

# **Interdepartmental Research Activities and Standard Operating Procedure (SOP)**

## **Research Facilities & Services**

The UOG offers research facilities in the following areas:

### **FTIR Analysis** (Approximately 10,000 samples analyzed in the last four years)

- The FTIR analysis of the following departments of University of Gujrat are being carried out.
  - Physics
  - Chemistry
  - Botany
  - Zoology
  - Chemical Engineering
  - Biochemistry
  - Biotechnology
  - Environmental Science

### **Bioassays, Enzyme Inhibition Assays, Molecular Docking Studies, Statistical and Computational Analysis (R Language, Molecular Dynamics Simulations, etc.)**

- These analysis of the following departments of University of Gujrat are being carried out.
  - Physics
  - Chemistry
  - Botany
  - Zoology
  - Biochemistry
  - Biotechnology
- Collaborating institutions outside the University:
  - Quaid-i-Azam University, Islamabad
  - Karachi University
  - Allama Iqbal Open University
  - GCU Faisalabad
  - GCU Lahore
  - NARC, Islamabad

- Punjab University

## **Research Collaboration Guidelines**

### **Request & Approval Process**

1. Interested researchers must submit a research request using the prescribed **Research Performa**.
2. The request will be reviewed by the departmental research committee.
3. Upon approval, an official collaboration agreement will be signed.

### **Undertaking & Authorship Rights**

1. All students and researchers must submit a **Research Undertaking Form** before initiating research.
2. Authorship rights for any resulting publications must adhere to ethical guidelines and be discussed prior to research initiation.

### **Research Compliance & Ethical Considerations**

1. Researchers must adhere to lab safety protocols and ethical guidelines.
2. Any biological or chemical samples must be handled as per biosafety regulations.
3. Data confidentiality and intellectual property rights must be respected.

### **Research Collaboration with External Institutions**

1. Students conducting research at external institutions (e.g., Quaid-i-Azam University, NARC, Punjab University) must obtain prior approval from the Department.
2. A research progress report must be submitted periodically.
3. Any publication arising from joint research must acknowledge all collaborating institutions.

### **Sample Submission & Analysis Process**

#### **For FTIR Analysis**

- Samples must be submitted using the **FTIR Analysis Performa**.
- The sample analysis report will be provided within a specified timeframe in hard as well as soft form.

#### **For Bioassays & Enzyme Inhibition Assays**

- A research proposal must be submitted before commencing analysis.
- Results will be shared upon completion, in form of images and raw data.

#### **For Molecular Docking & Computational Studies**

- Researchers must provide details of molecular structures and target proteins.
- The department will facilitate the analysis and assist in interpretation.

**Reporting & Documentation**

1. All research data must be properly documented and stored as per departmental guidelines.
2. Researchers must submit a final research report upon project completion.
3. Publications must acknowledge departmental contributions and funding sources, if applicable.

**Conclusion**

This SOP ensures a streamlined process for interdepartmental and interinstitutional research collaborations while maintaining high ethical, safety, and academic standards. Compliance with this SOP is mandatory for all researchers utilizing departmental resources.