









$A\ Brief\ Report\ on$ GSBTM Sponsored Crash Course at C. G. Bhakta Institute of Biotechnology, Uka Tarsadia University (UTU), Bardoli $(10^{th}-24^{th}\ December,\ 2024)$

Co-ordinator: Dr. Gopal Jee Gopal

Participating Student's List

Sr. No	College Name	No. of Students
1	Government College Daman	09
2	GACS College, Limbayat, Surat	05
3	C. G. Bhakta Institute of Biotechnology	12
4	L J Institute of Applied Science	18
5	Parul Institute of Applied Sciences, Wagjodiya	11
6	P.D. Patel Institute of Applied Sciences, Charusat	02
7	Silver Oak Institute of Science, Silver Oak University	05
8	M.B. Patel College, Charotar Education Society, Anand	01
9	ARIBAS, CVM University	05
10	SIGMA Institute of Science, BAKROL	04
11	Institute of advanced research, Gandhinagar	12
12	Swarrnim Science College	02
13	Indrashil University	02
14	Natubhai V. Patel College of Pure & Applied Sciences	07

A Brief Report on GSBTM Crash Course

The Gujarat State Biotechnology Mission (GSBTM)sponsored course conducted at the C. G. Bhakta Institute of Biotechnology, Uka Tarsadia University (UTU), Bardoli, to prepare students for national-level competitive exams to secure admission into Indian research institutes and various reputed universities to pursue masters in Lifescience. The 15 Days crash course took place from December 10th to 24th and 95 students from 14 different institutes participated in this crash course. The course aimed to provide a competitive learning atmosphere to the participants, and lectures were delivered by renowned speakers from various fields of Lifescience. Around 51expert faculties from reputed institutions and few from host department (C. G. Bhakta Institute of Biotechnology, UTU) delivered detail lectures on potent topics (with exam point of view) to prepare student in advance for national level competitive exam.

Dr. Gopal Jee Gopal served as the course coordinator, while Dr. N.Ch. Srivathsa was the co-coordinator of this crash course. The program commenced with a welcome note by Dr. Gopal Jee Gopal, the event coordinator, extending a warm welcome to all guests, speakers, and participants. He also provided a brief overview of the course's significance. The inauguration was graced by the esteemed Vice-Chancellor of Uka Tarsadia University, Dr. Yogeshwar P. Kosta, along with Dr. Meonis A. Pithawala, Director of CGBIBT, who shared theirinsightful and inspiring words in an engaging and accessible manner.



Day 1 (10th December, 2024)

The session commenced with an Orientation Program for the Crash Course under BT-CBC, followed by lectures from distinguished speakers. Dr. Mukesh Patel (Dept. of Mathematics, UTU) introduced key concepts of Probability and Time & Work, while Dr. Meonis A. Pithawala (Professor and Director at the C. G. Bhakta Institute of Biotechnology (CGBIBT) at UKA Tarsadia University) provided insights into Microscopy. Mr. Mohit Mantri, (Ph.D. student at IISER Pune, IIT-JAM, CEEB, CSIR-NET JRF Qualified and an alumnus of the first batch of the GSBTM Crash Course) delved into genome structure, chromatin, and nucleosomes. He explained the different levels of genome organization, DNA packaging within chromatin, and the role of nucleosomes in gene expression regulation. Overall, the first day of the crash course presented a diverse and engaging blend of topics and speakers.





Day 2 (11th December, 2024)

On the second day of the event featured a talk by Dr. Jyoti Singh(Tarsadia Institute of Chemical Science, UTU, Bardoli)on Co-ordination compound. This was followed by a lecture on "Introduction to Recombinant DNA technology" by Dr. Gopal Jee Gopal (CGBIBT, UTU). Dr. Ravi Nayak (Dept. of Botany, MSU)spoke about Genetics, Respiration and Photosynthesis whileDr. Sanket Charola(Dept. of Botany, MSU) talks on Amino Acid, Nucleotide Metabolism.





Day 3 (12th December, 2024)

Day 3 was started Dr. Raktim Mukherjee (Shree P. M. PatelInstitute in Anand), who delivered a lecture about Immunology and followed by Dr. Gopal Jee Gopal who continued the lecture on Recombinant DNA technology. Then Dr. Vineet P Singh (Dept. of Zoology, Govt. Science college, Daman)spoke about Cell Cycle and Regulation. Dr. Paresh Patel(I/C Director of the Department of Chemistry at TICS, Uka Tarsadia University) conclude the session with a lecture on "Acid-Base-Buffer Solution"









Day 4 (13th December, 2024)

Day 4 began with a lecture on "Malfunction of the Immune System" by Dr. Gaurav Shah (VNSG University, Surat), followed by Mr. Ghanshyam M. Suthar's session (Faculty of Proton Institute) on "Units and Measurements." Sheikh Mohammed Atique, (M.Sc. student at Gujarat Biotechnology University and an alumnus of the GSBTM Crash Course (2022–2023), GAT-B, GATE Qualified), then discussed Next-Generation Sequencing. Dr. Amrutlal L. Prajapat (Department of Chemistry, UTU) delivered a lecture on Intellectual Property Rights (IPR), and the session concluded with Dr. Gopal Jee Gopal's talk on "Polymerase Chain Reaction."



Day 5 (14th December, 2024)

Day 5, Dr. N. R. Supriya(CGBIBT, UTU) started the session by delivering lecture on Statistics, Then Dr. Aparna J Tailor (Dr. APJ AbdulKalam College, Silvassa) talked about "Immobilization of Enzymes and

Whole Cells" and Dr. Rajesh Jha (Assistant Professor, PPSU) talked about "Plant Hormone". Dr. Rajamouli Boddula (Tarsadia Institute of Chemical Science, UTU, Bardoli) talked about "Named Reactions of Organic Chemistry". Dr. N. Srivatsha(CGBIBT, UTU) concluded the session talking about how to write CV, Resume and SOPs for entering Good Institutes





Day 6 (15th December, 2024)

Day 6, Dr. Priyanka Chauhan (Asst. Professor, PPSU) talked about "Microbial growth and nutrition", then Dr. Gopal Jee Gopal continued the lecture on "Players of Recombinant DNA Technology". Then Rudrank Moharana (Ph.D. scholar (GATE-XL, BT Qualified), CGBIBT, Uka Tarsadia University) delivered a lecture on "Pedigree Analysis and Hardy Weinberg Principle."Then Dr. Aakanksha Wany(Associate Professor, SOS, PPSU) delivered a lecture on "Cell Signaling and Communication:Autocrine and Paracrine Signaling" and Dr. Ashutosh Kumar (Associate Professor, PSSU, Kosamba, Surat) delivered a lecture on "Bioinformatics: Major Resources and Search Tools."





Day 7 (16th **December, 2024**)

On day 7, Dr. Kinjalben Patel (Department of Physics, UTU) took lecture on "Matrices". Dr. Gopal Jee Gopal took lecture on "Players of Recombinant DNA Technology." Dr. Poonam Mishra (Assistant Professor of Biotechnology, KPGU, Vadodara) took a lecture on "Bioinformatics: general concepts &Introduction," Dr. Pranav Kumar Prabhakar (Deputy Director and Professor, Research and Development Cell, Parul University) took a lecture on "Mutation".





Day 8 (17th December, 2024)

On Day 8, Dr. Anil Kumar Singh (Faculty, Govt. college Vankal)delivered a lecture on "Regulation of Gene Expression", Dr. Jay Bergi(Shri Ram Krishna Institute, Surat) talked about Replication. Dr. Abhitosh Kedia(Department of Physics, UTU)spoke about "Photoelectric effect" and "Forces and Projectile Motion," Dr. Anil Gore (Associate Professor, TICS, UTU) spoke about "Analytical Chemistry". Dr. Gopal Jee Gopal continued lecture on "Players of Recombinant DNA Technology."





Day 9 (18th December, 2024)

Library + Chemistry Department Visit, Dr. Rozy Patel (Director of Dept. of Humanity) talked about Stress management, Dr. Dhruti Amin (CGBIBT, UTU) talked about "Eukaryotic cell Vs Prokaryotic cell", Dr. Smita Parekh (Asst. Professor, Dept. of Microbiology, Mandvi Education Society Science

College) delivered a lectured on "Cell Membranes". Dr. Gopal Jee Gopaldelivered the lecture on "Various Strategies for MolecularCloning".



Day 10 (19th December, 2024)

Day 10 started,Dr. Darshan Marjadi (SRKI Surat) delivered a lecture on "Mass Transfer", Dr. Dhruti Amin (Assistant Professor, CGBIBT, UTU) continued a lecture on "Eukaryotic cell Vs Prokaryotic cell", Dr. Gopal Jee Gopal continued "Various Strategies for MolecularCloning", Dr. Ashish Warghane (GTU) delivered the lecture on "Viruses: The Unsolved Question", Dr. Sanket Ray (Assistant Professor, Naranlala College of Professional and Applied Sciences) spoked about "Centrifugation and HPLC".





Day 11 (20th December, 2024)

Day 11 started with Dr. Jaymin Ray (Department of Physics, UTU) delivered a lecture on "Photon Energy", Dr. Vishva Jain(Department of Physics, UTU) spoke on "Exponential Law of RadioactiveDecay", Dr. Sumit Kumar Panja (Department of Chemistry, UTU) talked on "Thermodynamics: Fundamental and Its Applications", Dr. Mitesh Kumar Dwivedi (CGBIBT, UTU) delivered a lecture on "Antibody structure & function, antibody genes & antibodydiversity" and "Antigens: types, processing and presentation", Dr. Mukul Jain (Assistant Professor, Parul University) delivered the lecture on "CarbohydrateMetabolism-Electron TransportChain".





Day 12 (21th December, 2024)

On day 12 the event started with Rajashekhar Ingalhalli speaking about "Tissue culture", Dr. Zahid Hussain (CGBIBT, UTU) delivered a lecture on "Stem Cells", Dr. B. Rajamouli(Dept. OF Chemistry, UTU) continued his lecture on "Named Reactions of Organic Chemistry", Dr. Hardik Shah (AssociateProfessor in Microbiology Coordinator, BT-CBC, Mehsana Urban Institute of Sciences, Ganpat University talks on Biodiversity.) spoke about "Microbial Taxonomy and Diversity", Dr. Sachin Modha (Dept. OF Chemistry, UTU) delivered the lecture on "Characteristic of Water", Dr. Jaymin Ray (Department of Physics, UTU) concluded the session with a lecture on "Electricity & Magnetism".







Day 13 (22th December, 2023)

Day 13 started with Kinjalben Patel's (Department of Physics, UTU) lecture on "Sets and Functions", Dr. Gopal Jee Gopal delivered a lecture on "Protein- Protein and Protein-DNAInteraction", Dr. Akhilesh Prajapati (GSFC University, Vadodara) delivered a lecture on "Cell Organelles", Dr. Saroj Shekhawat (GSFC University, Vadodara) delivered a lecture on "Enzyme Kinetics", Mr. Kaushal Mehta (L J Institute of Applied Science, Ahmedabad) delivered a lecture on "Carbohydrates, Lipids and Protein".





Day 14 (23th December, 2023)

Day 14, Dr. Gopal Jee Gopal continued the lecture on "Protein- Protein and Protein-DNAInteraction", Prof. G. Naresh Kumar (Ex-Professor, Department of Biochemistry MSU, Baroda) delivered a lecture on "Introduction to Metabolism", Prof. G. Archana (MSU, Baroda) delivered a lecture on "Enzymes: concepts & applications", Dr. Kinjalben Patel (Department of Physics, UTU) delivered a lecture on "Geometry".





Day 15 (24th December, 2023)

On the last day of the crash course, Dr. Rasik Shah (Dept. of Mathematics, UTU) delivered a lecture on "Basic of Algebra", Dr. Gopal Jee Gopal Spoke about "chemistry and mathematics in biology"



Valedictory Ceremony

The valedictory function was happened in auspicious presence of HonourableCEO Dr D. R. Shah, Uka Tarsadia University, Vice-ChancellorDr Yogeshwar P Kosta, Uka Tarsadia University, Dr. Meonis A Pithawala (Director, CGBIBT) and Mitali Dabi. Students share their experiences after participating in this crash course. The ceremony included the distribution of certificate and all the study material is provided to the students for future reference purpose.





ति । तरसाडीया युनिवर्सिटीमां सायन्सना विद्यार्थीओनो वर्डशोप



બારકોલી

બારડોલી પ્રદેશ કેળવણી મંડળ સંચાલિત ઊકા તરસાડીયા યુનિ.ની સી.જી.ભક્તા ઈન્સ્ટિટ્યૂટ ઓફ બાયોટેકનલોજીમાં એન-બીટી-સીબીસી ગુજરાત સ્ટેટબાયોટેકનોલોજી મિશન દ્વારા ક્રેશ વર્કશોપ યોજાયો હતો. ડો.ગોપાલે સફળ આયોજન કર્યુ. ગુજરાતની ૨૩ જેટલી યુનિ, કોલેજોના ૧૦૦ વિદ્યાર્થીઓ ૦ જાણીતા તજજ્ઞોના વિચારપ્રેરક પ્રવચનોનો લાભ લીધો હતો. આ વિદ્યાર્થીઓ

પરીક્ષાની ફી પણ ગુજરાત સરકાર દ્વારા ઉઠાવવામાં આવનાર છે. ડો. મિતાલી દાબીએ જીએસબીટીએમ દ્વારા પુરી પાડવામાંઆવતી ભાવિ તકો માટે માર્ગદર્શન આપ્યું હતું. આ કાર્યક્રમને સફળ બનાવવામાં ઊકા તરસાડીયા યુનિ.ના ચીફ એક્ઝિક્યુટિવ ઓફિસર ડો.દિનેશ શાહ, વાઈસ ચાનસલેર ડો.યોગેશ્વર કોસ્ટા અને ઈન્સ્ટિટ્યૂટ ડાયરેક્ટર ડો.મિઓનિસ પીઠાવાલાનો મહત્વપૂર્ણ સાથ અને માર્ગદર્શન મળ્યું છે.



C. G. Bhakta Institute of Biotechnology Uka Tarsadia University



Maliba campus, Mahua Road, Tarsadi, Bardoli Dist. Surat – 394350, Gujarat

CAPACITY BUILDING CELL OF GUJARAT STATE BIOTECHNOLOGY MISSION - UKA TARSADIA UNIVERSITY



CONGRATULATIONS FOR QUALIFYING IIT-JAM 2025



DHYEY BHALODIA



SINGH SUMITKUMAR



NIRBHAY SHARMA



AISHWARYA SHIRAHATTI



SAKSHI SHAH

ALL ARE PARTICIPANTS OF GSBTM SPONSORED "15 DAYS CRASH WORKSHOP", ORGANIZED AT UKA TARSADIA UNIVERSITY (DEC. 2024), COORDINATED BY DR. GOPAL JEE GOPAL



C. G. Bhakta Institute of Biotechnology



Uka Tarsadia University

CAPACITY BUILDING CELL OF GUJARAT STATE BIOTECHNOLOGY MISSION - UKA TARSADIA UNIVERSITY



CONGRATULATIONS FOR QUALIFYING GATE 2025



AISHWARYA SHIRAHATTI, QUALIFIED GATE- BT



SAKSHI SHAH QUALIFIED GATE- BT,XL



HET MRUGESH MODI QUALIFIED GATE-BT



BHADAURIYA AMITA S. QUALIFIED GATE- BT

ALL ARE PARTICIPANTS OF GSBTM SPONSORED "15 DAYS CRASH WORKSHOP", ORGANIZED AT UKA TARSADIA UNIVERSITY (DEC. 2024), COORDINATED BY DR. GOPAL JEE GOPAL

Gopal Jee gopal

Co Ordinator



Monday

Director Director C. G. Bhakta Institute Of Biotechnology UKA TARSADIA UNIVERSITY Bardoli- Mahuva Road, Tarsadi-394350 Dist. Surat (Gujarat) INDIA