



**RAYAT SHIKSHAN SANSTHA'S
MAHATMA PHULE ARTS, SCIENCE AND COMMERCE COLLEGE, PANVEL.**

**DEPARTMENT OF CHEMISTRY
DBT STAR COLLEGE SCHEME**

2024-25

**PHOTO-GALLERY OF THE ACTIVITIES
CONDUCTED UNDER DBT STAR COLLEGE
SCHEME IN THE ACADEMIC YEAR 2024-25**

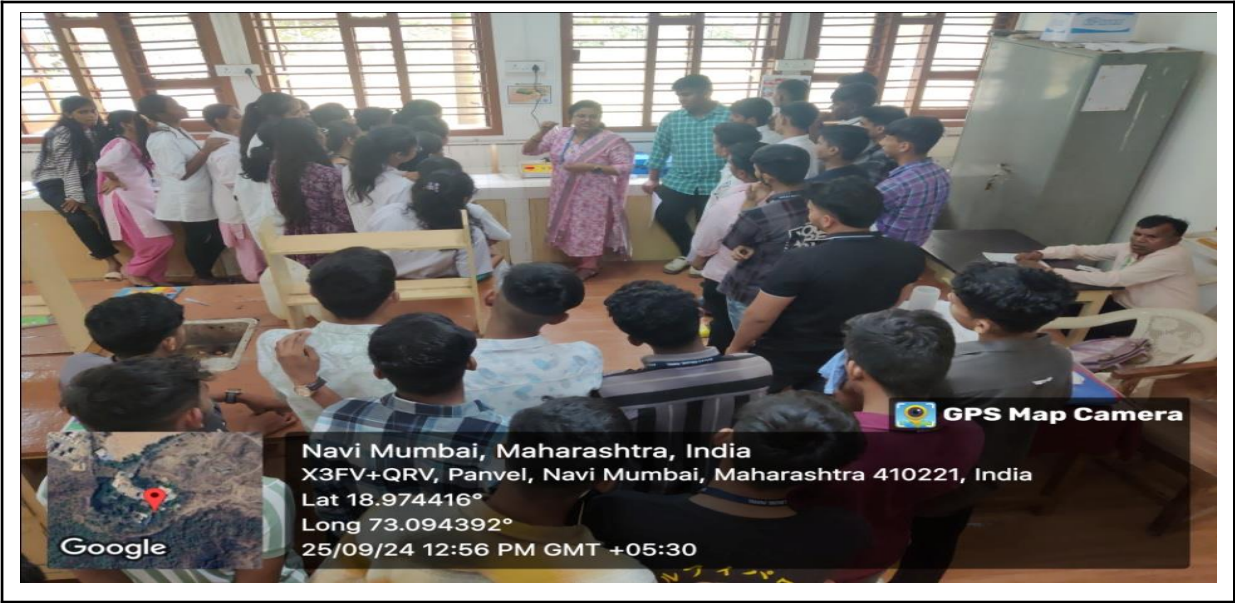


**PHOTO-GALLERY OF NEW
EXPERIMENTS CONDUCTED UNDER
DBT STAR COLLEGE SCHEME IN THE
ACADEMIC YEAR 2024-25**

Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
F.Y.B.Sc	Rapid detection of chemical adulterants of milk	Colorimeter, Weighing balance	23/09/2024 to 30/09/2024	233



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
F.Y.B.Sc	Physicochemical study of water sample of nearby water bodies	Nephelometer / turbidimeter, Weighing balance	23/09/2024 to 30/09/2024	235



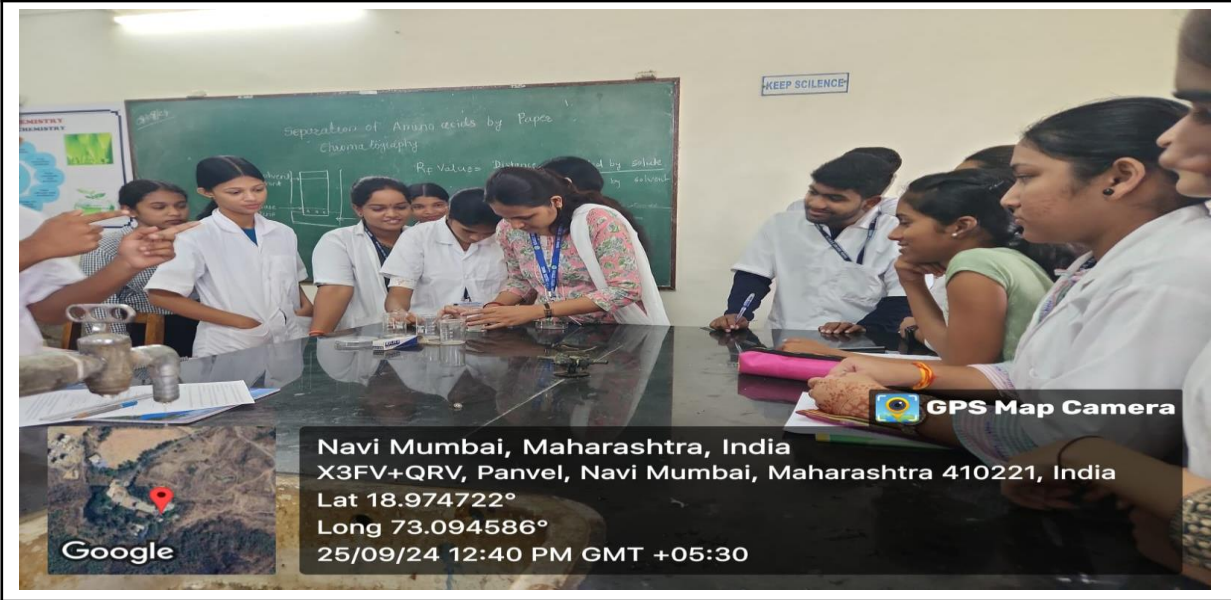
Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
F.Y.B.Sc	Preparation of buffer of desired pH and molarity and measurement of pH.	Colorimeter, Weighing balance	23/09/2024 to 30/09/2024	237



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
F.Y.B.Sc	Measurement of Pka value of amino acids	Colorimeter, Weighing balance	23/09/2024 to 30/09/2024	239



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
F.Y.B.Sc	Separation of amino acid mixture by paper chromatography	Colorimeter, Weighing balance	23/09/2024 to 30/09/2024	234



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
S.Y.B.Sc	Green synthesis of diversely functionalized oxindole	Weighing balance	23/09/2024 to 27/09/2024	184



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
S.Y.B.Sc	Analysis of micronutrients of soil samples	Flame Photometer	23/09/2024 to 27/09/2024	163



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
S.Y.B.Sc	Preparation of sanitizer, soap, handwash and perfumes	Rotary Shaker	23/09/2024 to 27/09/2024	167



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
S.Y.B.Sc	Estimation of sugar by Folin-Wu Method	Colorimeter spectrophotometer	23/09/2024 to 27/09/2024	171



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
S.Y.B.Sc	pH Metry: Acid base titration curves	pH Meter	23/09/2024 to 27/09/2024	165



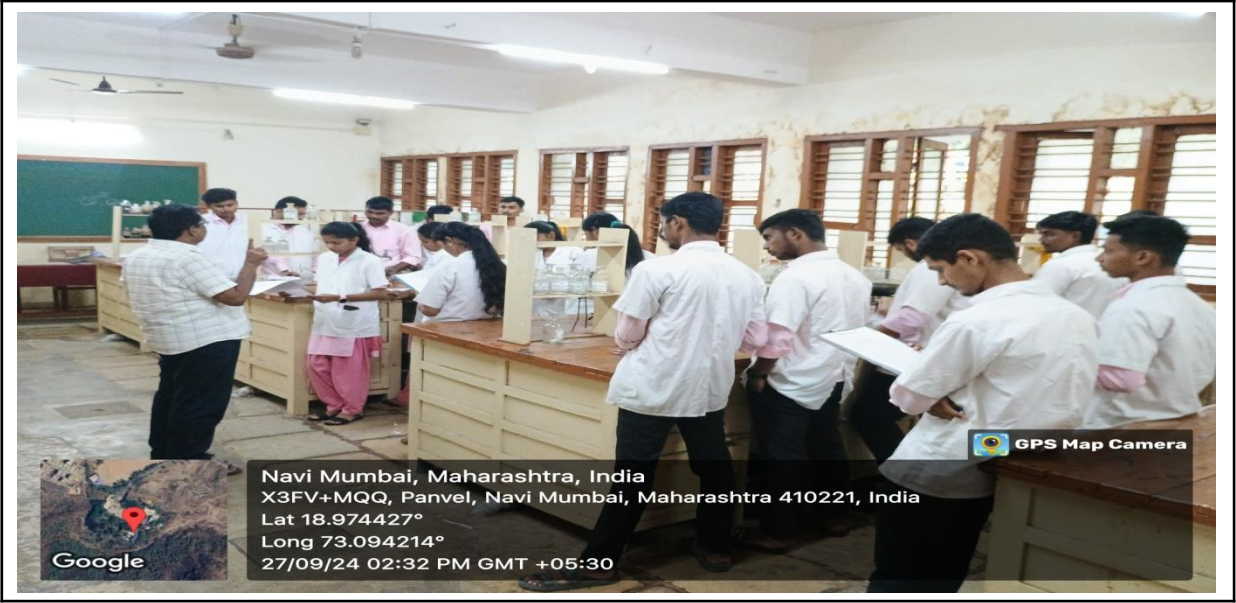
Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
T.Y.B.Sc	Synthesis and characterization of ZnO nanomaterial	Autoclave, Oven, Magnetic stirrer	23/09/2024 to 30/09/2024	103



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
T.Y.B.Sc	Heavy metal analysis of industrial wastewater Cr(VI)	UV-Visible spectrophotometer	23/09/2024 to 30/09/2024	107



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
T.Y.B.Sc	Synthesis of mixed ligand complex & determination of its magnetic susceptibility	pH meter	23/09/2024 to 30/09/2024	105



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
T.Y.B.Sc	Extraction of organic compounds from plants present in college campus	Rotary Shaker, Mortal Pestal, Electric water bath.	23/09/2024 to 30/09/2024	104



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
T.Y.B.Sc	Estimation of protein by Biuret method	Colourimeter, thermostat	23/09/2024 to 30/09/2024	106



Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
T.Y.B.Sc	Estimation of sugar by DNSA method	Spectrophotometer, Weighing Balance	23/09/2024 to 30/09/2024	108

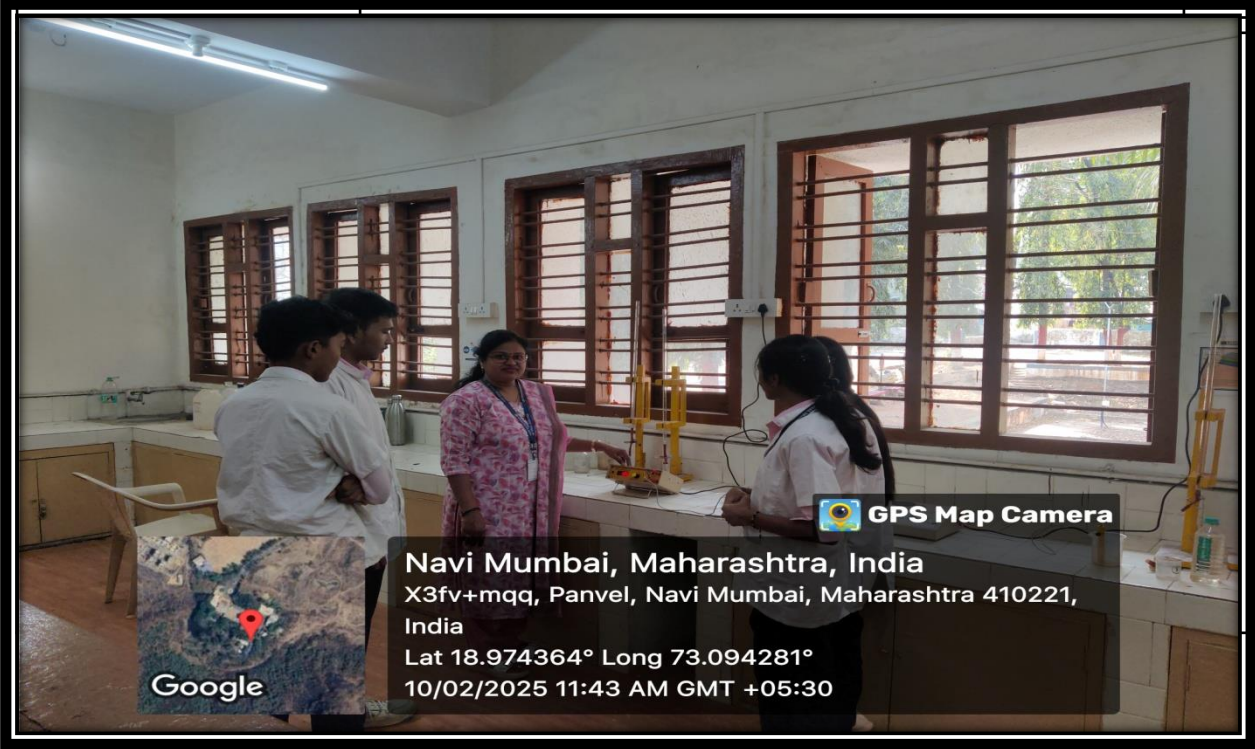


Class	Title of Experiment	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
T.Y.B.Sc	Estimation of amino acid by Ninhydrin method	Spectrophotometer, Weighing Balance	23/09/2024 to 30/09/2024	102



**PHOTO-GALLERY OF MINOR
RESEARCH PROJECTS CONDUCTED
UNDER DBT STAR COLLEGE SCHEME
IN THE ACADEMIC YEAR 2024-25**

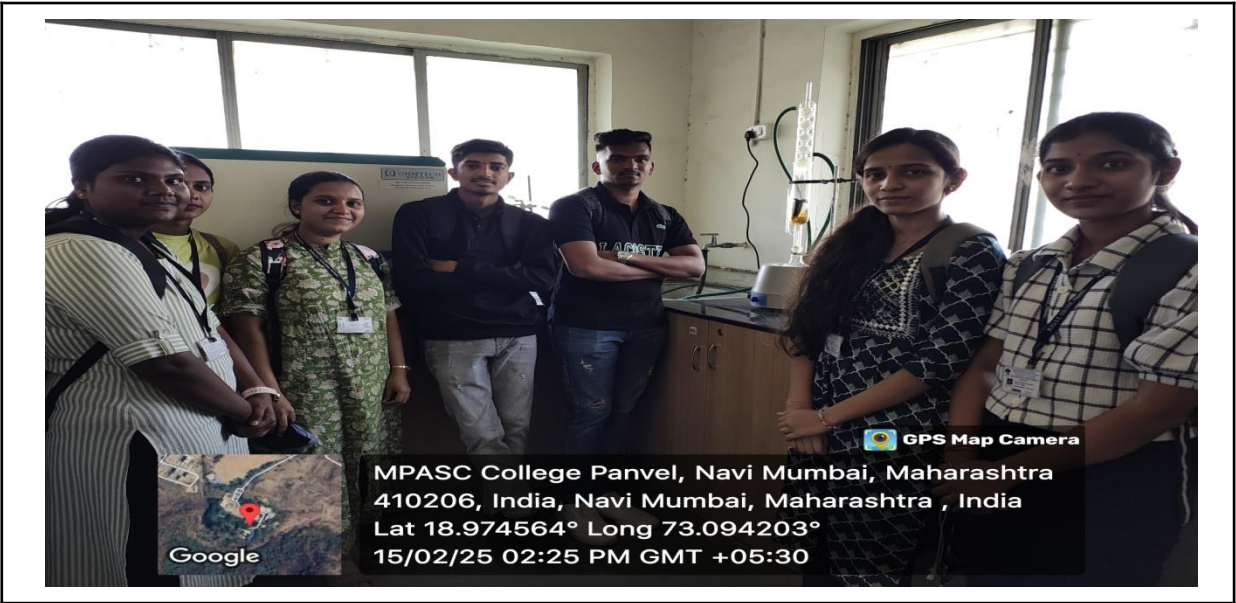
Class	Title of Minor Research Project	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
F.Y.B.Sc	Analysis of Water Quality Variables from Water Bodies of Navi Mumbai	Turbidimeter, pH meter, Conductometer, Oven, Water bath	11/12/202 to 31/03/2025	151



Class	Title of Minor Research Project	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
S.Y.B.Sc	Green Synthesis of Heterocyclic scaffolds for their biological evaluation	Magnetic Stirrer with hot plate, Digital balance, U.V. Visible Cabinet, Oven, Rotary Evaporator with vacuum pump.	11/12/2024 to 31/03/2025	40



Class	Title of Minor Research Project	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
S.Y.B.Sc	Estimation of various chemical constituents of regional seasonal fruits	Soxhlet Apparatus, Magnetic Stirrer with hot plate, Digital balance	11/12/202 to 31/03/2025	23



Class	Title of Minor Research Project	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
T.Y.B.Sc	Synthesis & Characterization of nano- materials from single precursor	Stainless Steel Autoclave, Weighing balance	03/02/2025 to 04/02/2025	44



Class	Title of Minor Research Project	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
T.Y.B.Sc	Extraction of chemical constituents from Medicinal Plants	Soxhlet Apparatus, Magnetic Stirrer with hot plate, Digital balance	11/12/202 to 31/03/2025	47



Class	Title of Minor Research Project	Name of Equipment/ Instrument Used	Dates of Conduct	Beneficiaries
T.Y.B.Sc	Preparation, characterization and antimicrobial activity of mixed ligand complexes	Magnetic Stirrer with hot plate, Digital balance, Oven, Suction pump,	11/12/202 to 31/03/2025	22



**PHOTO-GALLERY OF FACULTY
IMPROVEMENT/TRAINING
PROGRAMMES ORGANIZED UNDER
DBT STAR COLLEGE SCHEME IN THE
ACADEMIC YEAR 2024-25**

Title of Programme	Dates
Faculty Improvement Program on Intellectual Property Rights (IPR)	05/12/2024



Title of Programme	Dates
Lab Staff Improvement Program on “Ethical Handling of Hazardous Chemicals”	11/01/2025

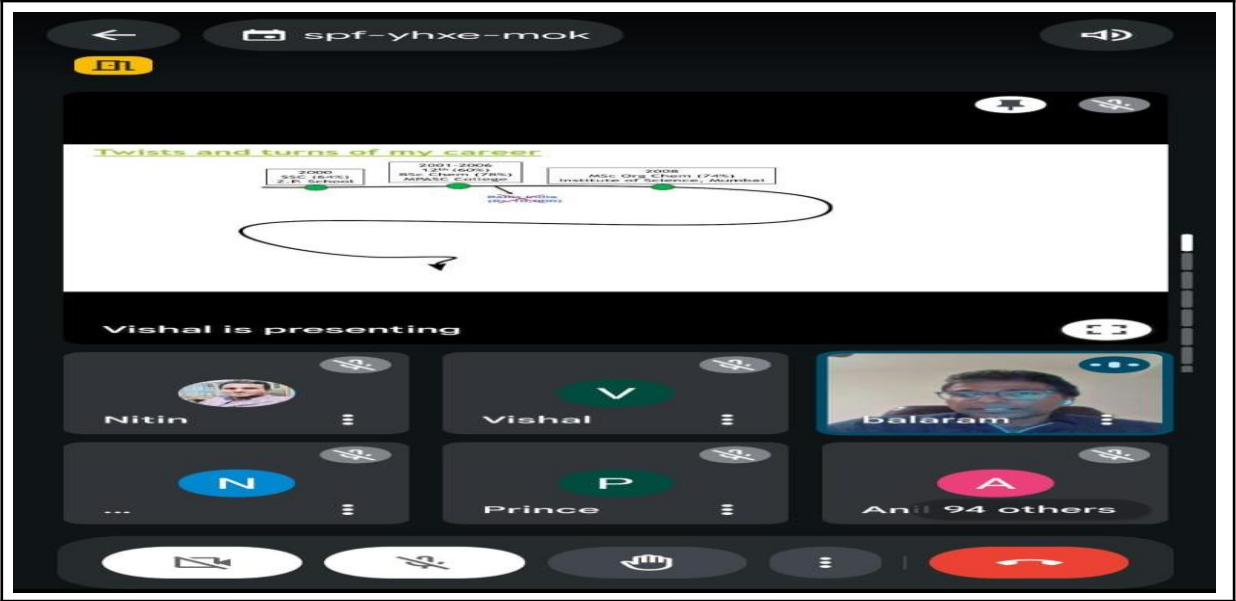
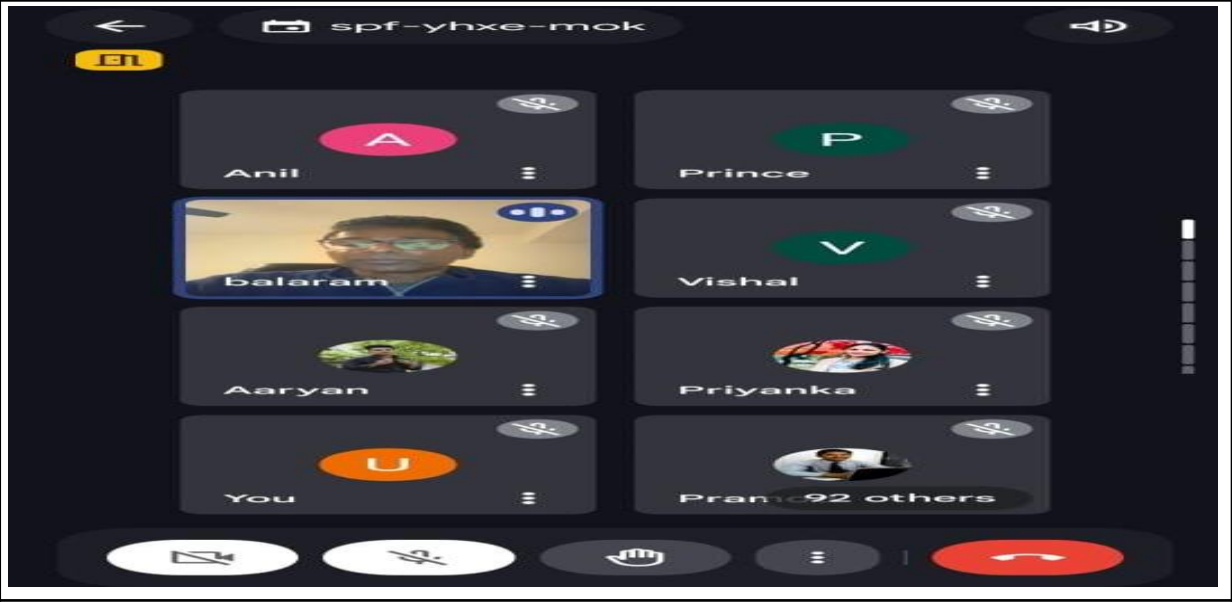


**PHOTO-GALLERY OF
INVITED/EXPERT/GUEST
LECTURES ORGANIZED UNDER DBT
STAR COLLEGE SCHEME IN THE
ACADEMIC YEAR 2024-25**

Title of Activity	Date	Resource Person/Chief Guest	Beneficiaries
Guest lecture on “Higher Education Opportunities in Chemistry”	312/08/2024	Dr. Suresh D. Pawar (Professor, Department of Chemistry, University of Mumbai)	124



Title of Activity	Date	Resource Person/Chief Guest	Beneficiaries
Guest lecture on Career Opportunities and Industrial Insights for Chemistry Students	11/01/2025	Dr. Balaram Takale (Senior Scientist, Chemical Development, Neurocrine Biosciences, San Diego, California, USA)	100

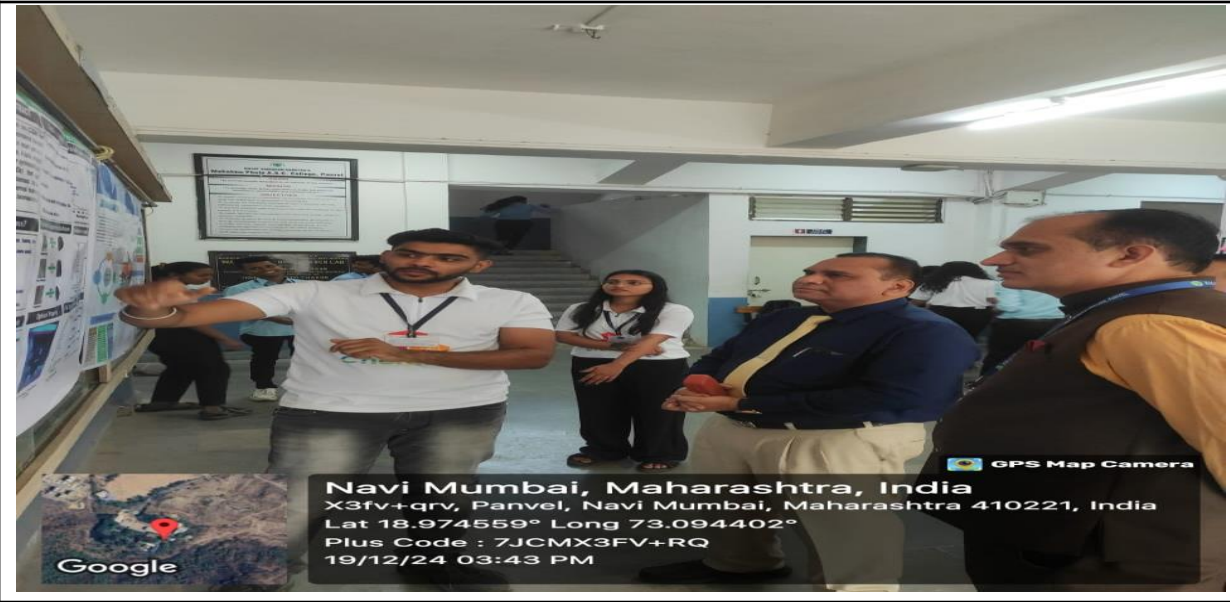


Title of Activity	Date	Resource Person/Chief Guest	Beneficiaries
Guest lecture on Career Opportunities in Chemistry	11/01/2025	Dr. Raju S.Thombal (Deputy Manager, B.A.S.F.,Navi Mumbai,Maharashtra)	79



**PHOTO-GALLERY OF INTER
DISCIPLINARY ACTIVITIES
ORGANIZED UNDER DBT STAR
COLLEGE SCHEME IN THE
ACADEMIC YEAR 2024-25**

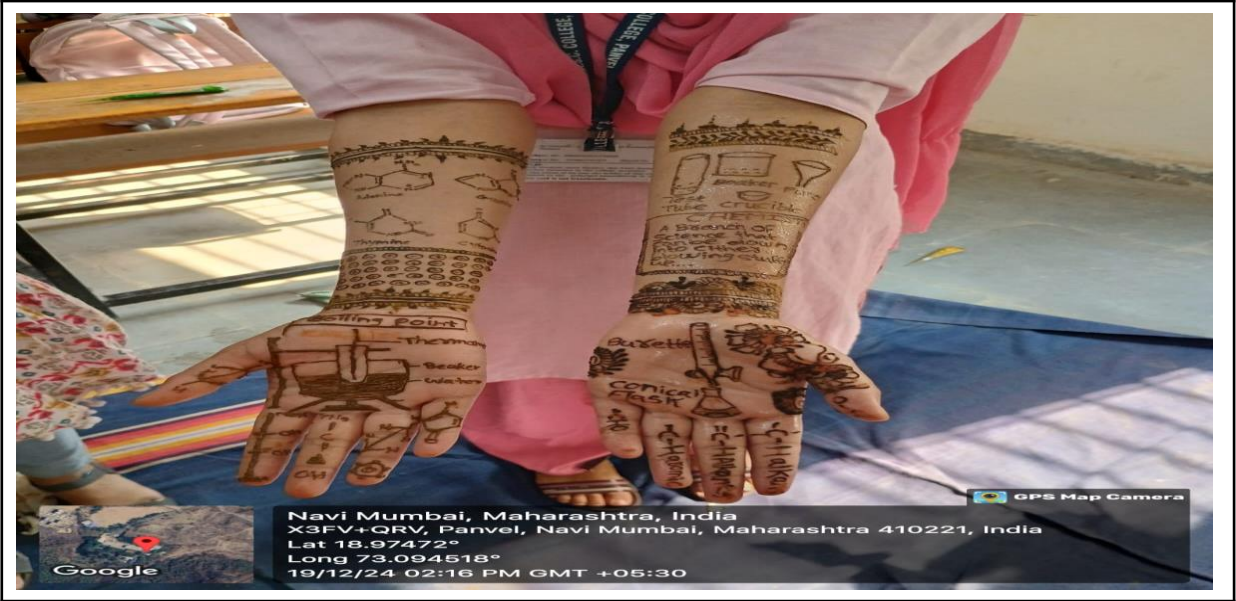
Title of Activity	Date	Resource Person/Chief Guest	Beneficiaries
Chem-Poster Competition	19/12/2024	Dr. U. N. Dhaigude	43



Title of Activity	Date	Resource Person/Chief Guest	Beneficiaries
Chem Rangoli	19/12/2024	Dr. R. K. Kadu	69



Title of Activity	Date	Resource Person/Chief Guest	Beneficiaries
Chem Mehndi	19/12/2024	Ms. R. A. Gatade	37



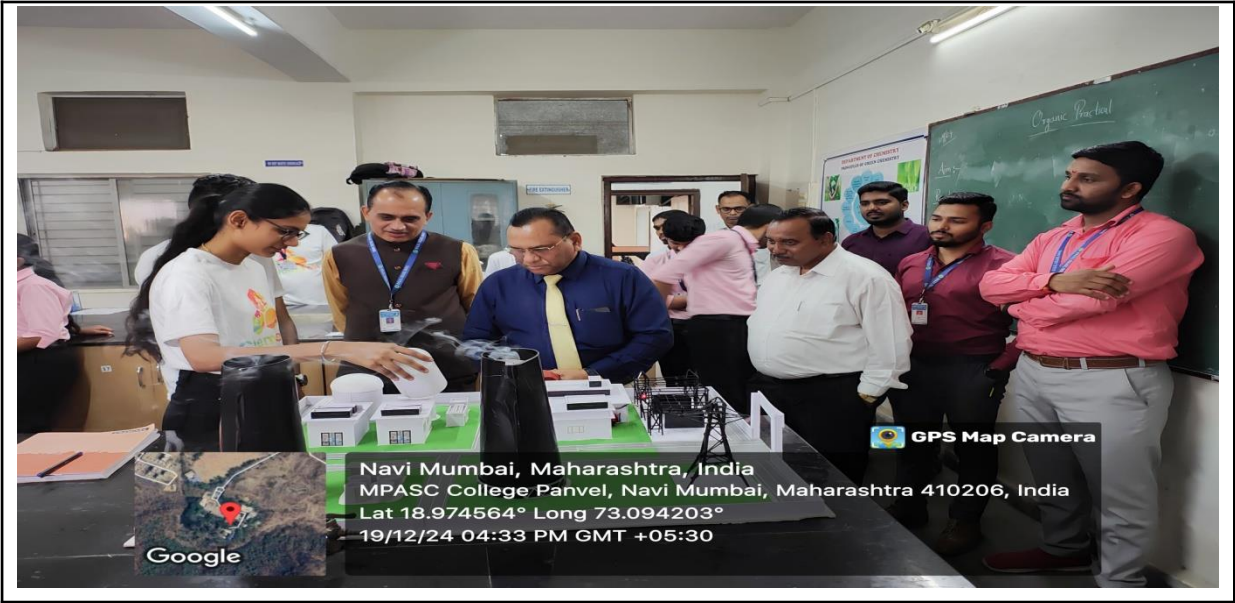
Title of Activity	Date	Resource Person/Chief Guest	Beneficiaries
PPT Competition	20/12/2024	Mr. D. N. Kokil	18



Title of Activity	Date	Resource Person/Chief Guest	Beneficiaries
Chem-Quiz Competition	20/12/2024	Dr. N. A. Sasane	59



Title of Activity	Date	Resource Person/Chief Guest	Beneficiaries
Chemistry Model Competition	19/12/2024	Mr. V. A. Naik	49

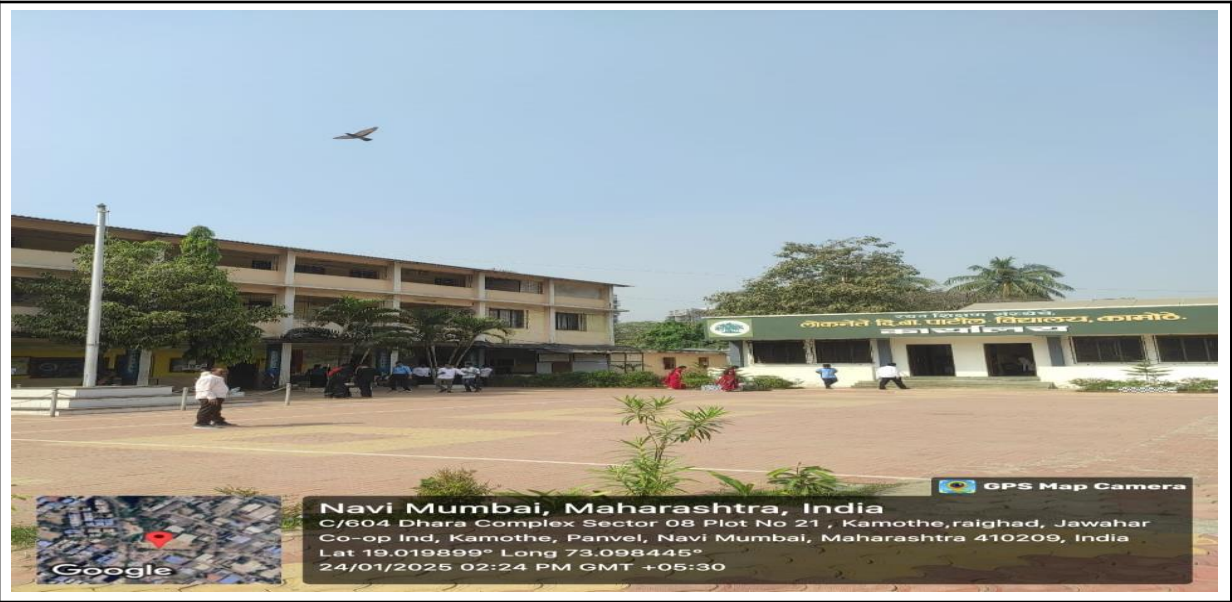


**PHOTO-GALLERY OF OUTREACH
ACTIVITIES ORGANIZED UNDER
DBT STAR COLLEGE SCHEME IN THE
ACADEMIC YEAR 2024-25**

Title of Outreach Activity	Place	Date	Beneficiaries
Igniting passion for Chemistry	Mahatma Phule Arts, Science and Commerce College Panvel, Dist.Raigad	29/01/2025	115



Title of Outreach Activity	Place	Date	Beneficiaries
Analysis of Drinking Water Samples of school nearby Panvel	Loknete D. B.Patil Vidyalaya, Kamothe, Tal-Panvel	29/01/2025	350



**STUDY TOURS/INDUSTRIAL VISIT,
FIELD VISITS ORGANIZED UNDER DBT
STAR COLLEGE SCHEME IN THE
ACADEMIC YEAR 2024-25**

Title of Outreach Activity	Place	Date	Beneficiaries
Study Tour/Field Visit	Western Regional Instrumentation Center (WRIC) Mumbai and Department of Chemistry University of Mumbai	05/12/2024	35



Title of Outreach Activity	Place	Date	Beneficiaries
Study Tour/Field Visit	Srikem Laboratories Pvt.Ltd and Chemicea Pharmaceuticals,Taloja MIDC, Navi Mumbai	07/12/2024	42



Title of Outreach Activity	Place	Date	Beneficiaries
Study Tour/Field Visit	Centre for Invention, Innovation and Incubation, Kharghar, Navi Mumbai	11/12/2024	22





**THANK
YOU**



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Star College Scheme

