

INSTRUMENTATION AND ANALYTICAL EQUIPMENT

● NUCLEAR MAGNETIC RESONANCE (NMR) SPECTROSCOPY

Modern NMR spectroscopy facilities delivering high-resolution (400MHz) NMR structural elucidation and comprehensive molecular characterization essential for advanced scientific research.

- Structural confirmation
- Multinuclear spectroscopy
- Organic and medicinal chemistry
- Natural product characterization
- Molecular interaction studies



● FLASH CHROMATOGRAPHY

State-of-the-art flash chromatography systems enabling rapid purification and isolation of synthetic compounds, natural products, and pharmaceutical intermediates with exceptional reproducibility and efficiency.

- Synthetic organic chemistry
- Natural product isolation
- Drug discovery research
- Reaction optimization
- Compound purification



● FT-IR SPECTROSCOPY

Advanced FT-IR systems providing rapid and accurate identification of chemical structures, functional groups, and intermolecular interactions.

- Material characterization
- Polymer analysis
- Organic compound identification
- Pharmaceutical investigations



A HUB OF SCIENTIFIC EXCELLENCE:

The Department of Chemistry at the University of Azad Jammu & Kashmir is a dynamic, research-driven centre committed to transforming chemistry for science, industry, and society through innovation, analytical excellence, and interdisciplinary research.

Equipped with advanced instrumentation and state-of-the-art analytical laboratories, the department provides a modern platform for molecular discovery, chemical characterization, and technology-driven scientific investigation. By bridging academia, industry, and emerging technologies, the department fosters impactful research, industrial collaboration, and scientific solutions addressing contemporary global challenges.

WHY COLLABORATE WITH US ?

OUR PILLARS OF EXCELLENCE:

Advanced Research Infrastructure

Modern analytical and research laboratories equipped with advanced purification, characterization, and molecular analysis technologies.

Multidisciplinary Scientific Expertise

Extensive expertise across Organic Chemistry, Materials Science, Biochemistry, Nanosciences, Spectroscopy, and Analytical Chemistry.

Industry-Focused Analytical Solutions

Delivering precise analytical and research support for pharmaceuticals, healthcare, food safety, environmental sciences, and advanced materials.

Strategic Research Collaborations

Strengthening significant partnerships with academia, industry, governmental organizations, and scientific institutions.

Transforming Chemistry for Science, Industry and Society



INDUSTRIAL INNOVATION PRECISION ANALYTICS ADVANCED RESEARCH



Department of Chemistry

The University of Azad Jammu and Kashmir,
Muzaffarabad

DISCOVER ANALYZE INNOVATE TRANSFORM



CONTACT US

Department of Chemistry

The University of Azad Jammu & Kashmir (UJK)

Muzaffarabad, Azad Jammu & Kashmir, Pakistan

Website: The University of Azad Jammu & Kashmir

Phone: +92-5822-962315

Email: chemistry@uajk.edu.pk

WHO CAN COLLABORATE WITH US?

To build strategic partnerships across science and industry, the Department of Chemistry welcomes collaborative research, advanced analytical projects, industrial research initiatives, and scientific consultancy opportunities with:

- Pharmaceutical & Healthcare Industries
- Food & Beverage Sector
- Agricultural & Environmental Organizations
- Clinical & Biomedical Research Centers
- Oil, Gas & Petrochemical Industries
- Textile & Chemical Industries
- Academics & Research Institutions
- Governmental & Regulatory Organizations
- Biotechnology & Material Science Companies
- National & International Research Agencies

ADVANCING CHEMICAL SCIENCES FOR A SUSTAINABLE, TECHNOLOGY-DRIVEN FUTURE

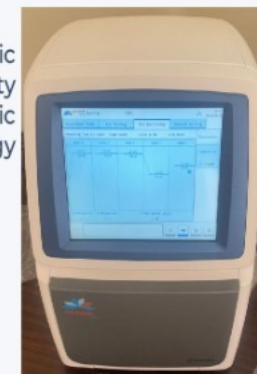
SHAPING THE FUTURE OF CHEMICAL SCIENCES

To emerge as a globally distinguished center for chemical sciences recognized for pioneering research, advanced analytical capabilities, scientific innovation, and transformative contributions to industry, healthcare, sustainability, and technological advancement

● RT - PCR & MOLECULAR ANALYSIS

Advanced molecular diagnostic platforms supporting high-sensitivity biochemical investigations, genetic analysis, and molecular biology research.

- Gene expression analysis
- Molecular diagnostics
- Agricultural biotechnology
- Biomedical investigations
- Pathogen detection



● ELISA & BIOCHEMICAL ANALYTICS

Modern immunological and biochemical systems supporting advanced diagnostic, toxicological, and biomedical research applications.

- Biomarker detection
- Clinical diagnostics
- Protein quantification
- Toxicological investigations
- Biomedical screening



● ELECTROCHEMICAL & CYCLIC VOLTAMMETRY SYSTEMS

Sophisticated electrochemical platforms enabling high-precision investigations in redox chemistry, energy systems, nanomaterials, and corrosion sciences.

- Energy storage materials
- Electrochemical sensors
- Corrosion studies
- Nanomaterial characterization

