

(Empowered Autonomous)
Basantsing Institute of Science & J. T. Lalvani College of Commerce

and Sheila Gopal Raheja College of Management.



# **Department of Chemistry**

# MASTER'S IN SCIENCE (M.Sc.) IN CHEMISTRY



PHYSICAL CHEMISTRY

**ORGANIC CHEMISTRY** 

**INORGANIC CHEMISTRY** 

ANALYTICAL CHEMISTRY



# ABOUT THE PROGRAM

The M.Sc. Chemistry program at Jai Hind College offers a comprehensive, two-year credit-based curriculum focused on Physical, Inorganic, Organic, and Analytical Chemistry. Students gain in-depth theoretical knowledge and hands-on experience, preparing them for careers in research, academia, and industry.



## **PROGRAM OBJECTIVES**

Comprehensive Chemical Expertise and Research Excellence Develop advanced knowledge across all major branches of chemistry, along with strong research capabilities, laboratory proficiency, safety practices, and analytical instrumentation skills enabling graduates to conduct innovative, independent research with a focus on sustainability and materials development.

Professional Advancement, Innovation, and Leadership Foster skills in chemical informatics, entrepreneurship, education, and intellectual property management, while supporting lifelong learning, career readiness, and leadership in both academic and industrial chemical sciences.



### **COURSE FEATURES**

Active classroom engagement

**Continuous Internal Assessment** 

**Credits for Internships** 

**Credits for MOOCs** 

**Support for** NET/SET/GATE/PET

**Engagement with** research projects

Introduction to advanced instrumentation

**On-Campus Placements** 

#### **EXPERTISE REFINEMENT**











#### **INTERNSHIPS**











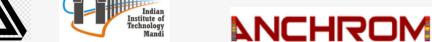














# M.Sc. CURRICULUM Course Title

SEM 1	SEM 2
Physical Chemistry-I	Physical Chemistry-II
Physical Chemistry Practical-I	Physical Chemistry Practical-II
Inorganic Chemistry-I	Inorganic Chemistry-II
Inorganic Chemistry Practical-I	Inorganic Chemistry Practical-II
Organic Chemistry-I	Organic Chemistry-II
Organic Chemistry Practical-I	Organic Chemistry Practical-II
MOOC-1	MOOC-2
Elective 1: Spectroscopy and Chromatography	Elective 1: Spectroscopy and Chromatography
Elective 2: Introduction to Nanomaterials	Elective 2: Introduction to Nanomaterials
Elective 3: Electrochemistry and Thermal Methods	Elective 3: Electrochemistry and Thermal Methods
Elective Practical: Analytical Chemistry I	Elective Practical: Analytical Chemistry II
Research Methodology	Internship

#### RESEARCH FACILITIES AT CIF



Presence of various advanced instruments at the Central Instrumentation Facility (CIF) enables students and professors alike to contribute greatly to educational, research, and collaborative activities.

















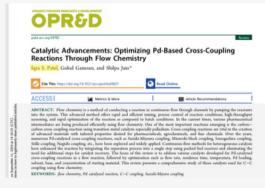






#### SCHOLARLY CONTRIBUTIONS

#### M.Sc. Student Publications in Scopus-Listed Journals





Selective Detection of Cu (II) ionsin Neat Aqueous Solution - An Innovative Fluorescent Chemosensor

#### **Current Nanomaterials**

ZnO Nanostructure Based Gas Sensors: Critical Review Based On Their Synthesis And Morphology Towards Various Oxidizing And Reducing Gases.

Affiliation

Department of Chemistry, Jai Hind College, University of Mumbai, Churchgate, Mumbai-400020, In

Nanotechnology has enabled sensors to detect and sense a very small amount of chemical vapors. Sensors play a major role in our daily life. The use of sensors has made human life easy. One such type of sensor is the Gas sensor made up of Semiconducting metal scikes. These sensors have their own unique features which help in the easy monitoring of toxic gases. Out of all the metal oxide

characteristics of bentonite of Jhilmili Region towards radionuclides Alshwanya Kar<sup>an</sup>, Bhakti Mane<sup>e</sup>, Subbiah. Jeyakumar<sup>an</sup>, Reshmi. Parayil<sup>a</sup>, R.K. Bajpai<sup>ha</sup>, and Manoj.K. Saxena<sup>a</sup>



Separation and determination of alkali and alkaline earth metals in soils by ion chromatography

<del>Bushra Shaikir Shahid'</del>, P. Sri Renganathan<sup>ı</sup>, Vaibhavi V. Raut', Aishwarya Soumitra Kar'd, Sadhan Bijoy Deb', Subbiah Jeyakumar'd, and Manoj.K. Saxenar

#### STUDENT ACHIEVEMENTS

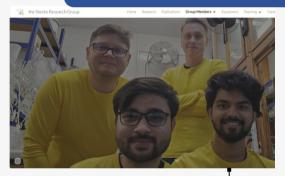


M.Sc. graduates have secured placements in Research, Industry, Academia, and Ph.D. programs.

#### **Placements:**

- Anagha Anilkumar secured a position at HP Green R&D Center.
- · Aashish Lad joined BTRA, Ghatkopar, Mumbai.
- Sayali Kate became an apprentice at BPCL.
- Monil Shah started his career at Rawji Fine Fragrances Pvt. Ltd.
- Monish Jatakiya began his teaching journey at Sardar Vallabhbhai
   Patel School, Mira Road.

#### Ph.D. Pursuits at Prestigious Institutions:



Aniket Chaudhari – Polish Academy of Sciences, Poland





Shreyas Dindorkar – IIT Gandhinagar (GATE AIR: 2182)

# **Admission Eligibility**



The B.Sc. degree examination of this University or any other recognized university with a **minimum of 46 credits** (or its equivalent) in the subject which the student wishes to pursue for the M.Sc. degree course by papers.



Admissions will be based on merit (Sem 5 & 6 of B.Sc.)

#### **Contact Information**



**Email** 

admissions.science@jaihindcollege.edu.in



**Address** 

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#### **APPLY NOW**



Click here for Admission Details