

DEPARTMENT OF BIOCHEMISTRY

Govt. Nagarjuna PG College of Science, Raipur (C.G.)

COLLABORATION & ACADEMIC LINKAGES REPORT

The Department promotes academic and research linkages with external academic and research communities to enrich student learning, strengthen research exposure and facilitate interaction with experts beyond the institution. The collaboration section records documented external academic engagement and provides space for future formal collaborations, MoUs, expert interactions, joint activities and student/research linkages.

01. COLLABORATION / LINKAGE AT A GLANCE

Partner / Institution	Type of Linkage	Year	Activity / Contribution	Outcome
IIT Delhi	Academic / Research Resource Linkage	2023-24, 2024-25, 2025-26	Teaching Assistant programme; regular online practical and guidance sessions; advanced laboratory and research mentoring	Enhanced practical competence, research exposure, Institute exposure analytical ability and confidence
Indira Gandhi Krishi Vishwavidyalaya (IGKV), Raipur	Student Project / Research Exposure	2024-25	M.Sc. dissertation/project work	External research exposure and hands-on project experience
University of Hyderabad	Student Project / Research Exposure	2025-26	M.Sc. dissertation/project work	External research exposure and hands-on project experience
CG COST	Student Project / Research Exposure	2025-26	M.Sc. dissertation/project work	External research exposure and hands-on project experience

02. IIT DELHI – ACADEMIC & RESEARCH LINKAGE

Nature of Linkage: External academic resource / Teaching Assistant support

Academic Year: 2023-24, 2024-25, 2025-26

Resource Person: Mr. Abhishek Sahu, Prime Minister Research Fellow (PMRF), IIT Delhi

Mode: Online academic and practical interaction through Google Meet; sessions conducted regularly on Saturdays.

Major Collaborative Components: Live laboratory demonstrations; advanced instrumentation and experimental techniques; dissertation topic selection; identification of research institutions/guides; literature review; research design; scientific report writing; Good Laboratory Practices; data interpretation; ethical research conduct and scientific communication.

Beneficiaries: B.Sc and M.Sc. Biochemistry students.

Outcome: The linkage broadened students' exposure to national-level research practices, strengthened practical and analytical skills, improved confidence and supported readiness for higher studies and research careers.



03. EXTERNAL INSTITUTIONAL EXPOSURE

Institution:

1. CGCOST, Raipur
2. University of Hyderabad
3. Indira Gandhi Krishi Vishwavidyalaya (IGKV), Raipur

Nature of Linkage: Student dissertation / project-based external research exposure

Academic Value: Provides exposure to an external research environment and strengthens practical research experience beyond the departmental laboratory.

Outcome: Development of research orientation, experimental exposure, scientific documentation and familiarity with external academic/research work environments.

S.NO	Name of Student	Topic	Institute	Year
1	Sakshi Parganiha	Optimized in –vitro Micropopagation strategies to enhance efficiency of culture and multiplication in Eucalyptus clone 413	IGKV, RAipur	2024-25
2	Amisha Abatt	Comparative Evaluation of Antioxidant and Antibiofilm Activities of <i>Madhuca longifolia</i> and <i>Bauhinia purpurea</i> extracts Individually and in Combination.	CGCOST	2025-26
3	Astha Singh	“In Vitro Evaluation of Antioxidant, Antiinflammatory and a-Amylase Inhibitory Activities of Crude Extracts and Biosynthesized Nanoparticles from <i>Moringa oleifera</i> , <i>Kalanchoe pinnata</i> and <i>Rauvolfia serpentina</i> ”	CGCOST	2025-26
4	Hemlata Sahu	A Comparative Study of Antioxidant and Antibacterial Activities in Brown Rice, White Rice, and Their Fermented Products (Baasi)	CGCOST	2025-26
5	Renuka Nayak	To Evaluate the Phytochemical Profile, Antioxidant activity and Wound Healing potential of <i>Nyctanthes arbor - tristis</i> Leaves Extract	CGCOST	2025-26
6	Srishti Pandey	Comparative Evaluation of Black tea, Green Tea and Coffee on Phytochemical Composition, Antioxidant potential and Influence of Energy - Related Activity.	CGCOST	2025-26
7	Mansi Meghani	Molecular cloning and functional characterization of cmc1, fit2, cox13 as potential interaction partners of mxr2 under copper stress conditions.”	University of Hyderabad	2025-26

04. COLLABORATION OUTCOMES

Student Exposure: Exposure to external academic and research environments.

Research Capacity: Access to external expertise, advanced practices and research-oriented mentoring.

Practical Competence: Opportunity to observe or learn techniques beyond routine classroom instruction.

Higher Education Readiness: Awareness of research institutions, guides, dissertation opportunities and higher-study pathways.

Scientific Communication: Interaction with external experts and practice of academic discussion, presentation and scientific reporting.

Institutional Networking: Development of academic linkages that can support future joint activities and formal partnerships.