Govt. Arts & Science Collg, Khammam
17	Dr P. Vasantha, TSWRD& &PGCW, Mahendrahills
18	Dr P.R. Sushma, Telangana Mahila University, Koti, Hyderabad
19	Dr B. Naveen Kumar, SKLTS Horticulture University, Hyderabad
20	Dr. Pidigam Saidaiah, SKLTS Horticulture University, Wanaparthy
21	Dr. Shoba, Rajiv Gandhi University of Knowledge Technologies, Nirmal
22	Mr. T. Rakesh Reddy, Rajiv Gandhi University of Knowledge Technologies
23	Dr. Hameeda Bee, Osmania University, Hyderabad
24	Dr. Syed Azeem Unissa, Osmania University, Hyderabad
25	Dr. B. Vijaya Lakshmi, Osmania University, Hyderabad
26	Dr Someswar R. Sagurthi, Osmania University, Hyderabad
27	Dr. Alia Begum, Telangana Mahila Viswavidyalayam, Koti, Hyderabad

## Workshop on “Recent Advances in Computational Tools in Life Sciences”

Dr. Y. Sunila Kumari, Department of Zoology,  
Telangana Mahila Viswavidyalayam, Koti, Hyderabad

The National Science Day, (NSD) is celebrated on 28<sup>th</sup> February every year to commemorate the birth anniversary of Indian Nobel Laureate Sir. C.V.Raman and The Raman Effect which brought him Nobel Prize in Physics. As a part of NSD Programs the Department of Zoology, Telangana Mahila Viswavidyalayam, (TMV), Koti, Hyderabad, has organized a Two Days National Workshop on “Recent Advances in Computational Tools in Life Sciences” on February 1<sup>st</sup> & 2<sup>nd</sup> 2023. The program is supported by NCSTC, DST, GOI and TSCOST, Dept of EFS&T, Govt. of Telangana.

### Day 1:

On February 1<sup>st</sup> 2023 the day started with Inaugural session at 10:00am by invocation and lighting of lamp. The programme was presided by Prof. M. Vijjulatha, Principal, TMV, Prof. Reddya Naik. B, Chief Guest, OSD to VC, Department of Zoology, UCS, O.U. , Prof. S. Jithender Kumar Naik, Senior Professor & Guest of Honour, Department of Zoology, UCS, O.U., Prof. Madhavi M, Guest of Honour, Head & Chairperson, BOS, Department of Zoology, UCS, O.U., Prof. H.A. Nagarajaram, Key Note Speaker, Head Department of Systems and Computational Biology, School of Life Sciences, University of Hyderabad, Dr. B. Shailaja, Vice Principal, TMV, Dr.G. Vijaya laxmi, Hostels Vice Principal, TMV, Dr.Y.Sunila Kumari, Head, Dept of Zoology, TMV and Organising Secretary, Dr. G.P.L. Jayasree, Joint organizing secretary. 60 Participants ( 11 Faculty & 49 PG Students) from various colleges , viz., Department of Microbiology Osmania University, Dr. Habeebullah Life Sciences, Government City College, Government Degree & PG college(A) ,Siddipet, Indian Institute of Rice Research, Telangana Mahila Vishwavidyalayam, Nizam College , Osmania University, OsmaniaUniversity College of Technology, RBVRR Women's college of Pharmacy, Sarojini Naidu Vanita Maha Vidyalaya, St Annie Besant women's college, Dilsukhnagar, St Ann's College for Women, St Francis College for Women have registered for the 2 days workshop.



Inaugural session was followed by Key Note Address at 11:00am by Prof. H.A. Nagarajaram on Network Perspective of Protein-Protein Interactions. He emphasized the importance of computational tools on Life Science research. The summary of his talk is as follows Proteins do not function in isolation but interact with each other and also with other biomolecules to give rise to various cellular functions. Literature abounds with many studies that have focused on interactions among proteins and hence have paved the application of network theory culminating in the construction and analyses of protein-protein interaction networks (PPINs). followed by studies highlighting some specific aspects of protein-protein interaction networks, showing how the topological properties of proteins in PPINs correlate to their biologically relevant characteristic features and functions. Next session started at 1:30pm by Dr. G.P.L. Jayasree, she delivered a talk on sequence alignment and Phylogenetic analysis. The lecture session was followed by hands-on training on “ PHYLIP” ( Phylogeny Inference Package) for construction of phylogenetic tree using Distance methods, parsimony method, Maximum likelihood method etc., The last session was by Mr. Laxman Kumar on Homology Modeling, a protein model of CDK2 using Modeler 9.23 was predicted.

## **Day2:**

The Second day started with an invited talk at 10:00am by Dr. Moumita Saharay on Modeling and Simulations of Biomolecules in the area of Renewable Energy and Biomimetics. The summary of her talk is as follows Microbial cellulase enzymes are persuasive candidates for the economical production of bioethanol, a promising substitute to fossil fuels, from cellulosic biomass. Cellulases catalyze the degradation of cellulose from plant biomass into simple sugars and then to bioethanol. We employed computer simulation techniques to understand the effects of the carrier nanomaterials on the catalytic activities of cellulases.

The Second session was by Dr. Vivek Thakur. He delivered an invited talk on “ Metagenomics”. The summary of his talk is as follows, The research in the past few decades has shown association of microbes with the higher organisms. In humans, a variety of microbes inhabit various body parts such as the gut, skin and oral cavity. Advancement in genomics has made the characterization of microbial communities feasible. The talk has given basic insight into the area of Metagenomics including the methods and applications.

Post lunch session started at 1:30pm by Hands on session by Ms.Gayathri Priya on RNA sequencing using R . She conducted a training session for analyzing microarray data from NCBI-GEO.

The Last session on Day 2 was hands on training at 3:30pm conducted by Mr.L. Laxman Kumar and Dr. S.Srikanth on Molecular docking using Autodock. The CDK2 protein and ligand obtained from NCBI Pubchem were used for docking analysis. The day 2 concluded with Valedictory Session at 5:30pm Principal Dr. M.Vijullatha, Vice-Principal Dr.B.Shailaja, Faculty of Department of Zoology, TMV and all the participants were present at the occasion. The Event Successfully concluded with a satisfactory feedback from all the Participants.

## National Science Day Celebrations - 2023

Dr. Annapoorna, University College of Science,  
Mahatma Gandhi University, Nalgonda

To increase intuitive thinking in science and an effort to popularize the benefits of scientific knowledge and practical appropriation, 28th February is celebrated as National Science Day (NSD). The Day is observed each year in India to mark the discovery of Raman Effect on 28<sup>th</sup> February 1928 by the great Indian physicist Dr. Chandrasekhara Venkata, for which he won the Nobel Prize in Physics in 1930. Science brings about solutions for everyday problems and provides answers to the greatest mysteries of the Universe. Any country is debited to scientists who find new approaches to problems and prove new scientific laws. National Science Day's main objective is to increase awareness among people about the importance of Science and its applications.

ABOUT THE COLLEGE: The University College of Science, Mahatma Gandhi University came into existence ever since its inception in 2008 and has been offering Post Graduate courses and Ph.D research programs in Chemistry, Mathematics, Physics, Biotechnology, Biochemistry, Geology and Botany. The college produces students who excel and become leaders in their chosen profession, contributing to the community, the nation, and the world.

10.05am	Lightening the lamp by Prayer song	All the Guests Ms. Swetha
10.10am	Speech by Principal & President of Session	Dr. Annapoorna R.S. Butti
10.15am	Speech by OSD	Prof. Ravi Aluvala OSD to Vice Chancellor
10.20am	Speech by Guest of Honor	Prof. T. Krishna Rao Registrar, MGU
10.25am		Prof. V.V. Haragopal. Dept. of Statistics, OU/BITS Pilani.
10.35am		Prof. M. Adinarayana. Dept. of Chemistry, OU.
10.40am	Speech by Chief Guest	Prof. Ch. Gopal Reddy Honorable Vice Chancellor, MGU
10.45am - 11.30am	Talk 1 Prof. Mundra Adinarayana. Dept. of Chemistry, Osmania University Introduction by Dr. M. Vasantha	Key note speech titled “ Scientific method and Scientific Temper in India”

11.30am to 12.45pm	<b>Talk 2</b> Prof. V.V. Haragopal. Dept. of Statistics, OU/BITS Pilani. Introduction by Dr.Hymavathi	<b>“Role of Statistics in Textual mining”.</b>
12.45pm to 1.00pm	<b>Vote of Thanks</b>	<b>Mrs.Samreen Kazmi</b>
1.00pm to 2.00pm	<b>Lunch Break</b>	
2.00pm to 3.30pm	<b>Talk 3</b> Dr.A.Venugopal. Principal Scientist, IICT Hyderabad. Introduction by Dr.Kalyani	<b>“Sustainable Catalytic processes for the production of clean fuels”.</b>
3.30pm	<b>Vote of Thanks</b>	<b>Dr. D.Ramesh</b>
3.35 pm to 4.00pm	<b>Valedictory</b>	

Prof. Mundra Adinarayana, Dept. of Chemistry, Osmania University.

Sir spoke about how life was long, long back in caves and open skies and how scientific inventions changed life of mankind. He talked about heat transfer mechanism in Red pots and Black pots. Invention and functioning Automobiles and they releases of gases causing Global Warming. Sir, talked about Renewable Energy sources: Nuclear, Thermal, and green hydrogen gas.

Prof. V.V. Haragopal., Dept. of Statistics, OU/BITS Pilani.

Sir, Spoke about Statistical aspect on Textual Mining, Textual Analytics, and data collections and document probability. Sir presented case study on textual mining implementing computational methods like natural language processing on political speeches especially to Politicians Telangana state.

Dr.A.Venugopal, Principal Scientist, IICT Hyderabad.

Sir, Spoke about green Hydrogen fuel production. Clean fuels their production and need for current world. Nanotechnology, properties of Nanomaterials in detail. Adsorption isotherms and their applications in research. Heterogeneous catalysis and its applications.

LIST OF WINNERS				
SI.NO	PRIZES	NAME	DEPARTMENT	SCIENCE FAIR PRESENTATION
1	1st Prize	Gandham Kiran Sri Ramadasu Tulasi	M.Sc (Physics - I Yr)	Solar Vehicle Experiment
2	1st Prize	R.Mounika Sai Priya	M.Sc (Bio-Technology- I Yr)	Effective Solar's
3	2nd Prize	K.Prudhvi	M.Sc (Physics - II Yr)	

		A.Balaji Nayik		Non-Conventional Energy Applications
4	3rd Prize	A.Yashash Chandrika T.Spandana Rekha	M.Sc (Bio-Chemistry - I Yr)	Covid Vaccines
LIST OF MODELS				
1	1st Prize	B.Ramesh K.Swamy	M.Sc (Physics - I Yr)	Hydro Electricity
2	2nd Prize	M.Praveen Kumar B.Gopi	M.Sc (Geology -II Yr)	Causes & damage of earth quakes in Turkey
3	3rd Prize	Y.Navya	IPC - IV Yr	Digestive System
4	Consolation	D.Neelima	M.Sc(Organic Chemistry - I Yr)	Organic Farming
POSTERS				
1	1st Prize	Md.Riyaz	M.Sc (Geology -II Yr)	Tectonic Plate Moments
2	2nd Prize	Shaik Adil	M.Sc (Bio-Chemistry - I Yr)	Birth Mechanism
3	3rd Prize	B.Om Prakash P.Venkatesh	M.Sc(Organic Chemistry - II Yr)	Herbal Plants
4	Consolation	B.Srikanth	M.Sc (Geology -I Yr)	Interior of Earth
ELOCUTION				
1	1st Prize	G.Lakshmi Priya	IPC - IV Yr	Importance of Science in daily life
2	2nd Prize	Sara Sangham	M.Sc (Bio-Chemistry - II Yr)	do
3	3rd Prize	Lakshmi Prasanna	M.Sc (Bio-Technology- I Yr)	do
QUIZ				
1	1st Prize	A.Vishnu A.Balaji Nayik	M.Sc (Physics)	Events in science from 2020 to 2022
2	2nd Prize	Md.Riyaz	M.Sc (Geology)	do
3	3rd Prize	R.Geetha	M.Sc (Bio-Technology)	do
ESSAY WRITING				
1	1st Prize	Y.Navya	IPC - IV Yr	Eminent Indian Scientist and their works
2	2nd Prize	K.Anusha	M.Sc (Physics - II Yr)	do
3	3rd Prize	T.Spandana Rekha	M.Sc (Bio-Chemistry - I Yr)	do



**NATIONAL SCIENCE DAY CELEBRATIONS-2023**  
**Dr. Jugun Prakash Chinta, Department of Chemistry, NIT Warangal,**  
**SCoPE-Telugu and TSCOST-Telangana**

Two-day “NATIONAL SCIENCE DAY CELEBRATIONS-2023” was Organized jointly by Department of Chemistry, NIT Warangal, SCoPE-Telugu and TSCOST-Telangana during 27<sup>th</sup> - 28<sup>th</sup>, February, 2023 on the theme of Global Science for Global Wellbeing! This two day programme contains expert lectures by eminent academicians and scientists working in frontier areas of Sciences and Technology and also experimental demonstration to the school children.

**First day (27<sup>th</sup> February 2023)**

**Inaugural function:** The day 1 of the NSD-2023 was started at 10:00 A.M with welcoming the dignitaries by Dr. M. Raghasudha, Convener, NSD-2023 followed by national song and garlanding the portrait of Sir C. V. Raman. Prof. B. J. Rao, Vice-Chancellor, University of Hyderabad was invited as chief guest of the function, Prof. N. V. Ramana Rao, Director NIT Warangal, Dr. Ch. Mohan Rao, Former Director, CCMB and JC Bose National Fellow and Prof. K. Laxma Reddy, Principal Investigator, SCoPE, NIT Warangal were guest of honors. Prof. D. Kashinath, Head, Department of Chemistry was acted as a president of the function. The programme was continued with welcome address by Prof. D. Kashinath, followed by both the Guest of Honours. Prof. B. J. Rao addressed the gathering by sharing his experiences with Prof. K. Laxma Reddy and current scenario of science and technology in India. Registrar, Deans, Heads of the other departments, current and retired faculty, School teachers and students participated in this programme. The programme was ended with felicitation of guests, vote of thanks and national anthem.

**Technical Session-1 (27<sup>th</sup> February 2023)**

This session started at 11.40 am with a very informative and excellent lecture by Dr. Ch. Mohan Rao on the topic “A Few Indian Contributions to Global Science”. In his lecture, he has discussed about the ground breaking research that was carried out by some of the prominent scientists and academicians of India. The second lecture in this session by Dr. T. V. Venkateswaran, Scientist F, Vigyan Prasar on the topic of “Science in Post-Independent India”. He has given overview of the activities and status of science after the independence of India. After this lecture, there was break for lunch.

Post lunch session started at 2.00 pm with the lecture by Prof. M. Adinarayana, Professor of Chemistry (Retd), Osmania University on “Method of Science and Scientific Temper”. He talked about the methods to follow for carrying out good science in simple and understandable form even by the school children. This lecture is followed by talk by Prof. B. N. Reddy, Professor of Botany (Retd), Osmania university on “How Chemistry Made Biology Strong”. He emphasized on the importance chemistry concepts involved in Biology. The next lecture is on “Science Popularization: NSD as a platform” was delivered by Prof. Koya Venkateswara Rao, Professor of Chemistry (Retd), Osmania University.

The first day was ended with a very interesting and fun filled session on “Fun with Chemistry” by research scholars and faculty of the Department of Chemistry. The session was arranged

with the demonstrations of simple concepts of chemistry for the school children. The children has got the chance to do and learn the some of the concepts which are useful in day to day life. The children were also asked solve and answer the questions involved in those concepts.

### Technical Session-2 (28<sup>th</sup> February 2023)

The second technical session on the second day started with an illustrative and animated lecture by Prof. A. Ramachandraiah, Professor of Chemistry (Retd), NIT Warangal on the topic “Introduction to the Raman Effect”. He has started the lecture by giving brief biography of Sir C. V. Raman and discussed about the discovery of Raman Effect. The second lecture in this session was by Sri K. Purushotam, Former DFO, Hanamkonda on “Environment and Societal Role”. He has emphasized on the important roles to be played by everyone in the society to protect environment and to reduce the health hazards due to pollution. The next lecture in this session was a futuristic lecture on “Trends in Artificial Intelligence (AI)” by Prof. L. Anjneyulu, Professor of ECE, NIT Warangal. Then the session ended with a lecture on “Fun with light” by Prof. D. Haranath, Department of Physics, NIT Warangal. He has described basic principles and some important properties of light and its interaction with matter.

The next session started after lunch break with a lecture on: Chemistry in our Daily Life: by Prof. D. Kashinath, Head, Department of Chemistry, NIT Warangal. This lecture was followed by “Demonstration of Physics Experiments by Prof. Prof. D. Haranath, Department of Physics, NIT Warangal and his team. The demonstration went for about one and half hour and then break for tea.

**Valedictory Function:** The valedictory ceremony started at 4:00 pm. The chief guest of the function was Prof. N. V. Ramana Rao, Director, NIT Warangal and Dr. Ch. Mohan Rao, Former Director, CCMB and JC Bose National Fellow, Prof. Y. N. Reddy, Dean, Faculty Welfare, NIT Warangal were guest of honors. The programme was started with welcoming the guest by one of the convener Dr. M. Raghasudha, national song followed by address by Chief guest, guest of honors and Head of the Department & President of the function. The conluding remarks of the two day proceeding were given by the convener of the program Dr. Jugun Prakash Chinta. Certificates were distributed to teachers and school children. Then oral feedback from the participants were also taken. The teachers and school children expressed their satisfaction towards the progra. The programme was concluded with vote of thanks followed by national anthem.

#### **Participants:**

- (1) 100 High School Science Teachers from Hanumakonda (30), Warangal (30), Mahabubabad (10), Jangaon (10), Bhupalpally (10) and Mulug (10) Districts
- (2) 300 High School students from JNU, Mamunur, Warangal (Dist), Social Welfare Residential School, Velair , Hanumakonda and Mahabubabad Districts
- (3) 120 Students from NIT Warangal



**Training Program on**  
**“Advance feed and fodder production technologies to**  
**improve economics of live stock farming”**

**Dr. A Uma Rajasekhar, Professor Jayashankar Telangana State  
Agricultural University, Agricultural College, Sircilla, Rajanna Sircilla Dist.**

The National Science Day, (NSD) is celebrated all over India in academic institutions, research institutions in the Universities under which they are working on 28<sup>th</sup> February every year to commemorate the birth anniversary of Indian Nobel Laureate Sir. C.V. Raman and the Raman Effect which brought him Nobel Prize in Physics to mark the discovery of the Raman effect. As a part of NSD Programs the Agricultural college, Sircilla, PJTSAU, Hyderabad has organized a two-day training programme on **“Advance feed and fodder production technologies to improve economics of live stock farming”** on March 9<sup>th</sup> and 10<sup>th</sup>, 2023 at Agricultural College, Sircilla and College of Veterinary Science, P. V. Narasimha Rao Telangana Veterinary University, Korutla, Jagtial district to the livestock farmers belonging to different villages of Sircilla district to impart knowledge on establishment of *Azolla* and Hydroponic fodder unit, fodder conservation technologies like Silage & Haylage making units at farmer level and different fodder crops along with their nutritional qualities for year-round fodder production and to supply nutrient rich feed to the livestock.

**Day-1 (09.03.2023)**

**Inaugural Function**

The programme was started by invocation and lighting of lamp followed by University song. The Programme was presided by Dr. T. Madhava Rao, Associate Dean. College of Veterinary Science, PVNRTVU, Korutla, Dr. M. Shanti, Professor (SSAC), Agricultural College, Sircilla, Dr. Ch. Ramakrishna, Assistant Professor (Agronomy), College of Veterinary Science, Korutla, Mr. A. Umarajashekhhar, Assistant professor (AMBE), Agricultural College, Sircilla & Dr. P. Madhavi, Assistant Professor (SSAC) Agricultural College, Sircilla presided over the inaugural session. The invited experts honored the session by explaining about the importance of the training programme and concluded the session by brief explanation about the institute and the research programmes going on.

Dr. T. Madhava Rao, gave introductory remarks and explained about the research activities and other programmes going on in their institute for farmers and its benefits. He also addressed the gathering by enlightening with the importance of the livestock and emphasized production of good quality and nutritious fodder to the livestock. The programme was enlightened by Dr P. Madhavi, welcomed the gathering and addressed the importance of training programme and different topics to be covered in the upcoming sessions and their importance in livestock farming.

## First session

Dr. M. Shanti, Professor (SSAC) explained about the importance of silage and haylage, suitable crops for preparation, advantages, disadvantages and precautions to be taken while preparing silage and haylage. She also enlightened livestock farmers about the farmer level establishment of hydroponic fodder production unit and crops suitable for hydroponic fodder production. She also expressed her research experience at AICRP project on silage and hydroponic fodder production. Dr. Ch. Ramakrishna as a guest faculty offered lecture on quality fodder production for sustainable livestock development. He has covered different types of fodder crops viz, Hybrid napier, Para grass, stylo grass, Guinea grass, Cowpea, Maize, Sorghum, Hedge lucerne, Berseem, Moringa etc. and their package of practices with specific constraints and advantages.

## Second session

In the afternoon session, the session was hold by Mr. A. Umarajashekhar and explained about the *Azolla* preparation as feed and advantages. He also stressed on *azolla* can be feed to the poultry, cattle, rabbits as it is a rich source for protein. Farmers were of quite interest on the aspects covered under this topic and actively interacted and cleared their doubts regarding *azolla* cultivation as feed to the livestock and also on various aspects covered under first session. Dr P. Madhavi offered lecture on Nutritional quality (nutritional and anti-nutritional factors) of different fodder crops & their role in animal nutrition. She also demonstrated the silage making by using ploythene bag. Farmers took an active part in the demonstration of silage preparation.

## Day-2 (10.03.2023)

Programme was started with exposure visit to Fodder block, Dairy, Rabbitary, Piggery unit and *Azolla* production unit at College of Veterinary Science, PVNRTVU, Korutla. Dr. Ch. Ramakrishna explained about the different fodder crops available in fodder block and their cultivation methods. He also briefed the breeds available in dairy viz., Sahiwal, Gir etc. Later, Mr. A. Uma rajashekhar and Dr. P. Madhavi had explained the *azolla* production and their application methods as feed. Farmers were of quite interest on the aspects covered under this exposure visit. Most of the farmers were actively participated in interaction and clarified their doubts during the visit.

The programme was ended with the distribution of certificates and recording feedback from the participants where they expressed their satisfaction and happiness in getting exposure and knowledge on advanced fodder production techniques, fodder conservation methods, package of practices and nutritional qualities of different fodder crops by expertise lectures by faculty of Agricultural College, Sircilla and Scientific experts of College of Veterinary Science, Korutla. Publicity material pertaining to *Azolla* Production, Silage making & Hydroponic fodder production was distributed to the participants. Later former vote of thanks was proposed by Mr. A. Umarajashekhar & concluded the program.






**PROFESSOR JAYASHANKAR TELANGANA STATE AGRICULTURAL UNIVERSITY**  
**AGRICULTURAL COLLEGE, SIRCILLA**  
**National Science Day - 2023 Celebrations**  
**Training programme on**  
**"Advanced feed and fodder production technologies to improve economics of livestock farming"**  
*(9<sup>th</sup> and 10<sup>th</sup> March, 2023)*





**Catalyzed & Supported by**  
**National Council for Science & Technology Communication (NCSTC) Dept. of Science & Technology, Govt. of India**  
**and**  
**Telangana State Council of Science and Technology (TSCOST) Dept. of EFS&T, Govt. of Telangana**






**PROFESSOR JAYASHANKAR TELANGANA STATE AGRICULTURAL UNIVERSITY**

## Certificate

This is to certify that Mr./Ms..... has attended Training Programme on ‘**Advanced feed and fodder production technologies to improve economics of livestock farming**’ organized by Agricultural College, Sircilla on 09.03.2023 and 10.03.2023. This programme has been organized as part of National Science Day - 2023 celebrations, catalyzed & supported by National Council for Science & Technology Communication (NCSTC), Dept. of Science & Technology, Govt. of India and Telangana State Council of Science and Technology (TSCOST), Dept. of EFS&T, Govt. of Telangana.

**(MARUPAKA NAGESH)**  
**MEMBER SECRETARY, TSCOST**

**(Dr. T. UMA MAHESWARI)**  
**ASSOCIATE DEAN**

**(MR. A. UMARAJASHEKHAR)**  
**COORDINATOR**



**Training programme “Food for the Future:  
Extension-led nutritional security through millets”**

**Dr M Sampath Kumar,  
PROFESSOR JAYASHANKAR TELANGANA STATE AGRICULTURAL UNIVERSITY  
AGRICULTURAL COLLEGE, SIRCILLA, RAJANNA SIRCILLA DIST. - 505 301**

As a part of NSD Programs the Agricultural college, Sircilla has organized a two-day training programme “Food for the Future: Extension-led nutritional security through millets” on March 3<sup>rd</sup> and 4<sup>th</sup>, 2023 at seminar hall of PGRC, PJTSAU, Rajendranagar, Hyderabad to Anganwadi staff to gain knowledge on role of millets in health for children and women and importance of value addition in millets and millet-based recipes.

**Day-1 (03.03.2023) : Inaugural Function**

The programme was started by invocation and lighting of lamp. The Programme was presided by Dr. Seema, Dean of Agriculture, PJTSAU, Dr. D. Ratna Kumari, Dean of Community Science as Chief Guest, Dr. J. Satyanarayana, Dean of Student Affairs and Dr .M.V. Nagesh Kumar, Principle Scientist (Millets) as Guests of Honour, Mrs. Alekya Patel, Child development Programme officer, Rajanna Sircilla also witnessed the program.

**First session :** Dr. G. P. Sunandini, Senior Professor (Agril. Economics) has explained about the importance of millets is a good source of protein, fiber, key vitamin and minerals which constitute an important source of food for millions of resource poor farmers and play a vital role in ecological and economic security of India. Dr. M. Sampath Kumar, Asst. Professor (Agril. Extension) explained about different types of millets, jowar, bajra, ragi, kora in addition to miner millets, samalu, arikelu, variga etc., and briefed the cultivation practices for production of millets

**Second session:** Dr. T. Supraja, Professor (FDNT) and Head, PGRC, PJTSAU has explained about role of millets in health for children and women and clarified the doubts expressed by the participants. She stressed the potentiality of the millets and health benefits including protection from cardiovascular disease, preventing the onset of diabetes, helping people archive and maintain healthy weight and managing inflammation in the gut. Dr. B. Anila Kumari, Asst. Professor (F&N), PJTSAU stressed the need of value addition of the millets which needs processing for consumption. The value addition facilitate ready to cook and ready to eat millet products. Value added products help the consumers who are suffering from life style diseases. Later she explained about the various types of millets recipes.

**Day-2 (04.03.2023)**

Programme was started by visiting millet processing and incubation centre, PJTSAU in which 21 Anganwadi supervisors/teachers from Rajanna Sircilla District. Mrs. Pradeepa, Research Associate demonstrated the process and working methods of different machineries used for

making of value added products of millets i.e., jowar biscuits, jowar ravva, jowar noodles, ragi murukulu, ragi laddu, muffins, millet vermi celli, cake, cookies flakes and sorghum bread etc., The participants have also prepared a few millet products for getting hands on skill. The programme was ended with the distribution of certificates and recording feedback from the participants where they expressed their satisfaction and happiness in getting exposure and knowledge to different millets and their value added products. Literature regarding daily millet diet chart and different types of millet based recipes was distributed to the participants.



**PROFESSOR JAYASHANKAR TELANGANA STATE  
AGRICULTURAL UNIVERSITY**

Training programme on  
**"Food for the Future: Extension-led nutritional security through millets"**

National Science Day - 2023  
Celebrations

*(3<sup>rd</sup> and 4<sup>th</sup> March, 2023)*



**Catalyzed & Supported by**  
National Council for Science & Technology Communication (NCSTC), Dept. of Science & Technology, Govt. of India  
and  
Telangana State Council of Science and Technology (TSCOST), Dept. of EFS&T, Govt. of Telangana

**Organized by**  
**AGRICULTURAL COLLEGE, SIRCILLA**



**Training programme “A path out of rural poverty:  
Developing women Agripreneurship in Telangana through Sericulture and Apiculture”**

**DR. G PRIYADARSHINI, PROFESSOR JAYASHANKAR TELANGANA STATE  
AGRICULTURAL UNIVERSITY, AGRICULTURAL COLLEGE, SIRCILLA, RAJANNA SIRCILLA**

As a part of NSD Programmes, the Agricultural College, Sircilla organized a three-day training programme on “A path out of rural poverty: Developing women Agripreneurship in Telangana through Sericulture and Apiculture” from March 8<sup>th</sup> to 10<sup>th</sup>, 2023 aiming women farmers belonging to different villages of Sircilla district to enlighten and discuss the significance of Apiculture, Moriculture and Sericulture and strategies to be taken for the sustainable development of Indian Apiculture and Sericulture industry for the rural development.

**Day-1 (08.03.2023)**

**Inaugural Function**

The programme was started by invocation and lighting of lamp. The Programme was presided by Dr. T. Uma Maheswari, Associate Dean, Agricultural College, Sircilla. She explained about the programmes going on in the institute for the farmers and also addressed the gathering to enlighten the importance of the theme of current training programme. Chairman of the training programme, Dr. G. Priyadarshini, Assistant Professor (Entomology), Agricultural College, Sircilla and Organizing Committee member, Dr. R. Sathish, Assistant Professor (Entomology), Agricultural College, Sircilla welcomed the gathering and addressed the importance of honey bees and silkworms as a part of integrated farming providing additional income and rural employment.

**First session**

Dr. G. Priyadarshini, Assistant Professor, Department of Entomology had given a brief introduction about the Sericulture and Apiculture: A boon to uplift economic status of rural farmers. Later Dr. R. Sathish, Assistant Professor, Department of Entomology offered lecture on raising of mulberry garden and management of pests and diseases.

**Second session**

In the afternoon, the session was headed by Dr. G. Priyadarshini and Dr. R. Sathish who made remarkable points on the establishment of apiculture unit, honey extraction technology and management of pests and diseases in Apiculture. Farmers actively participated and interacted with keen interest. The lectures made on visual form attracted farmers. The farmer's participation is appreciated with their doubts raising on various aspects.

## **Day-2 (09.03.2023)**

### **First session**

During this session Dr. G. Priyadarshini and Dr. R. Sathish made farmers well acquainted with Cocoon production technology, management of silkworm pests and diseases, marketing opportunities for the sale of cocoons and honey.

### **Second session**

The session after lunch, farmers were taken to Silkworm rearing unit of Sri. Devaiah, Sericulture progressive farmer, Goplapur village, Siddipet District to have peer learning about cocoon production technology.

## **Day-3 (10.03.2023)**

### **First session**

The session was enmarked with exposure visit to Forest College and Research Institute, Mulugu, Siddipet, where Dr. V. Sailaja, Assistant Professor (Entomology), Department of Natural Resource Management & Conservation had explained about the Apiculture and also discussed about the various schemes from government to encourage the farmers towards bee keeping. Later all the farmers were taken to field to have real time understanding about the challenges abound in bee farming, but there are also mitigating suggestions that could improve the business of apiculture.

### **Second session**

The session after lunch followed by guest lecture, where Dr. K. Praveen Kumar, Scintist - D (Retd.), Regional Sericultural Research Station, CSR & TI, CSB, Mulugu, Siddipet imparted the hands on training on establishment of mulberry garden and cocoon production technology by showing audio-visual aids and motivated the farmers by exhibiting success stories of women sericulture farmers. The programme was ended with the distribution of certificates and recording feedback from the participants where they expressed their satisfaction and happiness in getting exposure and knowledge by expertise lectures by faculty of Agricultural College, Sircilla and Scientific experts of Regional Sericultural Research Station, CSR&TI, CSB and Forest College and Research Institute, Mulugu, Siddipet.



**PROFESSOR JAYASHANKAR TELANGANA STATE AGRICULTURAL UNIVERSITY  
AGRICULTURAL COLLEGE, SIRCILLA**

National Science Day - 2023 Celebrations



**Training programme on**  
**“A path out of rural poverty:  
 Developing women Agripreneurship  
 in Telangana through Sericulture and Apiculture”**  
*(8<sup>th</sup> to 10<sup>th</sup> March, 2023)*

**Catalyzed & Supported by**

National Council for Science & Technology Communication (NCSTC) Dept. of Science & Technology, Govt. of India  
 and  
 Telangana State Council of Science and Technology (TSCOST) Dept. of EFS&T, Govt. of Telangana



**PROFESSOR JAYASHANKAR TELANGANA STATE AGRICULTURAL UNIVERSITY**

## Certificate

This is to certify that Mr./Ms..... has attended Training Programme on ‘**A path out of rural poverty: Developing women Agripreneurship in Telangana through Sericulture and Apiculture**’ organized by Agricultural College, Sircilla from 08.03.2023 to 10.03.2023. This programme has been organized as part of National Science Day - 2023 celebrations, catalyzed & supported by National Council for Science & Technology Communication (NCSTC), Dept. of Science & Technology, Govt. of India and Telangana State Council of Science and Technology (TSCOST), Dept. of EFS&T, Govt. of Telangana.

(MARUPAKA NAGESH)  
 MEMBER SECRETARY, TSCOST

(Dr. T. UMA MAHESWARI)  
 ASSOCIATE DEAN

(Dr. G. PRIYADARSHINI)  
 COORDINATOR

**Training programme “A path out of rural poverty:  
Developing women Agripreneurship in Telangana through Sericulture and Apiculture”**

**DR. G PRIYADARSHINI, PROFESSOR JAYASHANKAR TELANGANA STATE  
AGRICULTURAL UNIVERSITY, AGRICULTURAL COLLEGE, SIRCILLA, RAJANNA SIRCILLA**

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## Three Day National Workshop on Research Based Pedagogical Tools in Life Sciences

Prof. Sandepta Burgula  
Department of Microbiology, University College of Science,  
Osmania University, Hyderabad

As part of National Science Day Celebrations, The department of Microbiology, University College of science, O.U has Organized a Department of Microbiology, OU during Feb 6<sup>th</sup> -8<sup>th</sup>, 2023 in the seminar Hall at the Dept. of Microbiology. On the day 1 we have conducted inaugural session followed by lectures by eminent professors.

**Inaugural function:** The day 1 (6-2-2023) has started at 10 A.M with inaugural session, with Prof D Ravinder, honorable VC, OU as chief guest, followed by invocation and lighting of lamp. Principal, University college of Science, Professor.B Veeraiah and Dean, Faculty of Science, Prof Balakishan were the guests of honor. Dr K Shanthi Kumari, co-convener of the workshop invited the guests onto the dais and the convener Prof Sandepta Burgula gave an introduction to the topics designed for the workshop. Dr Hameeda Bee, the organizing secretary, about the eminence of the Department of Microbiology in doling out cutting edge research and imparting high quality education for Masters students. Dr K Srinivas Naik, co-convener of the workshop, proposed a vote of thanks. The inaugural session was followed by lectures and activities which were conducted by Prof. Gopal Reddy, retd professor of Microbiology and Dr Vidya Jonnalagadda, Site Head, Aarkus Therapeutics, Hyderabad, India.

Time	Activity	Format	Trainer
9.30am	Registration and Inauguration		
11:30 am	<b>Effective Pedagogy</b> Pedagogical methods to improve student performance.	Presentation	Prof Gopal Reddy
2:00 pm	<b>What is research?</b> Why do we need to do hands-on activities in class?	Presentation	Dr Vidya J
3:00 - 4: 30 pm	<b>Laboratory session-</b> Practical approaches for effective learning	Discussion	Dr Vidya J and Prof Sandepta Burgula
4: 30 pm	<b>Summary of Day 1 and Plan for Day 2</b>	Presentation	Dr Shanthi Kumari

The theme of day 1 of the workshop was to give an introduction to research based pedagogical learning.

**First Session:** Prof Gopal Reddy spoke about how teachers can enhance their knowledge and train students for better skills. Day to day life has several aspects that help us understand science. He spoke for 1:30 hours.

**Second Session:** The next session started at 2.00 p.m. by Dr Vidya Jonnalagadda, site head, Arkus T O.U, Hyderabad. She spoke about “What is research and Why do we need to do hands-on activities in class “? This session was continued for 2 hours. Dr Vidya gave simple handson exercises to participants about how research based teaching can build confidence in students. Dr K. Shanthi Kumari concluded the proceedings of the day.

**Day 2: The theme of day 2 was Science, psychology and learning. The following sessions were conducted**

Time	Activity	Format	Trainer
10:00	<b>Funding opportunities in Science</b>	Presentation	Prof Manjula Bhanoori
11:30	<b>Emotional Intelligence in teaching and student engagement</b>	Presentation	Dr A Anupama
2.00	<b>Pteranodon activity</b> Frame questions that require classroom activity: design empirical methods, record and report observations.	Presentation, Group activity	Dr Vidya J
4.00	<b>Lessons from Pteranodon activity</b> How simple models can teach advanced concepts and skills.	Discussion	Dr Vidya
4: 45 pm	<b>Summary of Day 2 and Plan for Day 3</b>	Presentation	Dr Shanthi Kumari

**First Session:** Prof Manjula Bhanoori, cBoS, Dept. of Biochemistry spoke about funding opportunity for PG teachers in science. She gave an overall idea about various funding agencies in India who provide funding for workshops, conferences, projects and other courses to PG teachers from affiliated colleges. Participants appreciated the information.

**Second Session:** The second session was by Dr A Anupama, Head, Dept. of Psychology, OU. She spoke in detail about the importance of mental health and psychology in overall development of students. She conducted a brief emotional health exercise for the participants by giving a detailed questionnaire and asked the participants to self assess their mental state of happiness and depression. The exercise according to Dr Anupama is very important in making a student

address mental health issues for improving their performance and overall success and happiness in their lives.

**Third & Fourth Sessions:** The post lunch sessions were a detailed exercise conducted by Dr Vidya Jonnalagadda. She has previous experience in conducting workshops on pedagogical tools. She conducted a detailed research based exercise where participants had to make a pteranodon model with chart paper which could fly a distance. The participants were asked to make scientific observations on their findings. All the participants actively participated in the exercise and displayed their models and observations.

### Day 3 - The theme of day 3 was advances in S&T : Teaching and Research

**First Session:** Dr Hameeda Bee, cBoS, conducted session 1 on practical aspects of Virology in M.Sc. Microbiology teaching. Since virology is a subject for which detailed and precise literature is not easily available and also, practicals in virology are limited by their biosafety issues and complicated procedures, Dr Hameeda gave insights on how to conduct effective practical classes for students and also shared important literature with participants. The session lasted for 1 hour.

**Second Session:** Dr Sandhya Annamaneni, cBoS, Dept. of Genetics, OU, spoke about important aspects of Restriction Fragment Length Polymorphism Detection, a complicated molecular biology experiment which is present in M.Sc. Microbiology, Biotechnology, Biochemistry and Genetics syllabus for M.Sc students. She explained the detailed mechanism of this experiment and gave insights about how it can be carried out in an M.Sc laboratory with minimum expenditure and maximum practical learning for students. Her session lasted for 1 hour. She shared important protocols for the experiment.

Time	Activity	Format	Trainer
10:00 am	<b>Cutting edge approaches to practical pedagogy</b>	Discussion And demonstration	Dr Hameeda Bee
11:00 am	<b>Practical aspects of Molecular Biology practicals : RFLP and PCR</b>	Presentation	Dr Sandhya Annamaneni
12: pm	<b>Bioinformatics in Biology</b>	Presentation	Dr Someshwar Sagurthi
2:00	<b>Setting SMART targets (Action planning), Hurdles and Helpers in implementation of Research Based Learning at Colleges</b>	Panel Discussion	Chairs : Prof Surekha Rani and Dr Karuna Rupula
3.30 pm	<b>Valedictory session</b>		



Third Session: Dr Someswar Sagurthi, Dept. of Biotechnology, OU, conducted the session wherein he spoke on Bioinformatics teaching for PG students. He gave information on valuable resources in terms of literature and online tools available for students. He also conducted some online exercises for participants on practical learning in Bioinformatics. His session lasted for 1 hour after which participants were given a lunch break.

Fourth Session: The post lunch session was conducted by Prof. Surekha Rani, Head, Dept. of Genetics and Dr Karuna Rupula, Dept. of Biochemistry, OU on Setting SMART targets (Action planning), Hurdles and Helpers in implementation of Research Based Learning at Colleges. They gave an exercise to the participants wherein the participants were divided into groups of 4 to 6 and were asked to propose a short research project. A representative from each group was asked to present their proposal which included principle, applications, funding and duration of the project. Prof Surekha and Dr Karuna assessed each group for their clarity of thought, applicability and scientific aspect of the proposals and gave the names of winning project to the organizers. The session lasted for 1 hour 30 minutes.

Valedictory session: The valedictory ceremony started at 3: 30 pm. The chief guest of the session was Prof G Mallesham, Dean, Development and UGC affairs, OU and the guest of Honour was Prof B Veeraiah, Principal, UCS, OU. Prof Mallesham addressed the participants about strengthening teaching in higher education and how teachers should take their time in sharpening their teaching skills by enhancing their own knowledge. He appreciated the organizers on using the opportunity of National Science Day theme as a basis for emphasizing the aspect of research based pedagogy. Prof B Veeraiah took feedback from the participants who gave strongly positive views on the workshop proceedings. They opined that this is one of the few opportunities for teachers where several resources on teaching and practicals were being shared with the participants. Some also stated that the workshop covered all aspects of teaching including scientific and emotional aspects of education. The convener of the Workshop, Prof Sandeepa Burgula gave a report on the proceedings of the workshop and Dr Hameeda Bee gave a vote of thanks to TSCOST and all other colleges who supported the workshop. The best proposal award was won by teachers from Siddhartha PG college (Nishath Khatoon and group). The chief guest and guest of honor gave prizes to the winners and certificates of participation to the participants. All participants received two books as a part of their registration benefits - 1. A manual of selected protocols in Microbiology and 2. Handbook of Bioinformatics for Life Science Students. The session concluded with tea.

**Invitation**  
 Department of Microbiology  
 Osmania University, Hyderabad  
 Cordially invites you to the  
**Inaugural Program**  
 Three Day National Workshop on  
 Research Based Pedagogical Tools in Life Sciences (RBPTL)  
 6th to 8th February, 2023  
 10:00 a.m. on Monday, Feb 6th, 2023 at Dept. of Microbiology, OU

**Chief Guest**  
 Prof. D. Ravinder  
 Honorable Vice Chancellor, OU

**Guest of Honour**  
 Prof. A. Sata Nishan  
 Dean, Faculty of Science, OU

**Presided by**  
 Prof. D. Veeraiah  
 Principal, University College of Science, OU

**Convenor**  
 Prof. Sandeeptha Burgula  
 Head, Dept. of Microbiology, OU

**Chairman**  
 Prof. Bhima Dhulwa  
 Chairman & Principal, Nizam College

**Organizing Secretary**  
 Assoc. Prof. Dr. Hameeda Bee  
 C-BoS, Dept. of Microbiology, OU

**Co-Convenor**  
 Assoc. Prof. Dr. K. Srinivas Naik  
 CPMB, OU

**Co-Convenor**  
 Asst. Prof. Dr. K. Shanthi Kumari  
 Dept. of Microbiology, OU

**Department of Microbiology  
 Osmania University, Hyderabad**  
 Cordially invites you to the  
**VALEDICTORY SESSION**  
 Three Day National Workshop on  
 Research Based Pedagogical Tools in Life Sciences (RBPTL)  
 on Wednesday, Feb 8th, 2023 03:30 p.m., at Dept. of Microbiology, OU

**Chief Guest**  
 Prof. G. Mallesham  
 Dean, Development and UGC Affairs, OU

**Guest of Honour**  
 Prof. B. Veeraiah  
 Principal, University College of Science, OU

**Convenor**  
 Prof. Sandeeptha Burgula  
 Head, Dept. of Microbiology, OU

**Chairman**  
 Prof. B. Bhima  
 Principal, Nizam College

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 C-BoS, Dept. of Microbiology, OU

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 CPMB, OU

**Co-Convenor**  
 Dr. K. Shanthi Kumari  
 Dept. of Microbiology, OU

## Experience Science: Do-it-Yourself (DIY) Biology

Dr. K Rama Krihsna, Centre for Plant Molecular Biology,  
Osmania University, Hyderabad

To commemorate the discovery of Raman Effect (National Science Day) of the great Indian physicist Sir C. V. Raman, the Centre for Plant Molecular Biology, Osmania University, Hyderabad has organized NCSTC(DST)-TSCOST Sponsored Program on “Experience Science: Do-it-Yourself (DIY)” on February 28, 2023 at the CENTRE FOR PLANT MOLECULAR BIOLOGY, Osmania University. The program was aimed at creating enthusiasm among undergraduate (B.Sc) students in scientific research. A team comprising 2 students from each degree college was selected. A total of 13 teams (26 students) were initially selected; however, following request from colleges, 7 more students were accommodated to participate in the workshop.

On the day we have conducted (28-02-2023)

1. Hands-on molecular biology experiments which included performing polymerase chain reaction (PCR) and agarose gel electrophoresis. The principle and procedure of PCR was explained in detail, followed by performing the experiment. PCR reaction was set up by every student. The PCR reaction consists of the following components:

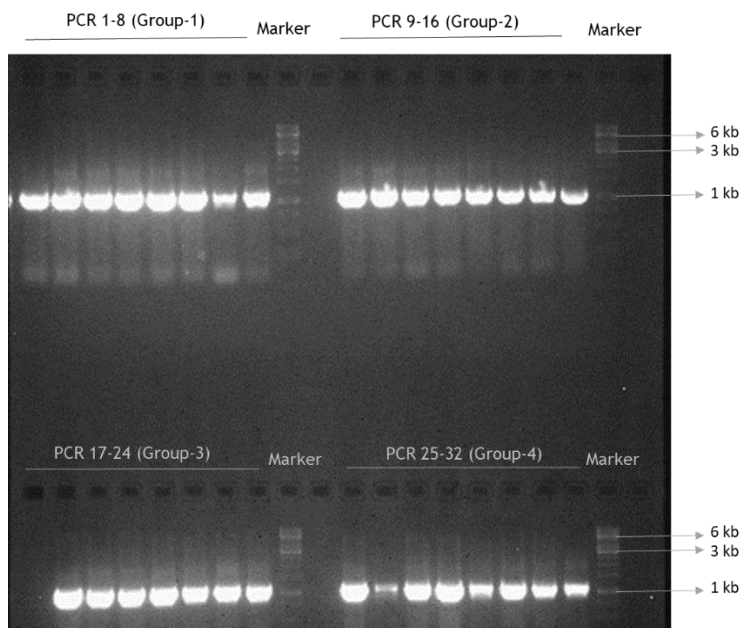
Component	Concentration	Volume
Template DNA	10 ng	1 $\mu$ l
Forward primer	1 pM	1 $\mu$ l
Reverse primer	1 pM	1 $\mu$ l
dNTPs	10 mM	1 $\mu$ l
PCR buffer	10X	5 $\mu$ l
Taq polymerase	1 U	1 $\mu$ l
Water	-	40 $\mu$ l

PCR was carried out for 30 cycles and the following conditions were maintained:

Stage	Temperature	Time
Initial denaturation	95 °C	5 minutes
Denaturation	95 °C	30 seconds
Annealing	58 °C	1 minute
Extension	72 °C	2 minutes
Final extension	72 °C	7 minutes

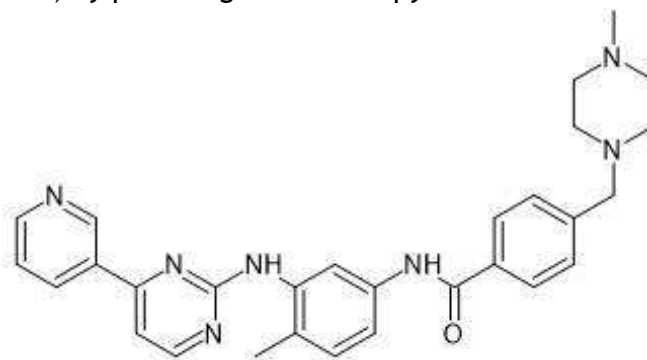
The duration for the reaction to complete was 2 hours 30 minutes. The amplified products were checked on 1% agarose gel. All the students were successful in getting the results (figure attached).

Result: Amplified products were observed in all lanes. A band near 1 kb which corresponds to the gene size (1.1 kb) was observed.



- Hands-on computational biology exercise in which the students have learnt how to use the Chems sketch software and have successfully drew structures of certain small molecule chemical inhibitors.

Theory regarding the usage of various options available in Chems sketch was explained for about 20mins. Then each individual was given 5 minutes of time and asked to draw the molecule (imatinib) by providing the hard copy of the structure.



Imatinib

- Lab rotations in which students have spent some time in the laboratories of the institute and interacted both with resource persons as well as the research scholars regarding their research and career opportunities in scientific research.
- The day ended with a lecture by distinguished scientist Prof. Arjula Ramachandra Reddy, former Vice Chancellor of Yogi Vemana University, Kadapa. The title of the lecture was “Plant Genomes on the run: Applications and implications”. Following this, the students received participation certificates.

## **Two Day National Seminar on Science & Technology in India: Achievements and Challenges**

**Prof. A.Sabitha Rani, Dept. of Botany, University College Science,  
Osmania University, Hyderabad**

The Department of Botany, University college of Science conducted the Two day national seminar on S&T in India : Achievements and Challenges during February 14 -15, 2023 at Conference Hall, Principals Office, UCS, Osmania University, Hyderabad.

**The First Day of the conference** i.e. February 14, 2023, competitions was conducted for UG and PG students from various colleges in the Dept. of Botany, Osmania University. . The competitions in essay writing and Elocution was conducted in the morning session i.e 11.-00 am to 12.30 pm. The other events i.e Power Point presentations and poster presentations were conducted in the afternoon i.e 2.00 pm to 4.00 pm. There was a huge response from the students to participate in the all-four events.

**Essay writing Competitions:** The topic for the essay writing competition is the theme of the conference i.e **Science & Technology in India: Achievements and Challenges**. For this competitions, more than 115 students from more than 14 colleges from the Hyderabad have participated. The students participated from t PG UG colleges are 24 students from Dept. of chemistry, Osmania University, 14 students from Saifabad Science college, 14 students from A.K. Navajeevan college, 13 students from Bavan's New Science PG college, 4 students from Vanitha college , 4 students from St. Ann' college, 3 students from Reddy college, 4 students from the dept. Of Biochemistry, OU, 4 students from Dept. of Zoology, UCS, OU, 9 PG students from dept. of Environment Science, Osmania University and 14 students from the dept. of Botany, UCS , Osmania University. All the students have been supplied with the papers for writing the essay and 30 minutes time period was given. All the essay writing competitions were evaluated by the judges, invited from the other dept. of university. Best three participants from UG and PG were selected for the 1, 2 and 3 prizes. The prizes were awarded to the students in the Valedictory program.

### **The UG student awardees for Essay writing completions are**

1. V. Yuktha , B.Sc., II year, Saifabad Science College, Hyderabad- I<sup>st</sup> prize
2. P.Bhavana, B.Sc III year, St.Ann'S College, Mehadipatnam, Hyderabad - 2<sup>nd</sup> prize
3. J.Manaswi, B.Sc, II year, Nizam College, Hyderabad- 3<sup>rd</sup> prize,

### **The PG student awardees for Essay Writing completions are**

1. R.Divya, M.Sc, Chemistry, Ist Year, UCS, Osmania University- I<sup>st</sup> prize
2. M.Rekha, M.Sc.II nd year, Dept. of Botany, UCS, OU- 2<sup>nd</sup> prize
3. Priyanka, Dept. of Botany, UCS, OU- 2<sup>nd</sup> prize
4. A.Ganesh, M.Sc, II nd year, Dept. of Environmental Science, UCS, OU

**Elocution Competitions** The topic for the elocution competition is also the theme of the conference i.e. **Science & Technology in India: Achievements and Challenges**. For this competition, more than 24 students from UG and PG colleges of various colleges were participated. Each student was given 4 minutes time for elocution. Judges were invited from the other Dept. of Osmania University. Among all, best speakers were selected as 1, 2 and 3<sup>d</sup> prize and prizes were awarded on valedictory function.

**The UG student awardees for Elocution competitions are**

1. M.Trisha, B.Sc, St. Ann's College, Mehadipatnam, Hyderabad - 1<sup>st</sup> prize
2. K.Vaishnavi, B.Sc., Reddy College, Hyderabad- 2<sup>nd</sup> prize
3. S.K. Nasreen, B.Sc., Saifabad college, Hyderabad- 3<sup>rd</sup> prize

**The PG student awardees for Elocution competitions are**

1. Pallavi Bhahuguna, M.Sc, 1<sup>st</sup> yr, Dept. of Botany, UCS, OU, Hyderabad- 1<sup>st</sup> prize
2. A. Tejashree, M.Sc. 1<sup>st</sup> yr, dept. of Zoology, UCS, OU, Hyderabad- 2<sup>nd</sup> prize
3. K. Divya, M.Sc. 1<sup>st</sup> yr, Botany, Vanitha Mahaavidyalay, Nampally, Hyd- 3<sup>rd</sup> prize

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**The PowerPoint and Poster presentation competitions** were also organized for UG and PG students. The topic for these competitions is the theme of this year's Science Day, i.e. **"Global science for Global wellbeing"**. More than 14 students participated in the PPT and poster presentations competitions. For PPT presentations, 4 minutes time was given for the each student and judges, invited from other department, evaluated the PPT presentations. Best of three were selected as 1, 2 and 3<sup>rd</sup> prize and prizes were given to the winners in the valedictory session.

The poster competitions, students have displayed the posters in the dept. of Botany. All the students of PG and UG visited the poster session and interacted with the participants. Among all, best spotters were selected as 1, 2 and 3<sup>d</sup> prize and prizes were awarded on valedictory function.

Students from various college, also from the host department (Botany) actively participated in the activities and also attended the elocution, PPT and Poster session. All the students were very much Impressed by the events and interacted well. The 1<sup>st</sup> day program was successfully conducted, creating the awareness and importance of the Science day to the more than 170 students.

**The student awardees for Power point presentation competitions are**

1. Laya Chavan, M.Sc 1<sup>st</sup> yr, Botany, UCS, OU, Hyd- 1<sup>st</sup> prize
2. K. Virajitha, M.Sc. 1<sup>st</sup> yr, Botany, OU, Hyd. - 1<sup>st</sup> prize
3. B.L. Haritha, B.Sc., Nizam College, Hyderabad- 2<sup>nd</sup> prize
4. Medha, B.Sc, St. Ann's College, Mehadipatnam, Hyderabad - 3<sup>rd</sup> prize

### **The students awardees for Poster presentation competitions are**

1. Shivani Nethe, M.Sc. I<sup>st</sup> year Botany, UCS, OU, Hyderabad- 1<sup>st</sup> prize
2. Mahek, B.Sc, Kasturba Gandhi College, Hyderabad- 2<sup>nd</sup> prize
3. Ch.Venkata ramana, M.Sc. Chemistry, UCS, Ou, Hyderabad-- 2<sup>nd</sup> prize
4. Shaza Irnani, B.Sc., Bhavans's College, Hyderabad, 3<sup>rd</sup> prize

**The Second Day of the Conference** i.e. February 15, 2023, conference was organized with inaugural session, **Keynote lecture**, Invited lecture's and Valedictory session.

The program on February 15, 2023 started at 9.30 to 10.00 am with the registration for the students. The inaugural session started at 10.00 am by inviting the guests on to the Dias. This was followed by the lighting of the lamp followed by prayer song.

The Chief Guest of the Inaugural session is **Prof. G.Mallesham**, Dean, Development and UGC affairs, Osmania University. **Prof. B. Rama Devi**, Head, Department of Botany, UCS, O U gave welcome address, highlighting the various activities undertaken by the Botany department. **Prof. A.Sabitha Rani**, **Organizing secretary** of the seminar presented the genesis of this national seminar and details of all the competitions conducted as part of **National Science Day-2023 celebrations**. . **Dr. Mohan Rao**, The CSIR Distinguished Scientist ad Former Director of the Center for Cellular and Molecular Biology (CCMB) , Hyderabad give a brief message about the development of scientific thinking, which is necessary for the advancement of science. **Prof. Mallesham** emphasized the importance of the science in the daily life. He told that there are so many advancements taking place in science, students and every one should be updated with these developments. He updated some of the major scientific developments, which has changed the whole spectrum of the life of the people. The President of the Function is **Prof. B.Veeraiah**, **Principal**, Science College, UCS, Osmania University. He advised that the students should utilize their time for update the subject knowledge and also other developments in the various fields of the science.

The inaugural session was followed by **Keynote lecture by Dr. Mohan Rao**, former Director of CCMB, Hyderabad. The topic of his lecture is "**Indian Science and Technology Journey: A bird's eye View**". He has discussed the developments of science and technologies in India from Independence to today. He had presented a detail of S & T in various fields of Science with special reference to medical, pharmaceuticals ad space technology. He has discussed in detail of Importance of science day and land mark discoveries of **Sir. C.V.Raman**. The importance of Raman effect and the technologies which have evolved based on the Raman effect. He presented the various Nobel laureates of India and their important discoveries and how they change the face of the science. Dr. Mohan Rao given the complete insight into the various scientific experiments done without much sophisticated instruments. He emphasized that the basis for any scientific discovery is the curiosity and asking questions and trying to get the answers for the questions. The lecture is very extensive with lot of

information about the science and technological developments in India. All the students are very much interested, asked many questions and interacted with the Mohan Rao. The keynote lecture is motivated students towards science and it is most opt lecture for the theme of the S& T in India, covering almost all the major advance in the India.

The 2<sup>nd</sup> lecture after lunch was the Invited Lecture by **Dr. Thangaraj, Director**, Center for DNA Finger Printing and Diagnostics (CDFD), Hyderabad. The Topic of the lecture is “**Who are We? Mystery revealed by an ancient and contemporary DNA**”. He has covered the origin and evolution of human race. He also discussed the homology and differences in the genetic material among the different organism and human beings. How humans are so evolved in various characters compared to the animals. He also presented the importance of paleontology in the study of human evolution. How these studies will contribute significantly to the identify the genes coding for various diseases also explained. He also given the details of the study of human migration taken pace in Asia, Africa, Andaman Nicobar Islands. He also presented the details of DNA finger printing and how it is helpful in the barcoding of plants and animals, in forensic science and identification of specific plants and animals. The lecture is so informative and created interest in the students toward subject about on the evolution of humans above the animals. The students asked many questions and interacted with Dr. Thanjaraj.

The last session of the two day conference is **Valedictory session**. **Prof. B.Rama Devi**, Convener of the seminar and Head, dept. of Botany presented conference report, giving the brief note of the activities undertaken during the two day national conference The **chief guest** of the valedictory session is **Prof. Laxminarayana**, Registrar, Osmania University, Hyderabad. He suggested that students should update the recent developments in science and technology. He also emphasized that that syllabus is needed to update regularly, so that new developments and advancements should include in the curriculum. Not only the theoretical knowledge, but also accompanied by the practical knowledge. The President of the Function **Prof. Veeraiah**, Principal, University College of Science, OU gave the presidential remarks. He told that various programs and events are conducting in the campus time to time and students should utilize these opportunities to enhance their skills and knowledge.. This will provide exposure to the students in the various field of science and create the confidence in the students.

Chief Guest, **Prof. Laxminarayana**, President of the Function **Prof. Veeraiah** and all the dignitaries gave the **prizes to winners of various competitions**. **Prof. A.Sabitha Rani**, Organizing secretary of the seminar presented the vote of thanks, by thanking all the Guests, invited speakers, students, participants of the competitions etc. The valedictory program ended with National Anthem.



**Program:**

**Day1: February 14, 2023 -**

Competitions for the students (Elocution, Essay Writing, Power Point and Poster presentations)

**Day 2: February 15, 2023 -**

Seminar with Invited Lectures

**1. Elocution and Essay Writing Competitions:**

**Topic:** Science & Technology in India: Achievements and Challenges

**Time & Date:** 11.00 to 12.30 pm, February 14, 2023

**2. Power Point and Poster Presentations Competitions:**

**Topic:** Global Science for Global Wellbeing

**Time & Date:** 2.00 to 3.30 pm, February, 2023

**General Guidelines for competitions:**

- For Elocution, each student will be given 5 minutes time
- For Assay writing: Maximum of 3 pages on A4 size paper (papers will be provided by the organisers)
- For Power Point Presentation: Each candidate will be given 4 minutes time and total slides should not be more than 12)
- For Poster Presentation Competitions (Size of the poster 2 x 3 feet)
- Each College can send two groups for each competition.
- No Entry Fee for the competitions
- All the participants will be provided with certificates

**Last date to send the names:** February-9, 2023

**Venue for Competitions:** Department of Botany, UCS, OU.

**No Registration Fee**

**Contact:**

**Prof. A.Sabitha Rani, Organising Secretary**

**Mobile : +91 9290609610**

**Email : sabitaamana@yahoo.com**



**On The Eve of National Science Day (NSD-2023)**

**Two Day National Seminar On  
Science & Technology In India:  
Achievements And Challenges  
on February 14-15, 2023**

**Venue**

**Conference Hall, 1st Floor, Principal's Office  
UCS, OU, Hyderabad**



**Organised by**

**Department of Botany, University College of Science  
Osmania University, Hyderabad, Telangana-500007**

**Catalysed & Supported by**

**National Council for Science & Technology Communication (NCSTC),  
Department of Science and Technology, Govt. of India and  
Telangana State Council of Science & Technology (TSCOST),  
Department of EFS & T, Govt. of Telangana**

Two Day “**National Seminar on Science & Technology in India: Achievements and Challenges**”, Organized by Dept. of Botany, UCS, Osmania University on **February 14-15, 2023**, National Science Day (NDS-23) - Competitions conducted for UG & PG students



**One-day National Seminar on  
“Health and Nutritional Benefits of Indian Millets” Organized by  
Prof. K Shailaja, Department of Botany, Osmania University, Hyderabad**

The Department of Botany organised the one-day National Seminar on “Health and Nutritional Benefits of Indian Millets” on account of National Science Day (NSD)- 2023 on 4<sup>th</sup> March, catalysed and supported by the National Council of Science and Technology (NCSTC) and Telangana State Council of Science and Technology (TSCOST). The inaugural ceremony was organized by **Prof K.Shailaja**, Dept of Botany and Coordinator, Environmental science, UCS, OU, convened by **Dr Rama Devi Bhukya**, Head of the Department of Botany, Co-convened by, **Prof. E. Sujatha**, Chairperson, BOS, Department of Botany, OU. About 150 students and scholars participated in the seminar from various colleges.

The inaugural function was presided by Chief Guest, **Prof B.Veeriah**, Principal, UCS, OU. He addressed the guests and participants of the seminar and shared his valuable thoughts on the upcoming presentations by experts on Indian millets and their health benefits. **Prof B. Vidya Vardhini**, Registrar, Telangana University the chief guest addressed the gathering and gave a motivating speech for the participants about millets and their historical importance in our culture. The Guest of Honor in the morning session **Prof S.Gangadhar Rao** (Retd.), Former C-BOS, Dept of Botany, OU. gave an informative presentation on how humans can achieve health and wealth by staying away from doctors and medicines (*No Doctor No Medicine*) by including different types of millets and lifestyle practices like yoga and meditation. This was followed by the lunch break.

The Guest of honour **Dr G.M.Francis**, MBBS, Medical and Research Head, JIYO Wellness Centre, Habsiguda, Hyderabad. Presented detailed and informative insights into the nutritional value of millets and health benefits for humans. He also distributed sample millet health drink (Millet Bowl) made from a mix of millet to the participants of the seminar and suggestions and feedback for the same was taken. The chief guest of the valedictory function was **Prof. G. Mallesham**, Dean, of Development and UGC Affairs, Osmania University. He addressed the gathering about the importance of socially relevant research activities and mentioned the support Schemes by the University at all levels for education and basic research. He also shared motivating experiences of his childhood regarding different millets being the staple foods and how they were healthy and thriving while growing up.



The reasons are lack of awareness of nutritional merits, inconveniences in food preparation, and lack of processing technologies.

The importance of nutrition as a foundation for healthy development is underestimated. This seminar targets young students and research scholars to make them aware of the Health and Nutritional benefits of Millets which had been the traditional crops and food culture of the Telangana region, with insights on the scientific empirical studies on the nutritional aspects, functional aspects and health benefits of millets from distinguished speakers. The U.N. Food and Agriculture Organization has endorsed India's proposal to declare 2023 as the International Year of Millets (IYOM23). Now a days people are very conscious about their healthy living practices to overcome metabolic disorders and lifestyle diseases. We hope that this national seminar will inspire researchers and students to pursue further research in millet studies, its Nutritional and Health merits and make Indian Millet markets expand beyond boundaries to share the health benefits of this poor man's staple food.

### "Food of Telangana-Future food of India & World"

Come and Know the

- Rich benefits of Nutricerals.
- Health-immunity boosters
- Current trends in Millet Research.
- Food security Policy & Food Economic Growth.
- Neo ideas for Enterprunership.

### Organizing Committee

#### Chief Patron:

**Prof.D. Ravinder**, Vice-Chancellor, OU  
**Sri Marupaka Nagesh**, Member-Secretary, TSCOST

#### Patrons:

**Prof. P Laxminarayana**, Registrar, OU  
**Prof. B. Reddy Naik**, OSD to VC, OU  
**Prof. A. Balakishan**, Dean, Faculty of Science, UCS, OU  
**Prof. G. Mallesham**, Dean, Development & UGC Affairs,OU  
**Prof. B.Veeriah**, Principal, UCS, OU

#### Convenor:

**Prof. Rama Devi Bhukya**,  
 Head, Department of Botany, UCS, OU

#### Co-Convenor:

**Prof. E. Sujatha**,  
 Chairperson BOS, Department of Botany, UCS, OU

#### Organising Secretary:

**Prof. K Shailaja**,  
 Dept. of Botany & Coordinator, Env. Science, UCS, OU

#### Joint Organising Secretaries:

**Prof. P. Kamalakar**,  
 Former Head, Department of Botany, UCS, OU  
**Prof. A.Sabitha Rani**,  
 Department of Botany, UCS, OU

#### Coordinators:

**Dr. S. Nageswara Rao**, Dept. of Botany, UCS, OU  
**Dr. A. Vijaya Bhasker Reddy**, Dept. of Botany, UCS, OU  
**Dr. B. Kiran Kumar**, Dept. of Botany, UCS, OU  
**Dr. Syeda Azeem Unnisa**, Dept. of Env. Science, UCS, OU  
**Dr. D. Seshikala**, Dept. of Env. Science, UCS, OU

**Free Registration**

#### Contact:

**Prof. K Shailaja, Organising Secretary**  
 Mobile: +91 98851 36976  
 email: k\_shailaja2001@yahoo.com



On the occasion of National Science Day (NSD-2023)  
 National Seminar on

### "Health and Nutritional Benefits of Indian Millets"

on 04<sup>th</sup> March 2023  
 e-Conference Hall, 1st Floor,  
 UPE Building, University College of Science,  
 Osmania University, Hyderabad-07



#### Organised by

Department of Botany  
 University College of Science  
 Osmania University, Hyderabad, Telangana-500007

#### Catalysed & Supported by

National Council for Science & Technology Communication (NCSTC),  
 Department of Science and Technology, Govt. of India and  
 Telangana State Council of Science & Technology (TSCOST),  
 Department of EFS & T, Govt. of Telangana.







## National Science Day Celebrations - 2023

**Prof.J Vishwanatham, Palamuru University, Mahabubnagar**

The College of Education ,Palamuru University, and Internal Quality Assurance Cell (IQAC) has conducted One day National Seminar on **Global Science for Global Wellbeing** on 28/02/2023, on the occasion of National Science Day ( NSD) celebrations-2023. The NSD-2023 brochure release programme was conducted on 06/02/2023 at 2:30 PM in the Conference hall, Administrative building. The Hon'ble Vice-Chancellor Palamuru University has released the brochure in presence of the faculty members and Administrative officers of the University

A meeting of all the organizers and Heads of the Science departments was conducted on 14/02/2023, in the PG College of the University. **Dr. N. Kishore** Principal PG College, Dr.Basheer Ahmed Principal College of Education, Dr .J. Vishwanatham Coordinator NSD-2023 and the HOD's of Science Departments has attended the meeting to discuss on the necessary arrangements for the NSD-2023. Articles have been invited on the theme, from the Science Teachers, Research scholars, Teacher Educators. The last date for the submission of abstract was 20/02/2023 and full length paper was 22/02/2023, we have received the papers for presentations on the NSD-2023 theme.

As a part of the National Science Day Celebrations NSD-2023, one day national seminar on **Global Science for Global Wellbeing** has been organized by department of Education and IQAC Palamuru university on 28<sup>th</sup> of February 2023 very enthusiastically with the cooperation of all heads of science departments of the university.

**Prof. L.B Laxmikanth Rathod**, Hon'ble Vice-Chancellor, Palamuru University has graced the Celebrations as Chief Guest and presented inaugural speech he said that the **Science Day Celebrations** well defiantly motivate the students and improve the scientific attitude and interest in research **Prof. K Girija Mangathayaru**, the Registrar Palamuru University, has blessed the NSD celebrations with her kind presence as Guest of Honor and presented the inaugural remarks she has highlighted on the importance of science and technology.

**Dr. K. Nagaiah** Chief Scientist IICT Hyderabad has kindly agreed and participated as speaker and delivered lecture on "Role of Bio Diversity in controlling climate change. "**Prof. M. Madhavi**, Head Dept of Zoology Osmania University, Hyderabad, participated as speaker of the theme. She has presented her elaborate presentation on Role of Information and Communication Technology (ICT) In Bio-diversity. Prof P. Pavan Kumar, Director Research cell, PU & Convener NSD-2023 has presented the aims & objectives of the NSD theme. **Dr. D. Madhusudan Reddy** Director IQAC & Convener NSD-2023 has addressed the gathering. He has appreciated the organization for conducting the excellent programme. He also thanks the TSCOST for sanctioned Rs. 25000/- grant for organization NSD 2023 programme.

**Dr. N. Kishore**, Principal, University PG College has actively participated as chairman. The Department of Education has made all the necessary arrangements for the smooth conduct of the programme. Dr. Basheer Ahmed principal, College of Education and **Dr. J. Vishwanatham**, Coordinator NSD 2023 and all the teaching and non-teaching staff members have cooperated well.

On 28<sup>th</sup> February 2023, the academic block auditorium was full with (170) participants including University Science faculty, Science Teachers, and Principals from the affiliated Colleges of Education, Ph.D Scholars, delegates, students and media. The programme was run very smooth as per the schedule from 10AM to 5PM. Lunch has been arranged for all the participants. In the post lunch session the paper presentations and poster presentation programme has been conducted and (25) participants have presented their papers. The students of zoology Department have Participated and presented posters on the theme.

The valedictory function was conducted at 4:30pm. Prof. Yadagiri Swamy Special Officer Palamuru University has participated and graced the valedictory event, participation attendance certificates have distributed to the delegates and participants. The programme was concluded with recitation of National Anthem. **Dr .J. Vishwanatham** Coordinator NSD-2023 has presented vote of thanks.

#### **Science for Sustainable Development of Society**

**Dr. T Savitha Jyostna, Department of Chemistry,  
Kakatiya University, Warangal.**

National Science Day is celebrated to commemorate discovery of “Raman effect”. To spread the application of science to human being, first of all it is important to understand the science. To know the awareness and implementation of science in day-to-day life, the department of chemistry and university college, Kakatiya university conducted competitions. Various competitions were conducted to school children and university students, on 23<sup>rd</sup> to 25<sup>th</sup> February 2023 on 27<sup>th</sup> February two enlighten lecturer were arranged on the topic science for sustainable development of society.

Day 1 (23-02-2023) innovative start up ideas presentation were held in different categories like life sciences, chemical sciences and physical sciences, for two years M.Sc. courses and integrated five-year M.Sc. courses separately. Presentations were held and concern professors conducted these competitions in the department of chemistry, zoology, Biotechnology their overall 30 teams participated in different categories whereas each team consisting of 3 members. They have presented different ideas, which are thought provoking. Day 2 (24-02-2023) competitions were conducted to government school’s children of Hanamkonda district. 10 School participated in quiz and poster making, theme of poster making is global science for global wellbeing. First, second, and consolation prizes were given (total = 15 prizes). Day 3 (25-02-2023) quiz competitions were conducted for university students. 4 teams consisting of 11 members in each team were participated, out of it two teams selected for the prizes. (11 +11 = 22 prizes).

On 27<sup>th</sup> February 2023, National Science Day celebrations program was started at 10.00 AM. By paying tributes to science wizard sir C.V. Raman by Coordinator of the program prof. T. Savitha Jyostna, Principal Prof. B. Sureshlal, Chief guest of the function, Prof. A. Srinivasa Rao, Keynote speaker Prof. K. Purushotham Reddy, Eminent Environmentalist, OU, Hyderabad, Invited speaker Prof. A. Venugopal, Senior principal scientist and Professor, ICT, Hyderabad. Guest of honours of the program Prof. T. Malla Reddy Dean faculty of science and Prof. R. Mallikarjuna Reddy Coordinator, UGC, Kakatiya University. Senior Professors, Teaching and Non-Teaching staff, Research scholars, Students, and School children were participated in the program. Invited speaker and key note speaker addressed the student with latest technologies to get Sustainable Development. After the lectures the prize distribution took place to the winners of different competition.

### List of Prizes for Competitions School Children

#### Poster Making

	Consolation Prizes
<b>1<sup>st</sup> Prize:</b> Saniya Kousra, 8 <sup>th</sup> Class ZPHS Girls High School Shyampet	T. Navya Sree 7 <sup>th</sup> Class ZPHS Bheemaram
<b>2<sup>nd</sup> Prize:</b> E.Poojitha, 8 <sup>th</sup> Class KGBV, Elkathurthy	Bunny, 8 <sup>th</sup> Class TSMS Mulkanoor
	V. Deepika, 9 <sup>th</sup> Class
	G. Sai Krishna 8 <sup>th</sup> Class ZPHS Shyampet

#### Quiz Competitions

T.S Model School BheemdevaraPally	ZPSS High School Saipet Dharmasagar	ZPHS Boys High School Shyampet
1 <sup>st</sup> prize	2 <sup>nd</sup> Prize	3 <sup>rd</sup> Prize
Ch. Sathwik	K. Sai Harsha	B. Vignesh
L. Ramana Reddy	S. Akshith Sai	B. Sanjay
S. Bunny	S. Dhatri	Vamshi

### University Students

#### Innovative Startup Ideas - 1<sup>st</sup> Prize

M. Sc Chemistry III semester	M. Sc Geology I semester	5 Years Integrated 7 <sup>th</sup> Semester	M. Sc Biotechnology	M. Sc Microbiology	M. Sc Zoology
Y. Nirupama	Nagavindhya	K. Saikiran	M. Bhavani	D. Vikas Reddy	Vennela
R. Madhu	Naveen	G. Bhrath kumar	G. Narasimulu	G. Bhavishya	Usha
M. Ashok	Raju		Tamkin	S. Karhik	Narmada



### Innovative Startup Ideas - 2<sup>nd</sup> prize

M. Sc Chemistry I semester	M. Sc Physics I semester	M. Sc 5 Years Integrated Chemistry 9 <sup>th</sup> Semester	M. Sc 5 Years Integrated Biotechnology	M. Sc Biotechnology
E. Krishna sai	Nagarani	K. Arjun	P. Anka Rao	K. Suma sri
A. Bharath	M. Rani	R. Sravanthi	R. Prashanth	K. Ruchitha
--	--	--	--	B. Indira

### National Workshop “Emerging Trends in Medical Device Regulations (ETMDR-2023)”

Dr D Suman, Head & Associate Professor  
Department of Biomedical Engineering, Osmania University, Hyderabad

The department of Biomedical Engineering has organized a NCSTC, DST, GoI funded program under National Science Day Celebrations NSD-2023 has conducted a workshop on “**EMERGING TRENDS IN MEDICAL DEVICE REGULATIONS-2023**”(ETMDR) on 25<sup>th</sup> February 2023. This workshop attracted many participants from different institutions include students, staff, and medical professionals. This workshop is inaugurated by Director Prof. K.Stevenson, Director, HCDC,OU . The keynote address is given by Dr. Suman, Head of Biomedical Department, UCE (A), OU.

#### ABOUT THE WORKSHOP

Besides learning different features of Medical Devices Regulations, the design language and design sense shall be imparted in the students so that they can design things in the most efficient way. We will be covering topics Medical Device Regulations, Medical Device Rules 2017, Quality Assurance of Medical Devices, FDA, CE, Medical Device standards & directives.. This workshop can be a perfect starting point for the biomedical engineers to successfully design and assemble Medical devices

#### BACKGROUND OF THE WORKSHOP

The session started with the Medical Device design methodology and thinking. After glossing over the Manufacturing and monitoring of medical devices are highly regulated activities. The part section was about medical devices and their regulations were regulated under the Drugs and Cosmetics Act 1940. These rules cover various aspects of device related regulations including classification, registration, manufacturing and import, labeling, sales and postmarked requirement, etc., therefore the aims to bring together leading academics scientists researchers’ and students along with industry personnel to exchange and share their knowledge.



## **One day National Workshop on "Hands on Training on Medical Equipment"**

**Dr. M Srinivas, Department of Biomedical Engineering,  
Osmania University, Hyderabad**

The Department of Biomedical Engineering, University College of Engineering (Autonomous), Osmania University, Hyderabad. Organized a National workshop on "HANDS ON TRAINING ON MEDICAL EQUIPMENT - 2023" on 04<sup>th</sup> March 2023. The workshop started with an inaugural ceremony, graced by distinguished Chief Guest, Prof. Sriram Venkatesh - Principal, University College of Engineering, Osmania University. The Guest of Honour Mr. B. Ravi Shankar - Assistant Vice President & Group Head of Bio-Medical, Care Hospitals. Dr. D. Suman - Head of the Department, Biomedical Engineering has presided over the event and the workshop coordinator Mr. M. Srinivas, Assistant professor and Chair person BOS(A), Dept. of Biomedical Engineering, University College of Engineering, Osmania University.

The ceremony started with the lighting of the lamp, followed by a welcome speech by the coordinator, Mr. M. Srinivas. He highlighted the significance of the workshop and how it could benefit the healthcare sector. The Chief Guest, Prof. Sriram Venkatesh, then delivered an inspiring speech on the importance of technology in the healthcare industry. He emphasized the need for healthcare professionals to have hands-on training on medical equipment to enhance their skills and provide better care to patients. The Guest of Honour, Mr. B. Ravi Shankar, spoke about the government's initiatives to improve the healthcare sector and how workshops like these could contribute to the cause.

The workshop had several informative sessions where expert speakers shared their knowledge and expertise. The speakers included Mr. Avadutha Sai Pavan, a service engineer in Allied Medical Limited, Mr. K.M. Giri, a radiation safety officer-technical & quality head in Vedha Biomedical Systems, and Mr. G.S. Ravi Kiran, an application and sales manager in Blue Space Medical. The workshop focused on Four essential medical equipment - Ventilator, Anaesthesia workstation, X-Ray unit, and Ultrasound imaging system. The healthcare professionals attending the workshop were divided into groups, and each group was given hands-on training on each equipment.

In the first session Mr. Avadutha Sai Pavan, a service engineer in Allied Medical Limited, gave hands on ventilator training included an overview of the equipment, its uses, and functions. The attendees were taught how to set up and operate the ventilator and how to troubleshoot common issues.

In the second session Mr. Avadutha Sai Pavan - Service Engineer in Allied Medical Limited, gave hands on training on Anaesthesia Workstation included an overview of the equipment, its uses, and functions and how to troubleshoot common issues. In the third session Mr. K.M. Giri - Radiation safety officer-technical & quality head in Vedha Biomedical Systems, explained on the X-Ray unit functioning and covered the basics of radiography and imaging, including how to position patients, and the proper use of radiation protection equipment. Finally, in the fourth session Mr. G.S. Ravi Kiran, an application and sales manager in Blue Space Medical, covered the ultrasound imaging system training demonstration and how to obtain high-quality images to

interpret the results. The participants were given an opportunity to use the equipment and receive guidance and feedback from the trainers.

In addition to the hands-on training, the workshop also included informative sessions from the speakers, Mr. Avadutha Sai Pavan, Mr. K.M. Giri, and Mr. G.S. Ravi Kiran. They covered various topics related to medical equipment, such as new advancements in technology, safety measures, and the importance of regular maintenance and calibration. The workshop provided a platform for participants to interact and exchange ideas with experts in the field of biomedical engineering. It was a great learning opportunity for participants to gain practical knowledge and hands-on experience with the latest medical equipment and technologies. Guests contributed for successful organization of the program and they have been felicitated with mementos as a token of appreciation.

In conclusion, the Department of Biomedical Engineering at the University College of Engineering (Autonomous) Osmania University, Hyderabad, successfully organized a national workshop that provided an excellent platform for participants to gain hands-on experience with the latest medical equipment and technologies. The event was informative and inspiring, and it showcased the department's commitment to promoting knowledge sharing and academic excellence in the field of biomedical engineering.



**“INSPIRATIONAL SCIENCE LECTURE SERIES” (ISLS-2023)  
Theme: “GLOBAL SCIENCE FOR GLOBAL WELLBEING”**

**Dr. P Ramesh, Department of Chemistry,  
SR & BGNR Govt. Arts & Science College, Khammam**

On the occasion of the “National Science Day-2023 Celebrations”, Dept. of Chemistry, SR&BGNR. Govt. Arts & Science College (Autonomous), Khammam organized “Inspirational Science Lecture Series (ISLS-2023)” with a theme of “Global Science for Global Wellbeing”, on 15<sup>th</sup>, 17<sup>th</sup>, 20<sup>th</sup> & 27<sup>th</sup> February, 2023. The programme was inaugurated on 15-02-2023, by paying rich tributes to the science wizard Sir C.V. Raman the first Science Nobel Laureate of India. The days was commemorated the discovery of Raman Effect using the available simple optical instruments on 28<sup>th</sup> February, 1928. Of late the Raman effect is used to analyze a wide range of materials, including gases, liquids, and solids. The Raman spectroscopy can analyze highly complex materials such as biological organisms and human tissue.

The Lecture Series provided an excellent learning platform to the enthusiastic UG & PG students of the institution, to interact with the Professors of eminence of reputed institutes like Osmania University, NIPER-Hyderabad, CSIR-IICT- Hyderabad and Kakatiya University. It paved way to the students of the institution to have good exposure, interaction and scientific temperament. More so ever by organizing this sort of activity, the institute was able to draw the attention of the philanthropists who helped in the development of the college and there by encouraged the students very well.

**Important Highlights:**

1. The interaction of the students and faculty with the reputed Professors, Scientists, Researchers, Entrepreneurs, Industrialists and technologists enhanced their skills, knowledge, and evinced research interests among students and also faculty of Khammam district.
2. Students and faculty learnt the importance of the Raman Effect and its significance in day-to-day life.
3. In P.C. Ray Memorial Lecture on 15-02-2023 by Dr. N. Shankaraiah, Associate Professor, NIPER-Hyderabad, students have learned about the drug development and trends in the present development of Anti-Cancer drugs.
4. In Dr. A.P.J. Abdul Kalam Memorial Lecture on 15-02-2023 by Dr. P. Muralidhar Reddy, Associate Professor, Osmania University, Hyderabad, students have learned about the placement opportunities of UG&PG-chemistry students in pharma industry through HCDC, OU-Hyderabad.

5. In S.S. Bhatnagar Memorial Lecture on 17-02-2023 by Dr. K. Suresh Babu, Senior Principal Scientist, IICT-Hyderabad, students have learned about the research facilities through CSIR and ongoing research in medicinal chemistry.
6. In Srinivasa Ramanujan Memorial Lecture on 20-02-2023 by Dr. Ch. Satyanarayana, Associate Professor, Mahindra University, Hyderabad, students have learned about the mathematical applications in Artificial Intelligence and Machine Learning.
7. In Sir. C.V. Raman Memorial Lecture on 27-02-2023 by Prof. B. Venkatram Reddy, Dept. of Physics, Kakatiya University, Warangal, students have learned about the Raman Effect and its applications in the field of science and technology.
8. In S. Chandrasekhar Memorial Lecture on 27-02-2023 by Dr. G. Padmaja, Chairperson-BOS, Dept. of Physics, Kakatiya University, Warangal, students have learned about the Science and its relevance to the common society in the present context.
9. Interactive sessions with the resource persons have paved the way for the students to explore the opportunities in the near future of their studies.
10. The guidance given to the students by the eminent personalities has ignited the interest in the younger minds. The students have expressed for having more such programmes and field visits to such national institutions for their future planning's and endeavours.

In every session of the programme, there is a huge response from the students and participants. Every session was concluded with discussions and deliberations with enthusiasm from the invitees and the audience. PG and UG Science students were explored recent developments in the science, specially chemical and material sciences. Many students have interacted with the invitees on the topics and acquired the knowledge on specialized topics of present day research. Finally, the Lecture Series inculcated a desire for research and scientific temper among the young minds. The series of Lectures ignited the participants to organize and attend the programmes of this kind.

**“Inspirational Science Lecture Series” (ISLS-2023)**

S.No.	Date & Time	Details Of Schedule/Programme/Lecture
1.	<b>15-02-2023</b> 10:00-10:30 AM	<b>Inaugural Session:</b> Welcome remarks by the convener, Lightening of the lamp by the Chairman and Chief Guest, followed by prayer song (Vandemataram)
2.	10.30-11.00 AM.	<b>Message by Chief Guest Dr. D.S.R. Rajendra Singh</b> Joint Director, CCE-TS, Hyderabad.
3.	11.00-11.10 AM.	<b>TEA BREAK</b>
4.	<b><u>Lecture -I</u></b> 11:10-12:20 PM	<b><u>Sir P.C. Ray Memorial Lecture</u></b> <b>“Pharma Industry &amp; Drug Development”</b> Dr. N. Shankaraiah Department of Medicinal Chemistry, NIPER, Hyderabad.
5.	<b><u>Lecture -II</u></b> 12:20-1:30 PM	<b><u>Dr. A.P.J. Abdul Kalam Memorial Lecture</u></b> <b>“Pharma Industry Placements through HCDC-OU, Hyderabad”</b> Dr. P. Muralidhar Reddy Dept. of Chemistry, Osmania University, Hyderabad, TS, India.
6.	<b><u>Lecture -III</u></b> <b>17-02-2023</b> 10:30AM-12:00 N	<b><u>Dr.S.S. Bhatnagar Memorial Lecture</u></b> <b>“Present Research in CSIR-Laboratories”</b> Dr. K. Suresh Babu <i>Senior Principal Scientist</i> Natural Products Laboratory, CSIR-IICT, Hyderabad-500 007, India
7.	<b><u>Lecture -IV</u></b> <b>20-02-2023</b> 10:30AM-12:00 N	<b><u>Sir Srinivasa Ramanujan Memorial Lecture</u></b> <b>“Present Research in CSIR-Laboratories”</b> Dr. Ch. Satyanarayana Associate Professor & HOD, Dept. of Mathematics, Mahindra University, Hyderabad.
8.	<b><u>Lecture -V &amp; NSD-2023</u></b> <b>27-02-2023</b> 10:30AM-1:00 PM	<b><u>Sir C.V. Raman Memorial Lecture</u></b> <b>“Raman Effect - A Success Story”</b> Prof. B. Venkatram Reddy Dept. of Physics, Kakatiya University, Warangal
9.	<b><u>Lecture -VI &amp; NSD-2023</u></b> <b>27-02-2023</b> 2:00-5:00 PM	<b><u>S. Chandrasekhar Memorial Lecture</u></b> <b>“Science &amp; Its Relevance to Common Society”</b> Dr. D. Padmaja Dept. of Physics, Kakatiya University, Warangal <b>“National Science Day Celebrations-2023”</b>

**Two-day National Seminar on CHEMICAL SCIENCES IN SUSTAINABLE TECHNOLOGY AND DEVELOPMENTS - CHALLENGES & OPPORTUNITIES (CSSTD CO - 2023)**

**Dr. P Vasantha, Department of Chemistry,  
Telangana Social Welfare Residential Degree & PG College for women,  
Mahendra Hills, Ghatkesar, Hyderabad**

To commemorate the discovery of Raman effect, by Sir C.V.Raman, **National Science Day** is celebrated on 28<sup>th</sup> of February every year in our country. The theme for this year's NSD-23 is **“Global Science for Global Well-being”**. On the occasion of NSD-23, The Department of Chemistry, Telangana Social Welfare Residential Degree & PG College for women, Mahendrahills has organized a two-day National Seminar on **“CHEMICAL SCIENCES IN SUSTAINABLE TECHNOLOGY AND DEVELOPMENTS - CHALLENGES & OPPORTUNITIES (CSSTD CO - 2023)”** during 24<sup>th</sup> and 25<sup>th</sup> February, 2023 at Kanha Shanthi Vanam, World Head Quarters of Heartfulness, Kanha Village, Hyderabad-509325.

The two-day national seminar witnessed talks from eminent speakers from our country who inspired and motivated the audience towards green technology and stressed on the need for eco-friendly approaches towards sustainable development. The inaugural ceremony was presided by D. Ronald Rose, IAS, Secretary, TSWREIS & TTWREIS and D. Hanmanthu Naik, Additional Secretary, TSWREIS. Our chief guest for the occasion, Dr. Srivari Chandrasekhar, Secretary, Department of Science & Technology, Ministry of Science & Technology, Govt. of India, emphasized on a futuristic approach of sustainable and inclusive developments in the field of chemical sciences. Our chief invitees, Prof. B. Jagadeeshwar Rao, Vice-Chancellor, Hyderabad Central University and Prof. S. Ramachandram, Vice-Chancellor,

Anurag University accentuated on the need for free and quality education for problem-solving. The key note address given by our chief invitee, Prof. B. Jagadeeshwar Rao, Vice-Chancellor, Hyderabad Central University, awakened the audience on **“think globally and act locally”**. Inaugural ceremony concluded with the release of the seminar souvenir.

The next sessions involved impacting plenary lectures delivered by highly placed academicians, University Professors and Industrialists that initiated a thought-provoking process in the minds of the audience and the role played by chemical sciences in sustainable development.

The seminar also witnessed active participation for oral and poster presentations.

**DAY 1: 24/02/2023**

<b>Time</b>	<b>Schedule</b>
8:30 a.m. - 10:30 a.m.	Spot Registration
10:31 a.m. - 12:00 p.m.	<b>INAUGURAL SESSION</b> <b>CHIEF GUEST:</b> Dr. Srivari Chandrasekhar, Secretary, DST, Govt. of India <b>PRESIDED BY:</b> D. Ronald Rose, IAS, Secretary, TSWREIS & TTWREIS D. Hanmanthu Naik, Additional Secretary, TSWREIS <b>CHIEF INVITEES:</b> Prof. R. Limbadri, Chairman, TSCHE Prof. B. Jagadeeshwar Rao, Vice-Chancellor, Hyderabad Central University



	Prof. S. Ramachandram, Vice-Chancellor, Anurag University <b>KEY NOTE ADDRESS:</b> Prof. B. Jagadeeshwar Rao, Vice-Chancellor, Hyderabad Central Univ.
12:01 p.m. - 12:15 p.m.	<b>TEA BREAK</b>
12:16 p.m. - 01:00 p.m.	<b>Plenary Lecture-1</b> <b>Prof. D. Ashok</b> Retd. Professor, Department of Chemistry, Osmania University <b>Title: Green synthesis of diverse Heterocyclic Library as Potential Pharmaceutical Agents</b>
01:01 p.m. - 02.00 p.m	<b>LUNCH BREAK</b>
02.01 p.m. - 02.45 p.m.	<b>Plenary Lecture-2</b> <b>Prof. M. Thirumala Chary</b> Professor Emeritus, Department of Chemistry, Jawaharlal Nehru Technological University, (JNTU), Hyderabad <b>Title: Corrosion Chemistry</b>
02.46 p.m. - 03.30 p.m.	<b>Invited Talk</b> <b>Sri Guntha Laxman Ji</b> ABRSM, All India Organizing Secretary <b>Title: Implementation of NEP-2020</b>
03.31 p.m. - 04:15 p.m.	<b>Plenary Lecture-3</b> <b>Dr. R. Ratheesh,</b> Director, Centre for Materials for Electronics Technology (CMET), Hyd <b>Title: Sustainable e-waste Management: Challenges &amp; Opportunities</b>
04:16 p.m. - 05:00 p.m.	<b>Plenary Lecture-4</b> <b>Dr. S. S. Kalyan Kamal</b> Scientist F, Group Head, Analytical Chemistry Group, Defence Metallurgical Research Laboratory (DMRL), Kanchanbagh, Hyderabad <b>Title: Nanomaterials for Defence Applications: Challenges &amp; Opportunities</b>
05:01 p.m. - 05:10 .	<b>TEA BREAK</b>
05:11 p.m. - 06:00	<b>Oral/Poster Presentations</b>

## DAY 2: 25/02/2023

Time	Schedule
8:30 a.m. - 10:00 a.m.	Spot Registration
10:01 a.m. - 10:45 a.m.	<b>Plenary Lecture-5</b> <b>Dr. Upendra M. Tripathi</b> Director, Startech Labs Pvt. Ltd. Hyderabad, Alexander von Humboldt Fellow <b>Title: Recent Advances in Identification and Quantification of Elemental impurities using green Analytical Techniques in drugs and drug products- an opportunity</b>
10:46 a.m. - 11:30 a.m.	<b>Plenary Lecture-7</b> <b>Dr. N. Lingaiah</b> Chief Scientist, Indian Institute of Chemical Technology (IICT) <b>Title: Capture and Utilization of CO<sub>2</sub>: Development of solid adsorbents and catalysts</b>
11:31 a.m. - 11:45 a.m.	<b>TEA BREAK</b>
11:46 a.m. - 12:30 p.m.	<b>Plenary Lecture-8</b> <b>Dr. Someshwar Pola</b> Assistant Professor, Department of Chemistry, Osmania University <b>Title: Synthesis of New Schiff's base complexes and their</b>

<b>Photocatalytic Applications</b>	
12:31 p.m. - 01:15 p.m.	<b>Plenary Lecture-9</b> <b>Prof. N. Anand</b> Scientist, CSIR-Indian Institute of Petroleum(IIP), Dehradun <b>Title: Heterogeneous Catalysis for Lignin valorization and Pharmaceuticals</b>
01:15 p.m. - 02:15 p.m.	<b>LUNCH BREAK</b>
02:16 p.m. - 02:30 p.m.	<b>Invited Talk-1</b> <b>K. Narasimha Raju</b> Founder - 5E <b>Title: 5E Champion Profile</b>
02:31 p.m. - 02:45 p.m.	<b>Invited Talk-2</b> <b>Dr. G. Venkata Rao</b> Professor, Department of Civil Engineering, Anurag University <b>Title: Effects of Urbanization on Ground Water Recharge and quality - A case study of Uppal region, Hyderabad</b>
02:46 p.m. - 03:45 p.m.	<b>Oral/Poster Presentations</b>
03:45 p.m. - 04:30 p.m.	<b>VALEDICTORY SESSION followed by high Tea</b>

As part of National seminar events, Oral and poster presentation were conducted on 24<sup>th</sup> & 25<sup>th</sup> February, 2023. Mementoes were handed out to first, second place and also consolation prize were given.

#### **POSTER PRESENTATION:**

1.	Dr. B.Vijayalaxmi, Asst. Prof.	UCS, Saifabad, OU	First prize
2.	B. Vijayalakshmi, Lecturer	TSWRDCW, Mahabubnagar	Second prize
3.	K.Maheshwari, B.Sc. final year student	TSWRD&PGCW, Mahendrahills	Consolation prize

#### **ORAL PRESENTATION:**

1.	Dr. Radhika Surampalli, Lecturer	TSWRDCW, Khammam	First prize
2.	M.Vijayatha, Research scholar	Osmania University	Second prize

**National Seminar on  
“Potential of Plants for Sustainable Future”**

**Dr P R Sushama, Department of Botony, Telangana Mahila Viswavidyalam**

On the occasion of National Science Day (NSD), One Day National Seminar on “Potential of Plants for Sustainable Future” was organized on 28<sup>th</sup> Feb, 2023 by Department of Botany, Telangana Mahila Viswavidyalayam, Koti, Hyderabad. The seminar was Catalyzed and Supported by National Council for Science & Technology Communication (NCSTC), Department of Science & Technology, Govt. of India and Telangana State Council for Science and Technology (TSCOST) Dept. of EFS&T, Govt. of Telangana. Chief Patron was Prof. M. Vijjulatha, Principal, Patron was Dr. B. Shailaja, Vice-Principal and Convener was Dr. P.R. Sushama, Head, Department of Botany.

Faculty members, research scholars and students from different universities, colleges and schools participated in large number. Smt. A. Sonibala Devi, IFS, Special Secretary to Government and Chief Executive Officer, Telangana State Medicinal Plants Board, Department of Health, Medical and Family Welfare, Government of Telangana was invited as Chief Guest. Inauguration programme started with lightning of lamp and welcoming the guests. After inauguration, Convener, Dr. P.R. Sushama has presented opening remarks on the seminar. Dr. K. Anitha, Principal Scientist & Officer-in-Charge, ICAR- National Bureau of Plant Genetic Resources (NBPGR) Research Station, and Hyderabad has delivered a lecture on the topic “Role of plant resilience with mitigation to climate change” and presented the extensive work of NBPGR in this regards.

Dr. J. Kotesk Kumar, Sr. Principal Scientist & Scientist- in-charge, CSIR- Central Institute of Medicinal and Aromatic Plants, Research Centre, Hyderabad was the next Guest Speaker and he gave presentation on the topic “Applied aspects of aromatic plants & medicinal plants” and explained the various technologies involved in extracting the compounds from different aromatic and medicinal plants. Audience Interactive session was also held where participants involved with great enthusiasm. Just a minute (JAM) and Quiz competitions were conducted where large numbers of audience have participated. At the end of the Seminar, Valedictory programme was organized and Dr. J. Kotesk Kumar acted as Chief Guest and Prof. Lakshmi Bhavani, Vice-Principal, Science College, Saifabad and Prof. K. Shailaja were Guest of Honours. All the dignitaries were felicitated and Vote of Thanks was proposed. Session ended with singing National Anthem.



On the eve of National Science Day (NSD, 2023)  
Department of Botany  
Telangana Mahila Viswavidyalayam, Koti, Hyd.

## One Day National Seminar on “Potential of Plants for Sustainable Future”

### *Inaugural Programme*

Time: 11.00 am

#### **Chief Guest and Keynote Speaker** **Smt. Sonibala Devi, IFS**

Special Secretary to Government and Chief Executive Officer, Telangana State  
Medicinal Plants Board, Department of Health, Medical and Family Welfare,  
Government of Telangana

#### **Guest of Honour** **Prof. B. Ramadevi**

Head, Dept. of Botany, UCS, Osmania University

### *Valedictory Programme*

Time: 04:30 pm

#### **Guest of Honour** **Prof. E. Sujatha**

Chairperson, BoS, Dept. of Botany, Osmania University

Date: 28<sup>th</sup> Feb, 2023

Venue: P.G. Seminar Hall

*Cordially invite you*

**Convener**  
Dr. P. R. Sushama

**Patron**  
Dr. B. Shailaja

**Chief Patron**  
Prof. M. Vijjulatha

## One Day National Seminar on Potential of Plants for the Sustainable Future

Date: 28<sup>th</sup> Feb, 2023  
Venue: P.G. Seminar Hall TMV, Koti

Organized by Department of Botany, Telangana Mahila Viswavidyalayam, Koti, Hyderabad

Catalyzed and Supported by  
National Council for Science & Technology Communication (NCSTC),  
Department of Science & Technology, Govt. of India and Telangana  
State Council for Science and Technology (TSCOST) Dept. of EFS&T,  
Govt. of Telangana



## Orientation Programme cum Exhibition on Grape for Students and Farmers

Dr B Naveen Kumar, Grape Research Station, AICRP on Fruits (Grape),  
Rajendranagar Centre, Hyderabad  
Sri Konda Laxman Telangana State Horticultural University

In a view to honor the achievements of Sir C.V Raman and to celebrate the National Science Day, Grape Research Station, Rajendranagar, Hyderabad, Sri Konda Laxman Telangana State Horticultural University has organized "Orientation Programme cum Exhibition on Grape for Students and Farmers" on 24-02-2023. This programme was conducted for Government high school students, Budvel and grape interested farmers. About 70 high school students and 25 farmers attended the programme. On this day we have conducted following sessions

1. Introduction and importance of grape
2. Cultivation techniques of grape
3. Propagation techniques of grape
4. Information on value addition in grape
5. Exhibition of different varieties of grape

**Inaugural function:**It was started at 9.30 A.M in the morning. Dr. T. Suresh kumar, zonal head was invited as chief guest for this programme. Dr. K. Venkatalaxmi, Head of the Grape Research Station and the scientists Dr. B. Naveen Kumar, Dr. Venkata Ramesh and other Non-Teaching faculty participated in the programme.

### **1. Introduction and importance of grape (Session-1)**

Dr. T. Suresh kumar, chief guest in his address to the students and farmers stated the importance of National Science Day and inculcated the interest among the students about the science. Later, Dr. K. Venkatalaxmi gave the introduction about the grapes and also explained about the nutritional value in grapes and health benefits of grapes. This session was continued for 1 hour

### **2. Cultivation techniques of grape(Session-2)**

This session started at 11.00 A.M. Scientists, Dr. K. Venkatalaxmi, Dr. B. Naveen Kumar and Dr. K. Venkata Ramesh explained about cultivation practices like training, pruning, tipping and pest & disease management in grapes to students and grape interested farmers.

### **3. Propagation techniques of grape(Session-3)**

This session started at 1.30 pm. Scientific staff of the research station explained about grafting method of propagation in grape by showing it live in the field.

### **4. Information on value addition in grape(Session-4)**

This session started at 2.40pm. In this session, students and farmers were taught about the preparation of raisins (Kishmish).

### **5. Exhibition of different varieties of grape (Session-5)**

This session started at 3.30pm In the final session, different varieties of grapes (60 no.) were exhibited for the students and grape interested farmers.



There was a valedictory session at 4.30pm.



Inaugural Session



Session-1





**Session-2**



**Session-3**





Session-4



Session-5





**One day national training program on horticulture as an  
entrepreneurship for rural youth**

**Dr. P Saidaiah, College of Horticulture,  
Sri Konda Laxman Telangana State Horticultural University,  
Mojerla, Wanaparthy Dist., Telangana Sate**

As a part of celebrations of National Science Day 2022-23, College of Horticulture, Sri Konda Laxman Telangana State Horticultural University, Mojerla, Wanaparthy Dist., Telangana Sate has organized “one day national training program on horticulture as an entrepreneurship for rural youth” on 3<sup>rd</sup> March, 2023 in Seminar Hall 1 of College of Horticulture, Mojerla.

**Inaugural function:** The inaugural session commenced at 9:30 AM after registration of the participants at 9 AM. The session began with an invocation and lighting of the lamp. Dr. (Smt.) B. Neeraja Prabhakar, Hon’ble VC, SKLTSHU was the chief guest and Dr. A. Kirankumar, Dean of Horticulture, SKLTSHU was the guest of honour. Dr. P. Saidaiah, Program Coordinator and Organizing Secretary invited the guests on to the dais and introduced the participants to the topics of the training programme. The training coordinator also welcomed all the participants, including trainee rural youth (81), horticultural graduates (14), experiential learning program candidates (34), YFA-KVK staff (4), Cluster level Horticulture and Sericulture Officer, District Horticulture and Sericulture officer, young women farmers, faculty (12), B.Tech students and faculty from other universities, and staff of agri-horti society. He emphasized the importance of horticulture as a business and encouraged everyone to utilize the opportunity.

**Address by the chief guest:**

Dr. P. Saidaiah, the Training coordinator, welcomed Dr. (Smt.) B. Neeraja Prabhakar, the Hon'ble VC of SKLTSHU, who released the training brochure, digital pamphlet, and resource material and addressed the trainees. She emphasized the need to increase fruit and vegetable production to meet the demand for food nutrition and security. She highlighted the progress made in production, income generation, employment creation, and exporting of horticulture produce. She discussed the importance of mechanized cultivation, precision farming, artificial intelligence, using drones for aerial application of chemicals, and the HELP program for students to become successful entrepreneurs in the university.

<b>Topic</b>	<b>Resource Person</b>
Tissue culture banana in industrial mode	Dr. Suhail Khan, Associate Professor, Indraprastha University, U.P., India
Hydroponics for quality horticulture produce business	Dr. P. Sairam Reddy, CEO, Urban Kisan India Ltd.
Digital marketplaces for horticultural produce	Dr. Venu Margam, Vice-President, Kalgudi Digital Pvt. Ltd.
Horticulture in India: Creating Success Stories	Dr. Suresh Adina, Ex- T-HUB and Zen SkillProc. Pvt. Ltd.

**First session (Morning):**

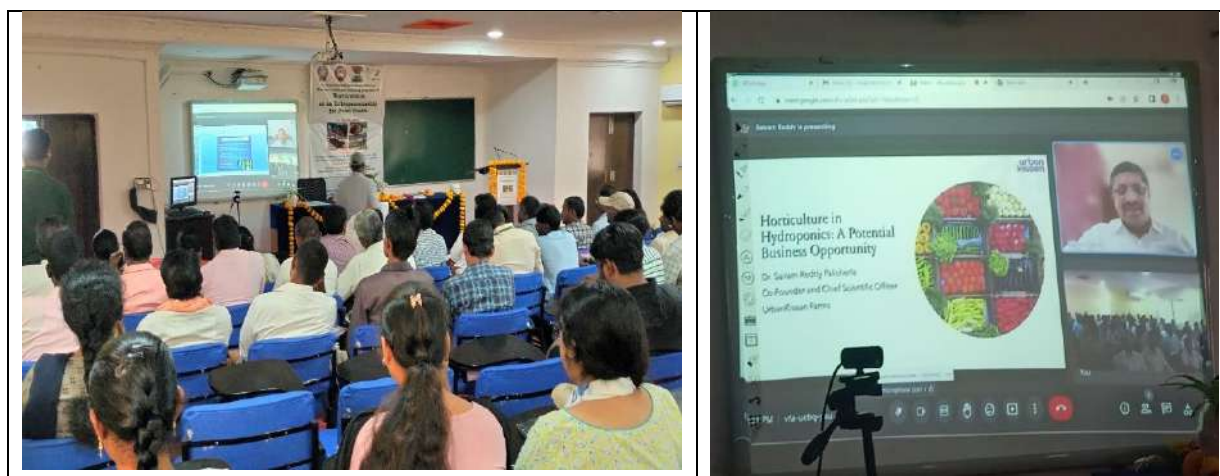
Dr. Suhail Khan, the Associate Professor, School of Biotechnology, Indraprastha University, U.P. spoke on tissue culture banana in industrial mode, emphasizing the advantages of tissue culture over conventional technologies. He explained about basic importance & production leaders of banana in India and mentioned

that Telangana has scope & potential for banana cultivation as it stood 15<sup>th</sup> rank in India's production list. Dr. Khan gave glance on 7 banana varieties with GI tags. He also briefed the limitation of conventional technologies (using of sucker planting techniques) attracts pest & diseases, high cost, low multiplication rate, variation in age, size & non uniformity of suckers.

Dr. P. Sai Ram Reddy, CEO, Urban Kisan has started presentation on challenges on horticulture produce with reference to perishability, contamination, pest & disease resistance, low profitability and then explained about urban kisan success story in hydroponics, a soil-less farming in India by growing tropical crops, using e-commerce platform for marketing. He mentioned that 37% horticultural produce getting wasted before reaching market and discussed in deep on semi urban & urban soils have pollution & presence of heavy metals.

Dr. Venu Margam, the Vice President of Kalgudi Digital Pvt Ltd, talked about the digital marketplaces for horticultural produce. He introduced about KALGUDI, the online marketing platform, its inspection & role in connecting farmers with consumers. Then, led the presentation with statistics on size of horticulture Production rate in India & different challenges at markets.

Mr. Suresh Adina from Ex. T-HUB delivered lecture on "Horticulture in India: Creating Success Stories." Firstly, speaker briefed about significance of nutrient diet & horti. produce and given statistics on GDP (6%) contribution of horticulture in India & production of fruits & vegetables. He provided information on marketing, processing, waste management, value added products, *i.e.* using of garland/flower waste from temples to make scents & soaps as successful startups in horticulture.



**Second session (Afternoon):** The following lectures were delivered by the experts and trainers at post lunch session.

Topic	Resource Person
Medicinal plans for business orientation	Dr. Irene Vethamoni, Dean, HC & RI, Coimbatore, TNAU
Production of quality planting material in nurseries as an entrepreneurship	Dr A. Kiran Kumar, Dean of Horticulture, SKLTSU
Vegetable Seed production & Vegetable grafting	Dr. Pidigam Saidaiah, Associate Professor, College of Horticulture, Mojerla, SKLTSU

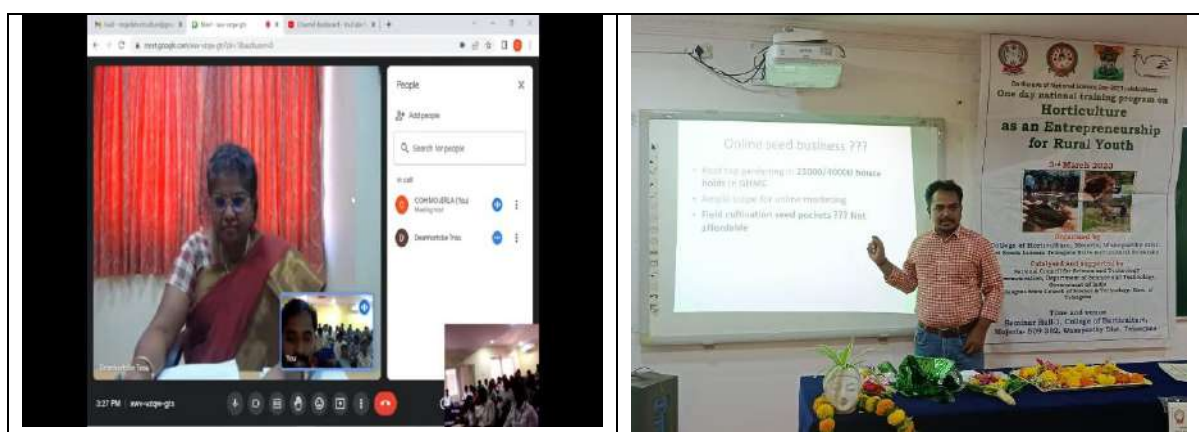


Bee Keeping & Vermicomposting	Dr. Shahanaz, Asst. Prof. (Entomology), College of Horticulture, Mojerla
Precision cultivation of vegetable crops	Mr. Kattula Nagaraju, Asst. Prof. (Vegetable Science), College of Horticulture, Mojerla
Value addition of Horticultural crops	Dr. J. Shankaraswamy, Asst. Prof. (Fruit Science), College of Horticulture, Mojerla
Soil sampling & Bio-fertilizers	Mr. B. Chandrasheker, Asst. Prof. (Soil Science), College of Horticulture, Mojerla

Dr. Irene Vethamoni, Dean, HC&RI, Coimbatore, TNAU has spoken on “Medicinal plants for business orientation.” She started the lecture by explaining the significance of medicinal plants & their value-added products in India. Out of 45000 species, around 15000-20000 species have potential medicinal value, she told. Dr. Irene described very well on value added products like capsules, skin care, hair oil, pickle, juice concentrates and tonics etc. And then, briefed everyone about small & medium enterprise on herbal tea, juice, powders like Aswagandha powder, Triphala powder.

Dr. A. Kiran Kumar, Dean of Horticulture, SKLTSHU talked on production of quality planting material in nurseries as an entrepreneurship. He emphasized the importance of nurseries in horticulture development and provided information on procedure for license from local DHSO and accreditation of National Horticultural Board (NHB).

Dr. P.Saidaiah, Associate Dean, College of Horticulture, Mojerla and Program Coordinator, delivered lecture on “Vegetable Seed Production & Vegetable Grafting on business mode.” He explained the importance of seed industry in economic growth of country, which has contribution of \$ 37 billion. He informed that Arizona state of USA and Telangana in India are having suitable environment for seed production across the globe. Seed export potential and contributions of Indian seed industry were well explained.



Speakers of the afternoon session

**Hands on training to the participants:** The trainees were divided into convenient batches of five each and trained on various practical aspects such as nursery establishment and management; tissue culture banana; vegetable seed production and certification; hydroponics; beekeeping; vermicomposting; precision cultivation of vegetable crops and value-added horticulture products; soil and water testing and biofertilizers. The procedures to establish, operate, grading, marketing and profitability of each entrepreneurship were elaborated in the fields demonstrating on real time bases.



Dr. Shahanaz, Assistant Professor of the Department of Entomology, conducted a session for rural youth on vermicomposting. She explained how farmers and youth can generate wealth through vermicomposting and demonstrated the process along with the required materials and cost benefit ratio. The farmers observed the practical arrangements of vermicomposting beds using HDPE bags, waste material arrangement, earthworm release, and harvesting of vermicompost.

Mr. K. Nagaraju demonstrated precision cultivation practices for vegetable crops to the group of rural youth during their hands-on training. He showed them how to optimize the use of resources, such as water and fertilizers, by adopting modern techniques like drip irrigation and controlled-release fertilizers.

Dr. J. Shankaraswamy, Assistant Professor (Fruit Science), College of Horticulture, Mojerla demonstrated the preparation procedures for several value-added products, including jam, jelly, organic soaps, organic shampoo, car air fresheners, essential oils, and incense sticks made from horticultural crops, during a hands-on training session for trainees. He emphasized the potential business opportunities that could be found from producing these products & the importance of using locally available raw materials during glut in the market.

Mr. B. Chandrashekar, Assistant Professor (Soil Science), demonstrated the procedures of soil sampling and testing for determining the initial fertility status of the soil, making informed nutrient management decisions. He stressed the use of organic or bio-fertilizers for maintaining soil fertility and ecosystem health due to their eco-friendliness, low cost, and longer shelf-life compared to chemical fertilizers. He has also shown the methods of biofertilizers treatment for seeds and horticultural crops.



### Third Session (Evening): Exhibition of horticultural products on business modules:

The B.Sc. (Hons.) Horticulture completed and final year students along with entrepreneurs were invited for exhibition of produce on business modules. Seven groups were made comprising 7- 9 students in each group and their business module, marketing channels, product quality and SWOT analysis were assessed by panel of experts. The two best business modules were adjudged and appreciated with certificates.

Name of the module	Team members
Seed production of Vegetable crops	R. Naveen, P. Naresh, S. Adarsh, B. Sowmya Srivaani, Durga Laxmi, S. Mounika L. Supriya and T. Supraja
Processing and value addition of horticultural crops	K. Srinath, B. Saicharan, Arshiya, Shravya, Haripriya, Ramyatha and Tejaswini

**Valedictory session:** The valedictory ceremony started at 5 PM. Dr. Kiran Kumar, Dean of Horticulture, SKLTSHU was the chief guest and K. Suresh, DHSO, Wanparthy Dist. and Dr. Pidigam Saidaiah, Associate Dean, College of Horticulture, Mojerla were the guests of honour. The chief guest addressed the participants to utilise the opportunity to build a business on horticulture, being a sector with tremendous scope for economic growth and career. The trainees opined that the training-built confidence to start their own entrepreneurship with clarification of even a small bit of doubt. Dr. Saidaiah, presented proceedings of the training and future action plan. The winners of the business proposals, best oral presentation awards and participant trainees received certificates from the hands of chief guests and guests of honour. All the participants received compendium of lectures as a part of their registration. The session concluded with snacks and high tea.

## One-day National Seminar on “Applications of Science”

Dr. C Shobha Devi, Department of Chemistry,  
Rajiv Gandhi University of Knowledge Technologies (RGUKT), Basar

To commemorate the birth anniversary of the great Indian Scientist Sir **Chandrasekhara Venkata Raman**, Department of Chemistry, Rajiv Gandhi University of Knowledge Technologies (RGUKT)-Basar-Nirmal has Organized a One-day National Seminar on “Applications of Science” as a part of National Science Day (NSD-23) on January 30, 2023 sponsored by TSCOST and NCSTC, DST-Gol. The program was conducted in the Student Activity Center (SAC) Auditorium, RGUKT-Basar. As a part of one-day National seminar, four eminent speakers delivered efficient lectures on the theme of Applications of sciences and Global Science for global well-being. More than 800 students and twenty five faculty members were actively participated in the program.

The day has started at 10:00 A.M with lectures by the following experts:

**Inaugural function:** It was started at 10.00 AM followed by invocation and lighting of lamp. Director, Prof. P. Satish Kumar, Associate Dean, R & D Dr. V Chandrashekar Rao, Associate Dean, Student Welfare Dr.H. Dattu, Controller of Examination Dr. B. Vinod, HOD, Dept. of Mathematics A. Madhusudhan and the other Chemistry faculty participated. The Director RGUKT-Basar was invited as a chief guest. In the inaugural session, the Director and other invitees have addressed the gathering and explained the importance of National Science Day and the applications of science to the participants.

**First Session:** The first invited talk was started at 10.50 AM by Dr. K.Pavani, Associate Dean, Sciences, RGUKT, Basar. She gave a lecture on “Nanoscience in Nature” containing applications of nanoscience in various fields. This session was very much useful to Pre University Course (PUC) students as she explained in a very basic level taking simple examples to illustrate nanoscience. This presentation was very much received by our students. She took the session for 1 hour.

**Second Session:** The next session started at 11.50AM by Mr. T. Rakesh Reddy, HOD, Dept. of Bio-Sciences, RGUKT, Basar. He has delivered a lecture on “Biology for Sustainability” containing the importance of the environment and methods/strategies to employ to save the environment. This session was continued for an hour.

**Third Session:** In the afternoon (after lunch break) the third session was started at 1.50PM by Dr. G. Devaraju. Assistant professor, Department of Physics, RGUKT, Basar. Topic of his lecture was “Recent advances in emerging materials”. Nanotechnology is fascinating and has numerous applications. The advanced technologies aided in further exploration. Our understanding of natural phenomena assisting in developing future technologies. The lecture covered the fundamentals, various processes involved in growth and characterization, and device testing. Also, possible laws that explain how atomic-level arrangements of atoms and molecules significantly affect structural and physics properties and achieving properties as required.



**Fourth Session:** The last session of the day was started at 2.50PM by Dr. J. Kashanna, Assistant professor, Department of Chemistry, RGUKT, Basar. The topic of his lecture was “Catalysis and its applications in the synthesis of Indenones”. He explained the various technologies used in synthesis of compounds using different catalysts and illustrated their applications in everyday life. The lecture was continued for one hour.

**Valedictory Session:** The Chief Guest Prof. P. Satish Kumar, Director, RGUKT, Basar has given a short speech to the students about the importance of the legends and explained to the participants to dream of their goals and how to achieve them. We thank our Hon’ble Vice-Chancellor Prof. V. Venkata Ramana sir and Sri. Marupaka Nagesh, Member secretary, TSCOST for supporting and sponsoring to organize the program by Department of Chemistry, RGUKT, Basar. All the participants, members of organizing committee and student volunteers were given appreciation certificates. The program was ended by proposing vote-of thanks by Dr. C. Shobha Devi, HOD, Department of Chemistry and Program co-ordinator.

## శాస్త్ర సాంకేతిక రంగంలో అప్లికేషన్ పాత్ర కీలకం

ముధోల్(బాసర),  
**న్యూస్ టుడే:** శాస్త్ర  
 సాంకేతిక రంగంలో  
 అప్లికేషన్ పాత్ర కీలక  
 మని డైరెక్టర్ సతీష్ కు  
 మార్ అన్నారు.  
 బాసర ఆర్జీయూకే



సెమినార్లో పాల్గొన్న డైరెక్టర్ సతీష్ కుమార్ తదితరులు

టీలో సోమవారం తెలంగాణ స్టేట్ కౌన్సిల్ ఆఫ్ సైన్స్ అండ్ టెక్నాలజీ, దనేష  
 నల్ సెంటర్ ఫర్ సోకింగ్ సశేషమ్ అండ్ ట్రెనింగ్ సంయుక్తంగా సైన్స్ అప్లికే  
 షన్ ఆనే ఆంశంపై జాతీయ సెమినార్ను నిర్వహించారు. ఆసోసియేట్ డీన్  
 డా.పాపని మాట్లాడుతూ అభివృద్ధి చెందుతున్న మన దేశంలో నానో సైన్స్ పాత్ర  
 అమోఘమని, మన చుట్టూ ఉన్న ప్రపంచాన్ని మార్చగల సామర్థ్యం కలిగి ఉందని  
 పేర్కొన్నారు. కార్యక్రమంలో అధ్యాపకులు పాల్గొన్నారు.

### About the Seminar:

Science is important in our daily lives because it allows us to understand the world around us and to make improvements to our lives. Science has led to many technological advances that have made our lives easier, including the development of antibiotics, vaccines, and treatments for diseases. It also helps us to understand the natural world and to protect our environment.

In today's world, the role of science and technology is indispensable. We need Science and Technology in every sphere of our life like to treat diseases such as cancer or even to book a cab or train/flight ticket.

- In fact, without technology (integrated with science), we cannot imagine our life

### Resource Persons:

**Session 1: Dr. K. Pavani**, Associate Dean of Sciences, RGUKT-Basar

**Session 2: Mr. T. Rakesh Reddy**, Assistant prof, Dept of Biology, RGUKT-Basar

**Session 3: Dr. G. Devaraj**, Assistant professor, Dept of Physics, RGUKT-Basar

**Session 4 : Dr. J. Kashanna**, Assistant professor, Dept of Chemistry, RGUKT-Basar

### Who Shall Attend:

The Seminar is intended for Students, Faculty and Research Scholars.

### Registration:

[bit.ly/3wwD2WW](http://bit.ly/3wwD2WW)



**Date :** 30. 01. 2023

**Time:** 10. 00 AM

**Venue:** SAC Auditorium

### About RGUKT:

Rajiv Gandhi University of Knowledge Technologies (RGUKT) Basar was established as a university in Andhra Pradesh (A. P), India. In March 2008, the AP Government created RGUKT by an act of the Legislature as a full-fledged university which would initially admit approximately the top 1% of the rural students into the three residential campuses located at Basar, Nuzvid, and R K Valley (Idupulapai- Kadapa). The first batch of about 6000 tenth class students got admitted into a six year integrated program in August 2008.

Subsequently, due to the bifurcation of the erstwhile state of Andhra Pradesh into Telangana and Andhra Pradesh in the year 2014, the three campuses too got divided between the two states. Currently, the Basar campus of RGUKT is the only one that is functioning in the state of Telangana.

### About Chemistry Department:

The chemistry department serves the purpose of imparting knowledge in the core science subject, which is a foundational building block for most engineering disciplines. As such, high tech labs with the latest technological gizmos greet any students and faculty members of the college looking to strengthen their base in this subject. A team of extremely capable teachers and staff members keep the department running in full throttle.



One Day National Seminar

On

## APPLICATIONS OF SCIENCE

On 30th January-2023

As part of

National Science Day (NSD) 2023 Celebrations



Catalysed and supported by



National Council for Science & Technology Communication (NCSTC)  
Department of Science & Technology, Govt. of India  
and  
Telangana State Council of Science and Technology (TSCOST)  
Department of EFS&T, Govt. of Telangana

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Vice Chancellor, RGUKT-Basar

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Member Secretary, TSCOST

Chairman

**Prof. P. Satish Kumar**

Director, RGUKT-Basar

Coordinator

**Dr. C. Shobha devi**

Head of the Chemistry Department

RGUKT-Basar

Dist: Nirmal, Telangana State



## National Seminar on Science as a tool for Universal wellbeing

**Dr. T Rakesh Reddy, Department of Biosciences and Bioengineering (BSBE),  
Rajiv Gandhi University of Knowledge Technologies (RGUKT) Basar, Nirmal District**

The Department of Biosciences and Bioengineering (BSBE), RGUKT Basar has organized one day National seminar on Science as a tool for universal wellbeing on the occasion of National Science Day 2023 on 28-02-2023, the eminent academicians and scientists to highlight the significance of science in everyday life and enlighten the young intellectual student minds with the permeating role of scientific knowledge in alleviating global challenges and ensuring human welfare.

The Sessions at seminar focused on

1. Session -1: “Advances in the global science arena”, by Dr. Rambabu Gundla, Professor, Chemistry Department, Gitam University, focused on applications of Bioinformatics in the drug design for various diseases that the people are suffering from.
2. Session -2 : “Fundamentals of Nanomaterials and applications”, by Dr. Azeem, Professor, Physics Department NITW,
3. Session -3 : and “Chemistry in day today life”, By Dr. Kavitha Mannem, Associate Professor, Chemistry department, OU.
4. Quiz competition is conducted with theme “Global science for Global wellbeing” in Physics, Chemistry and Biosciences department. Winners of the competition are appreciated with the prizes.

Tentative Schedule of the one day national seminar on NSD-2023 with the theme “Global Science for global wellbeing” held on 28-02-2023.

Time	List of activities
8:30 AM - 9:00 AM	Registrations & gathering
9:00 AM - 9:05 AM	Inaugural session : Welcome and lamp lightening
9:05 AM - 9:10 AM	Introduction to NSD 2023 by Dr. Sai Krishna, Assistant Professor, BSBE Department
9:10 AM - 9:15 AM	Address by Director, RGUKT-Basar
9:15 AM - 9:17 AM	Address by speaker Dr. Rambabu Gundla, Professor, Gitam University
9:17 AM - 9:19 AM	Address by speaker Dr. Kavitha Mannem, Associate Professor, OU
9:19 AM - 9:30 AM	Stage arrangements
9:30 AM -10:45 AM	Session -1 “Advances in the global science arena”, by Dr. Rambabu Gundla, Professor, Chemistry Department, Gitam University
10:45 AM - 11:00 AM	Tea break

11:00 AM - 12:15 Pm	Session -2 “Fundamentals of Nanomaterials and applications”, by Dr.Azeem, Professor, Physics Department NITW
12:15 PM - 2:00 PM	Lunch break
2:00 PM - 3:15 PM	Session -3 “Chemistry in day today life”, By Dr. Kavitha Mannem, Associate Professor, Chemistry department, OU
3:15 PM to 3:30 PM	Prize Distribution, & Closing Remarks
3:30 pm to 3:45 Pm	Valedictory

**Registrations for the seminar:** Around 250 student’s and 20 faculty participated in the One Day National Seminar as part of NSD 2023 on 28 -02 2023 at AB-I auditorium, RGUKT-Basar.

**Inaugural Session:** After the lamp lightening the Guests are welcomed on the stage by Dr. Sai Krishna, Assistant Professor, BSBE Department, RGUKT-Basar and Inaugural of NSD 2023 at RGUKT-Basar was done by Honourable Director RGUKT-Basar **Prof. Sathish Kumar Peddapelli**.

**First Session:** The first invited talk was started at 09.15 A.m. by **Prof. Rambabu Gundla, Gitum University**. He gave a session on “**Advances in the global science arena**”, in which he explained the basic concepts of biology, mechanism of drug delivery and drug functioning in the body. He also clarified the effect of pathogens like Bacteria, Virus and Fungi and the diseases caused by them, he enlightened on the emerging techniques which are been used for synthesizing the new drugs for new diseases. This session was very much useful to the students of RGUKT-Basar for their engineering applications in the field of drug delivery and faculty who are doing research in the related field. This presentation was very much received by our students. He took the session for 1 Hr and 15 Minutes

**Second Session:** Next session started at 11.30 A.m. by **Dr. Abdul Azeem, Professor Dept. of Physics, NITW, Warangal**. He gave a session on "Fundamentals of Nano materials and applications". He started his session by wishing the audience and explained the importance of Raaman effect. He clarified doubts on Nano materials, compared Nano to Bulk materials with respect to their properties and applications, variation of properties of the materials at nanoscale, and different methods used for synthesizing of nanomaterials. He also explained the relationship between research in Nano science and the decrease in size of the computer, TV and other electronic gadgets. He stressed on why research is important to mankind and motivated the audience towards research. I can say it was a productive session. He took the session for 1 Hr and 15 Minutes

**Third Session:** This session started at 2:00 P.m. by **Dr. Kavitha Mannem, Assistant professor, Department of Chemistry, OU, Hyderabad**. She gave a session on “Chemistry in Day today Life”. She explained the importance of chemistry and the role of chemical compounds in daily activities. She also spoke on structure, properties and applications of chemical compounds that exists in carbohydrates, proteins, lipids, Vitamins. She explained about preservatives used in food materials, and types of food materials with medicinal properties and chemical structures of common medicine.

### Quiz winners of Physics department

1.	E. Shreya (B210339)	PUC-2	First prize
2.	V.Vivek (B220807)	PUC1	Second prize
3.	V. Shekher (B220278)	PUC1	Third prize

### Quiz winners of Chemistry department

1.	Rohan Kumar (B210004)	PUC-2	First prize
2.	K.Kerthana ((B210032)	PUC-2	First prize
3.	P. Swetha (B220096)	PUC-1	First prize
4.	G. Chandra Kiran (B210341)	PUC-2	First prize
5.	G.Sravani (B2220081	PUC-1	Second prize
6.	R.Swathi ((B220355)	PUC-1	Second prize

### Quiz winners of department of BSBE

1.	Akhila (B210779)	PUC-1	First prize
2.	Anusha (B210430)	PUC-1	First prize
3.	Srija(B210523)	PUC-1	First prize
4.	S. Vaishnavi (B210788)	PUC-2	Second prize
5.	G. Keerthi (B210546)	PUC-2	Second prize
6.	M. Manasa (B211517)	PUC-2	Second prize
7.	V. Vivek Kumar (B210243)	PUC-2	Third prize
8.	T.Abhiram ( B211735)	PUC-2	Third prize
9.	B. Venkatesh ( B210424)	PUC-2	Third prize

The prize winners received the Certificate from resource persons Prof. Rambabu Gundla, Prof. Abdul Azeem and Dr. Kavitha Mannem. And other BSBE department faculty

**Valedictory session:** In this session the distribution of certificates to the quiz winners, organizers and participants is done from the resource persons along with the concluding remarks on the One day National seminar was done and seminar competed with vote of thanks to all the funding organizations TSCOST, NCSTC, supporting people for successful conduction of the NSD.



**Startup Ideation Program**  
**“Motivating Younger Minds Towards Science and Innovation”**  
**Dr. Hameeda Bee, Department of Microbiology, UCS, Osmania University**

The Department of Microbiology organized - Startup Ideation Program on “Motivating Younger Minds Towards Science and Innovation” as part of National Science Day (NSD) 2023, celebrations to commemorate the discovery of Raman Effect by Sir C.V. Raman 2023. The program was scheduled on March 2<sup>nd</sup> and 3<sup>rd</sup>, 2023 and organized at Centre for Plant Molecular Biology (CPMB) and Department of Microbiology, University College of Science, Osmania University. The theme was taken up to motivate young ideated minds which can be a source of local ingenuity and create global impact. The program was catalyzed and supported by NCSTC, DST, TS-COST, Dept. of EFS&T, Govt. of Telangana. The program was open to students and faculty of Science, Engineering, Commerce and Business Management. A total of 50 participants registered for the program. A total of 18 Resource persons were involved as invited speakers, team members of incubation centers (IC), panel discussion members (inter-disciplinary faculty members) of the OU were involved in organizing the program.

**On Day 1, (March 2<sup>nd</sup>, 2023) - Session - I**

- (i) Mr. Paritosh Tripathi, COO (Chief Operating Officer), a-IDEA (Association for Innovation Development of Entrepreneurship in Agriculture), Technology Business Incubator (TBI) of Indian Council of Agriculture Research (ICAR)-National Academy of Agricultural Research Management (NAARM), Hyderabad and delivered TALK on “Basics of Entrepreneurship, Design Thinking and case study of Startups” through online mode using Google link. The participants were able to get the concepts of prototype design and the challenges faced by startups during the initial days of their journey.
- (ii) Mr. Gaddam Sudarshan, Trainer and Mentor on Entrepreneurship, National Institute for Micro, Small and Medium Enterprises (Ni-MSME) on “Ideation to Business Model”. The participants were able to understand, how idea can be modified into Business model. The market strategy needed to carry forward the business model for generic type and the plan needed for skilled personals to take forward innovations in their areas of expertise. Similarly, information was provided regarding the support and the loan facility provided by Government of India for startups to initiate their work.
- (iii) Dr. Sushmita Sundar, Head, Life Sciences- Research and Innovation Circle of Hyderabad (RICH), the nodal agency for the Hyderabad Science & Technology. Her TALK was about the “Ambidexterity - A Way Forward for Innovation”. It motivated the young mind about, how being Ambidextrous is very much essential both as an individual and at organization level to explore and exploit. She added in building complementary skills in the start-ups and working as a team is an essential key to be successful. And also added about the top 20 reasons why start-ups fail, and careful steps to be taken to avoid the same.

**In the second session**, half the participants were taken to Osmania Technological Business Incubator (OTBI), OU and the other half to Atal Incubation Centre (AIC), CCMB. The supporting team members of IC were Dr. R. Hafeez Basha, Incubation Manager and Mr. Rohan Ande, Community Manager, Mr. Sudhir preincubatee at OTBI and Dr. Ramjee Palela, COO, AIC explained the participants about incubation centres and road map for students to entrepreneurial journey ahead.



## On Day 2, (March 3<sup>rd</sup> , 2023), Session-I

- (iv) Dr. Samunnatha, Assistant Professor of Management at University College of Commerce and Business Management, TALK was about steps in the journey “From a Student to an Entrepreneur”, the participants were able to get clarity about the different roles they have to take up during their initial days till to be a successful entrepreneur.
- (v) Dr. Nazia Sultana, Associate Professor of Commerce, Telangana Mahila Viswavidyalayam (UCW), TALK was about “Business Incubation for Entrepreneurial Development” to foster innovation and entrepreneurship in young researchers.  
Followed by Panel Discussion with inter-disciplinary faculty members of Engineering and Sciences, Dr. Nageshwar Amanchi, Dr. Shibsekhar Roy, Dr. Vidyasagar K.E.Ch, Dr. Rama Krishna Kancha, Director-CPMB etc., were present to give their experiences and clarify the queries raised by the participants.

Around 12 prototypes and/or models were displayed by participants on Day1 and Day 2. A selected few Prototypes are explained below:

1. Eye ball controlled wheel chair, Ms. Saniya Mahreen, Dept. of Biomed. Engineering, UCE, OU: In order to take care of different disabilities , various kinds of interface have been developed for wheel chair control such as joy stick control, head control etc., but it still is difficult to operate for people who experience total paralysis of four limbs, muscle dystrophy, spinal cord injury. Eye controlled wheel chair is one such technology for autonomous navigation. Gaze estimation is a process to estimate and track the 3D line of sight of a person. The device used to track gaze by analyzing eye movement is a called gaze tracker. We have tried to use the same idea here in our model. It performs two tasks simultaneously i.e, localization of eye position in image or video and tracking its motion to determine their gaze direction to move the wheel chair accordingly. This can further be extended to control equipment’s like fans, switches etc.
2. Heart rate detector using image processing: Ms. Saneya Rafeeqe Siddiqui, Dept. of Biomedical Engineering, UCE, OU: Detects heart rate using image processing by amplifying image and detecting the slightest change in color or even movement. Designed to use during disaster times to save time by saving people who are alive and need medical attention by separating the dead from the alive
3. Probiotic Drink insight to healthy life: Ms. Manjusha, Dept. Microbiology, UCS, OU: Banana is considered as one of the dietary nutrient enrichments and is rich in folic acid, Vitamin C, Vitamin B, Manganese, Potassium and choline. Amongst all fruits, banana is known for high consumption as its available for everyone at reasonable cost. Now a days, fermented fruit juices are high in demand mainly because of its aroma and delicacy. By fermenting fruit juice we enhance nutritional value present in the fruit. There are many health benefits by consuming fermented fruit juices. The major health issues are related to adrenal fatigue syndrome (AFS), a common condition caused by primarily by stress. This syndrome can cause a multitude of symptoms such as lethargy, difficulty in concentration, insomnia, fatigue, feeling anxious, depression, craving for salt, frequent sickness and allergies. Fermented drinks helps in regulating detoxification process of NeuroEndoMetabolic (NEM) stress response and promote healthy gut microbiota.
4. Integrated Farming System: Ms. Marpini Pavani, Government City Degree College, Hyderabad. Integrated Farming (IF), integrated production or Integrated Farm Management is a whole farm management system which aims to deliver more sustainable agriculture. Integrated Farming

combines modern tools and technologies with traditional practices according to a given site and situation, often employing many cultivation techniques in a small growing area. Mixed farming systems or integrated farming produce both crops and animals on one farm. This farming system permits wider crop rotations and thus reduces dependence on chemicals, allowing diversification for better risk management and promotion of agro Industries, recycling, energy saving, fodder security for livestock.

5. Bacterial Time Bombs for Cancer, by Ms. Talat Shamsia and Syeda Khadija, Shadan Degree College. One of the reasons as to why we haven't cured cancer yet is because it is a rare disease at genetic level i.e., when DNA sequencing of tumor cells is performed, every cell is found to have mutations at different sites in the 3 billion base pair molecule. With help of synthetic biology, scientists make a piece of synthetic DNA and insert it into a suitable bacteria (*E.coli*). This synthetic DNA serves three main functions: It causes bacteria to selectively grow in tumor cells by identifying certain criteria which are characteristic of cancerous cells like low pH, low O<sub>2</sub> levels and over production of certain molecules. It has the genetic recipe to synthesize cancer drug along with bacterial proteins. The bacteria becomes an SLC (Synchronized Lysis Circuit) bacteria; when these bacteria are injected into a tumor, they multiple and upon reaching a "critical mass density", detected by quorum sensing, majority of these bacteria lyse delivering the cancer drug locally in the tumor. The remaining tiny population of bacteria replenishes the colony and the cycle repeats. Unlike chemotherapy or radiation therapy, this is a method of "local drug delivery" and does not affect healthy cells.

Organizing faculty members were Dr. Kuthadi Shanthi Kumari, Department Microbiology, Dr. Ramakrishna K, CPMB and Dr. Sandhya Annamaneni, C-BoS, Dept. Genetics. At the Valedictory event, Chief Guest of the program Dr. KRK Reddy, Managing Director, CEO, Sri BioAesthetics Pvt. Ltd. Hyderabad, gave the valedictory address and portrayed his journey as an Entrepreneur with small idea and how Belief-Passion-Optimism paved the way to be a Successful Industrialist. Prof B. Veeraiah, Principal, UCS, OU, Guest of Honour, about how students of Biosciences can plan their ideas, incubate and be successful in their career. Prof. B. Bhima, Professor of Microbiology, Principal Nizam College, explained about the different concepts and how microbial fermented products can be useful to the society. Prof. Sandepta Burgula, Co-Convenor and Head. Dept. Microbiology explained the significance of Microbial Sciences and about role played by India and Bharath Biotech to make Covaxin (Made in India, concept) during the COVID-19 pandemic and motivated the younger generations about new research avenues. Dr. Hameeda Bee, Convenor of the event, elucidated the glorious opportunities available to the creative entrepreneurs and work towards making *Aatmanirbhar Bharath / Self-Reliant India*. Selected prototypes were given Awards and Appreciation Certificates to motivate the young participants. Logistic support to the participants was managed by the organizers for both the days, including teaching and non-teaching staff. The program concluded with vote of thanks to the supporting members, funding support and participants of the program.

# Day 1



# Day 2



## One Day National Seminar on Single Use Plastic: Concerns & Alternatives

Dr. Syeda Azeem Unnisa, Department of Environmental Science  
University College of Science, Osmania University, Hyderabad

The Department of Environmental Science, UCS has organised a One day National Seminar On the Eve of National Science Day Celebration on 25<sup>th</sup> February 2023 on "Single Use Plastic: Concerns and Alternatives. Speakers were invited from Pollution Control board Mr. Narender, SEE, Bio Reform start-up Mr. Azhar and Samiksha Entrepreneur, Mr.Pramod and Prof. B. Manjula, Biochemistry, UCS, OU. The speakers have spoken about their innovations which are eco-friendly and biodegradable like covers, pens, pencil made from natural materials and colors.

The National Seminar has Two Sessions 1<sup>st</sup> Session is about **Inaugural Function** which is started from 10:00 am to 03.30 pm & 2<sup>nd</sup> Session is about **Valedictory Function** which is started from 03:30pm to 04.30 pm

**Inaugural Function:** It was started at 10.00 am Followed by Prof. B. Veeraiah, Principal, UCS, OU, Chief Guest for the inaugural function was Prof. G. Mallesham, Dean, Development UGC Affairs, Dr. Syeda Azeem Unnisa, Organizing Secretary and Director, Minorities Cell, OU, Prof. K. Shailaja, Convenor & Coordinator Dept. Env. Sci. OU , Prof. B. Rama Devi, Convenor & BoS, Dept. Env. Sci. OU,



The banner features four logos at the top: the Government of India emblem, the National Council of Science and Technology (NCST) logo, the TSCOST logo, and the Osmania University logo. The main text is in bold blue and black fonts, with a green 'Welcome to' script. A red banner at the bottom contains the seminar title in yellow and white text. The date and venue are listed at the bottom in black text, flanked by floral illustrations.

**NATIONAL SCIENCE DAY (NSD-2023)**  
**Department of Environmental Science**  
University College of Science, Osmania University, Hyderabad  
*Welcome to*

**One Day National Seminar on**  
**Single Use Plastic: Concerns & Alternatives**  
Catalysed & Supported By TSCOST, NSCST, Hyderabad

Date: 25-02-2023, at 10.00am,  
Venue: Conference Hall, 1<sup>st</sup> Floor, UPE Building,  
University College of Science, OU, Hyderabad

**Prof. G. Mallesham, Dean, Development UGC Affairs, OU, Chief Guest**

**Sessions 1:** Md. Azhar, Director Bio-reforms has discussed about his innovation the green material. This green material is used in the preparation cover bags of various shapes and micron sizes. The covers are made from natural material which is bio-degradable and eco-friendly. He insisted to the students to adopt for the start-ups and entrepreneurs.

**Session 2:** Mr. Narender, Senior Environmental Engineer, Telangana State Pollution Control Board has delivered a lecture on Plastic waste management rules 2016 and 2022. He discussed about the types of plastics, materials used, sources, pollution and alternatives to be used. He highlighted about the how the government is following the rules since 2022.

**Session 3:** Mr.G.Pramod, Director, Shamiksha Enterprises. He has focused on his innovation making pen, pencil from the recycled newspaper. He has also put the seeds in the caps of the pens when thrown away the new sampling can arise. He has encouraged the participants to stop using plastic and switch over to the traditional methods.

**Session 4:** Prof. B.Manjula, Biochemistry, UCS, OU has organized a quiz session on Swach Bharath. She has prepared 45 questions which were of various types and answered well by the participants. The quiz was open for all participants. The 3 best participants were awarded with prize in the form Book and Certificate and 1 consolation prize.

**Valedictory Function:** It was started at 03.30pm Followed by Prof. B. Veeraiah, Principal, UCS, OU, Chief Guest for the Valedictory Function was Sri. S. Kalicharan, IAS, Secretary, Telangana State Biodiversity Board, Dr. Dr. Syeda Azeem Unnisa, Organizing Secretary and Director, Minorities Cell, OU, Prof. K. Shailaja, Convenor & Coordinator Dept. Env. Sci. OU , Prof. B. Rama Devi, Convenor & BoS, Dept. Env. Sci. OU, & Prizes Distrusted to Participations who was a participated in Quiz Competition. The participants were nearly 95 from various colleges. Quiz competition was conducted and which was open for all to participate.



**WORKSHOP ON CLINIC TO LAB: TOP- BOTTOM APPROACH  
FOR DIAGNOSIS OF GENETIC DISEASES”**

Dr. B Vijaya Lakshmi, Institute of Genetics & Hospital for Genetic Diseases, Osmania University,  
Begumpet, Hyderabad-500016

To provide a holistic approach in understanding the core causes of Genetic Disorders and to educate on the diagnosis and management of the conditions through basic to advanced techniques, a workshop was organized.

**Day-1 - CLINICAL GENETICS & BIOCHEMISTRY (23.02.2023)**

The workshop entitled “CLINICTOLAB: TOP-BOTTOM APPROACH FOR DIAGNOSIS OF GENETIC DISEASES” (23.02.2023 to 25.02.2023) was inaugurated by Prof. P. Sashikala Reddy, Principal, Medical College as chief guest along with other dignitaries at Institute of Genetics and Hospital for Genetic Diseases, Osmania University. Dr. B. Vijayalakshmi, Director, Institute of Genetics welcomed the dignitaries and described the institute activities since its establishment and proposed the present insights and future aspects of the institute. Prof. Sashikala, stressed on the importance of genetics and its role in disease diagnosis and management. She even suggested the screening services for the individuals who are at high risk for genetic diseases and stressed on collaborations with hospitals, research and academic institutions. Dr.M.Sujatha, Senior Medical Consultant addressed the participants and highlighted the theme of the workshop. The inaugural program was concluded by a vote of thanks by Dr. G. Deepika. Participants were given with registration kit where book on all the techniques with detailed principal, methodology and trouble shoots was provided.

The Day 1 Technical session began with “Genetic soft markers, Approaches for the Rare Diseases& Genetic Counseling” coordinated by our clinical geneticists Dr. Sujatha, Dr. Sunitha and Dr. BSrinadh followed by a post lunch session by Dr. G. Shilpa who demonstrated New Born Screening and Dr.M.Sailaja demonstrated Hb variant analyzer. The day concluded with a demonstration on Tandem mass Spectrometry and GC- Mass Spectrometry at YODHA diagnostics. The participants were trained on report analysis and disease diagnosis .





DEMONSTRATION OF GC-MS



DEMONSTRATION OF LC-MS



DEMONSTRATION OF B-THALASSEMIA



DEMONSTRATION OF NEW BORN SCREENING

## DAY 2 - (24-02-2023): CYTOGENETICS

The Second day session started with a lecture session on the chromosome structure and number analysis. The significance of chromosomal anomalies in Disease physiology had been explained by Dr. Srilekha. The participants were then given a hands on training on lymphocyte culturing, wherein initiation harvesting, dropping of culture on slides were done along with practical demonstrations by the respective lab members. This session was followed by lunch. Post lunch the second session was started with advanced molecular cytogenetic techniques like Fluorescent *In Situ* Hybridization (FISH) and Spectral Karyotyping (SKY). The faculty has explained the techniques and the participants were given practical testing for screening of the slides and then, interpretation of the results were discussed. During post lunch session, a demo on usage of Chemidoc for quantitative analysis of DNA, RNA, Protein gel analysis, blots and immunofluorescence, colony formation assays by Dr. Praveen Kumar, Application Specialist, Life Sciences Division, Cytiva Life Sciences.



**Inauguration by Dignitaries**



**Prof. P. Sashikala Reddy**



**Participants in Seminar Hall**



**Participants along with Staff of IOG**





**Screening of karyotype slides under microscope**      **Demonstration of Spectral karyotyping**



**Results and its interpretation of Spectral karyotyping**



**Demo on Quantitative analysis of gels, blots, colonies, fluorescence on Chemidoc by Dr. Praveen Kumar, Application Specialist, Cytiva Lifesciences.**

### **DAY 3- (25-02-2023) : MOLECULAR GENETICS**

The Day 3 technical session started with the lecture session on Next generation sequencing with new platform introduced by Pac bio where long read sequences can also be analyzed. Dr. Balaji. B, Field application Specialist in Genomics has touched upon other assays like microarrays and third generation sequencing. The lecture session was followed by Quiz and sequence report analysis by the participants. After Tea break, Dr. M.L.N Deepika demonstrated DNA isolation, quantitation, types of PCR. Hands on training was given for agarose gel electrophoresis and polymerase chain reactions. Post lunch session started with agarose gel electrophoresis for genotyping and reporting process that was later followed by a formal visit to school (SECMH). The day concluded with distribution of certificates and with their valuable feedback & suggestions. The participants gave good feedback about the subject, hands on training. cleanliness of laboratories and also on Green Campus.



**Talk on NGS using Pacbio platform by Dr. Balaji, Application Specialist from SpinCo Biotech**



**Demonstration of DNA Isolation Hands on -Agarose gel Electrophoresis**





**Institute of Genetics & Hospital for Genetic Diseases,  
Osmania University, Begumpet Hyderabad-500016**

**ORGANISING A WORK SHOP ON**

**“CLINIC TO LAB: TOP- BOTTOM APPROACH FOR DIAGNOSIS OF GENETIC DISEASES”**

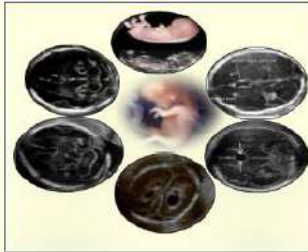
**Dates: 23.02.2023 to 25.02.2023**

**On the Occasion of National Science Day**

**Theme**

To provide a holistic approach in understanding the core causes of genetic disorders and to educate about the diagnosis and management of the conditions by applying advanced technologies.

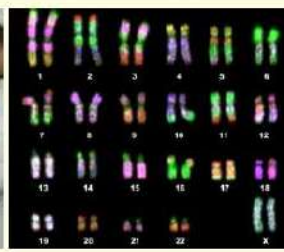
**Soft Marker Screening**



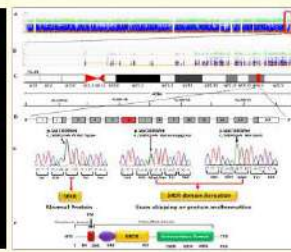
**New Born Screening**



**Advanced Cytogenetics**



**Molecular Genetics**



Category	Before Deadline (21.02.23) Rs.	Spot Registration Rs.
Students (Life Sciences / Medical / Nursing )	1,000.00	1,200.00
Research Scholars	2,000.00	2,500.00
Faculty	3,000.00	3,500.00
Industry Participants	5,000.00	5,500.00

Program Schedule	
Day 1 23.02.2023	Clinical assessment and Biochemical diagnostics
Day 2 24.02.2023	Cytogenetics
Day 3 25.02.2023	Molecular Genetics

**Payment Details:** Registration is must to participate in the workshop. Registration fee should be paid through online/NEFT.

Name of the Account Holder : **Director, Institute of Genetics, O.U.**

Account Number: **30392010034360**

Name of Bank: **Canara bank**

Bank Address : **Ameerpet, Hyderabad**

Type of The account : **Saving Account**

IFSC : **CNRB0013039**



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Department of Science & Technology, Government. of India.

Telangana State Council of Science & Technology(TSCOST), Department of EFS&T, Government of Telangana.

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## One day National Science Convention

Dr. Someswar R Sagruthi, Dept. of Genetics & Biotechnology,  
Osmania University, Hyderabad

The Department of Genetics organized - National Science Convention on “Impact of Genetics and Biotechnology research on society” on account of National Science Day (NSD)- 2023 on 4th March under the financial support of National Council of Science and Technology (NCSTC) and Telangana State Council of Science and Technology (TSCOST).

The inaugural ceremony was held by **Dr. S. Someswar Rao**, Coordinator of the program, **Prof. H. Surekha Rani**, Convenor of the event and Head of the Department of Genetics and Biotechnology with the Chief Guest, **Prof. G. Mallesham**, Dean, Development and UGC Affairs, Osmania University. He addressed the gathering about importance of society relevant research activities as well as mentioned about the support Schemes by the University at all levels for education and basic research.

On this occasion, the faculty of genetics and biotechnology from the department as well as CPMB have felicitated Prof. K.V. Rao, Eminent scientist, CPMB for his outstanding contributions to Science. Also, Dr. Sharath Chandra from TIFR, Bombay was invited as a guest of honour who was an alumnus of Osmania University. He inspired the participants to conduct impactful research. The program mainly focused on the latest developments in Genetics and Biotechnology and providing an interactive platform for students and researchers from different arenas of life sciences.

Eminent speakers invited were **Prof. K. V. Rao**, FNAS, NASI Scientist from CPMB, Osmania University, **Dr. Parul Mishra** from University of Hyderabad, **Dr. Rajakumara Eerappa** from IIT Hyderabad and **Dr. N. Srikanth** from Syngene International Bangalore who delivered talks on various aspects covering genetically modified crops for food security, structure-function dynamics of proteins via deep mutational scans, allosteric cross talk on tuning enzyme activities and drug design, and how CRISPR can revolutionize life. Around 118 delegates from 16 UG and PG colleges in the state and delegates from IICT have participated in the event. There were 33 poster presentations, 16 oral presentations and 13 review article presentations.

The program concluded with valedictory session Prof. B. Veeriah, Principal, University College of Science, OU as chief guest. Certificates were given to all the participants of the program. A total of 15 cash prizes were awarded to the contestants in various categories.

### PRIZE WINNERS

#### Undergraduation Poster Presentation

##### First prize

Summaiya Begum (BSc. Life sciences, Islamia Degree College)

Zeba Tabassum (Faculty of Biochemistry, Shadan Degree and PG College for Women)

Poster Name: **Nanoparticles**

#### Postgraduation Poster Presentation

##### First prize

Shaik Nazneen (MSc. Biotechnology, AV PG College)

Bogam Bhavani (MSc. Biotechnology, AV PG College)

Swathi K. (Assistant Professor, AV PG College)

Poster Name: ***In-silico* analysis of Schizophrenia treatment by Herbal Medicine**



### Second prize

Nabeelah Nisma Ibrahim (MSc. Biotechnology, University College of Science, Saifabad, OU)  
Poster Name: **Tissue Nano-transfection**

### **Poster Presentation- Scholar/Faculty**

#### First prize

Bhavita Kattula (Research Scholar, CSIR-IICT)

Poster Name: **Dual inhibition of SARS-CoV-2 main protease and papain-like protease through 2-chloroquinoline based aromatic imines**

#### Second prize

S. Vijaya Reddy (MSc. Biotechnology, Telangana University)

M. Ramesh Naik (Research scholar, Telangana University)

Poster Name: **Pest menace on the rise and its prevention**

### **Undergraduation Oral Presentation**

#### First prize

D Wilcina Genevieve (BSc. Life sciences, Kasturba Gandhi Degree College)

Presentation Title: **Nanotechnology in Cancer Treatment**

#### Second prize

GangavaramAlekhya (BSc, Life sciences, Bhavans Vivekananda College)

Presentation Title: **Impact of Genetics & Biotechnology Research on Society**

### **Postgraduation Oral Presentation**

#### First prize

Vineeth Reddy Kankanala (MSc. Biochemistry, Kakatiya University)

Presentation Title: **GW182 Scaffolding proteins and microRNA-mediated Interference**

#### Second prize

GandhamJoymercy (MSc. Zoology, Osmania University)

Presentation Title: **Impact of Genetics & Biotechnology Research on Society**

### **Review article writing Scholars**

#### First prize

A. Raviteja Reddy (Dept. of Genetics and Biotechnology, Osmania University)

Presentation Title: **Impact of Genetics & Biotechnology Research on Society**

#### Second prize

Lali Lingfa (Dept. of Genetics and Biotechnology, Osmania University)

Presentation Title: **Impact of Genetics & Biotechnology Research on Society**

### **Postgraduation Review article writing**

#### First prize

Natani Yamini Sai silpa

The faculty from department of genetics- Prof.A.Roja Rani, Prof. Smita C Pawar, Dr. Sumanlatha, Dr.A.Sandhya, Dr.A.Srinivas, Dr. Prashant Singam, Dr. G.Vijay Kumar contributed for successful organization of the program and they have been felicitated with momentos as a token of appreciation.

Also, faculty from CPMB- Dr.K. Srinivas Naik, Dr. K.Rama Krishna, Director and Dr.T.Layanya actively involved in the event. Dr.Sandeeptha, Head, Dept and microbiology, Dr Hameeda Bee, Dr. AmanchiNageswar Rao, Dr. V. Sugunakar, Dr. Raju Padiya and Dr.Sambha Shiva from Nizams College, have attended the program. The financial support for this event was received by Dr. Someswar Rao from Dean, Development and UGC affairs, Principal, college of science, Osmania university and TSCOST.

## Innovations in Science & Technology for Sustainable Development

Dr. Alia Begum, Dept. of Chemistry,  
Telangana Mahila Viswavidyalayam, Koti, Hyderabad

To commemorate the discovery of Raman Effect(National Science Day) of the great Indian Physicist Sir C.V. Raman, the department of Chemistry, Telangana Mahila Viswavidyalayam, Hyderabad has Organized NCSTC(DST)-TSCOST sponsored one day program on **Innovations in Science & Technology for Sustainable Development** on 6th March 2023 at PG Block, PG Seminar Hall.

### Inaugural function

The inauguration for the one day program was started at 10.00 a.m. with compering by Dr. Shrvanthi, Assistant Professor, Dept of Chemistry followed by Welcome address by Dr. Alia Begum, Program coordinator. Dr. V. Shashikala, Head & Convener, Department of Chemistry explained the significance of the program and its theme “**Global Science for Global Wellbeing**” and expressed Best wishes to all the participants for the success of the program.

**First Session:** The first invited talk was coordinated by Dr. N. Kavitha, Assistant Professor, Dept. of Chemistry at 10.15 a.m. The speaker for this session was Dr. Ahmed Kamal, Senior scientist, BITS Pilani. He delivered talk on “Innovations in Chemistry-Future perspective”. He focused on role of chemistry in pharmaceutical industries and its sustenance in future. He was honoured with a memento presentation by Dr. V. Shashikala.

**Second Session:** The next session started at 11.30 a.m. by Dr Karuna Rupala , Associate Professor Dept of Biochemistry, University College of Science, O.U, Hyderabad on “Integrative trends in Biochemistry and Nanotechnology”. She explained properties of nanoparticles and shared her research work on the nano particles of natural gums using metals of gold, palladium and platinum. She also emphasized on the applications of nano particles in food and pharmaceutical industries. This session was coordinated by Mrs. Ameena Husain and Memento was presented by Dr. A Swaroopa

**Third Session:** This session was coordinated by Dr. E. Srivalli . Dr. C. Anjali Devi , Retired Professor, Osmania University, Hyderabad addressed the participants on the topic “Nutritional Supplements & Functional Foods” . The speaker was honoured with a memento by Mrs Jayasurya Kumari. The forenoon session was concluded with a vote of thanks by Dr. A Swaroopa Rani.

### Competitions

Around 200 students participated in this one day program from all branches of sciences. The following competitions were held in blended mode.

1. **Essay:** Solidarity of Science in changing scenario
2. **JAM(Just A Minute)** : Innovations in Science and their Sustenance
3. **e Poster:** Integrated approach in S & T for long term sustainability
4. **Skit/Game** : My Millets-Ye Dil Mange More
5. **Do You Know Me**(Dress like lady noble laureate of Science)

S.No.	Event	Online/Offline Mode	Incharge Faculty Members	Judges
1	Essay	Online	Mrs. Mounika Mr. N. Ravi	Dr. K. Premalatha

			Mrs Jaysree	Dr. Ashwini
2.	JAM(Just A Minute)	Online	Mrs. Manasa Mr. Raghavendra Prasad	Dr. G. Vijaylakshmi Mrs. Jayasurya Kumari
3	e Poster	Online	Dr. Yamini Dr. Sudhakar Ms. Akshita	Dr. A. Swaroopa Rani Dr. P. Mamatha
4.	Skit/Game	Offline	Dr.Sreekanth Mrs. Vijayatha	Dr. Neelamma Dr. Revathi
5.	Do You Know Me	Offline	Mrs. Narmada Dr. Sk. Ayub	Dr. Shravanthi Mrs. Ameena Husain

### 1.ESSAY WRITING COMPETITION

1.	Mahiruha Mudiraj(B.Sc.)	TMV,Hyd	First prize
2.	Jhanav P. (B.Sc.)	TMV,Hyd	Second prize
3.	Bhavani Pullemla(B.Sc.)	TMV, Hyd	Third prize

### 2.JAM( Just A Minute)

1.	T. Sowmya(B.Sc.,II <sup>nd</sup> Year)	TMV, Hyd	First prize
2.	Ummul Khair Aniqua Fatima(PG Nutrition & Dietitics)	Dhruva PG College	Second prize
3.	D.Vinyasri(MPC, II <sup>nd</sup> Year)	TMV, Hyd	Third prize

### 3.POSTER PRESENTATION

1.	B. Sai Geetha	TMV, Hyd	First prize
2.	P. Bhavani	TMV, Hyd	Second prize
3.	B. Anusha	TMV, Hyd	Third prize

### 4.SKIT

1.	K. Mamtha(B.Sc.)	TMV, Hyd
2.	Afroze Unnisa(B.Sc.)	TMV, Hyd
3.	Seetha Kalpana(B.Sc.)	TMV, Hyd
4.	T. Sowmya(B.Sc.)	TMV, Hyd
5	G. Shivani(B.Sc.)	TMV, Hyd
6.	Annam Preethi(B.Sc.)	TMV, Hyd
7.	G. Rupa(B.Sc.)	TMV, Hyd
8.	D. Ranga Tejaswini(B.Sc.)	TMV, Hyd

### VALEDICTORY SESSION

The Valedictory function was presided by Prof. M .Vijjulatha, Principal, TMV. The brief report of the program was conveyed by Dr. V. Shashikala, Head & Convener of the program . Dr. G. Vijaylakshmi Vice Principal (Hostel) delivered a message and congratulated the organisers, committee members and the students for the grand success of the program. The winners received the prize and certificate from our Alumini guests. The e Certificates were mailed to all the students who participated in the Program.