G.SAI PRASHANTH

+91-8074903020 | spguthikonda@gmail.com | LinkedIn |

EDUCATION

Chaitanya Bharathi Institute of Technology (CBIT), Hyderabad	December 2021 - June 2025
B.Tech in Biotechnology	CGPA: 3.0/4.0

Narayana junior college, Hyderabad	May 2017 – May 2019
Grade 12 - Biology, Physics and Chemistry	Score: 91/100

Dr.K.K.R'S Gowtham School Hyderabad	May 2014 – May 2017
Grade 10	CGPA: 9.8/10

RELEVANT COURSEWORK

During my **B.Tech in Biotechnology**, I developed a strong foundation in diverse subjects, including **Molecular Biology**, **Immunology**, **Biochemistry**, **Microbiology**, **Genetics**, **Bio process Engineering**, and **Bio informatics**. Alongside theoretical knowledge, I gained practical experience in **animal cell culture experiments**, honing my skills in laboratory techniques. Additionally, I acquired computational proficiency in **Python**, **R**, and **SQL**, enabling me to analyze and interpret complex biological data effectively. This interdisciplinary knowledge and hands-on experience have equipped me with the necessary skills to address challenging problems in biotechnology research.

RESEARCH INTEREST

Microbiology, Cell Culture Techniques, Cancer Biology, Bio-materials, Tissue Engineering, Bio printing, Drug-Eluting Nanoparticles , Regenerative Medicine and Biomedical Research.

RESEARCH EXPERIENCE

Chaitanya Bharathi Institute of Technology, Hyderabad   September 2024 - April 2025
Project Assistant
Supervisor: Dr. C. Obula Reddy
Topic: Design of Nano-based Cardiovascular Devices
- Led the design and development of a novel stent coated with ZnO nanoparticles for cardiovascular applications.
- Coordinated with Relisys Medical Devices to procure CoCr-L605 stents of 25mm and 50mm lengths with a 3mm diameter for experimental use.
- Conducted hemolysis testing on triplicates of 25mm stents before and after nano-coating with ZnO, analyzed results to assess bio compatibility.
- Prepared and analyzed data to evaluate the effectiveness and safety of the nano-coating, with ongoing plans for further analysis using advanced techniques such as SEM, TEM, and XPS.
- Contributed to experimental planning, data interpretation, and ongoing refinement of the novel nanoparticle coating design.

Center for Advanced Cancer Research Laboratory, Kerala   June 2024 - July 2024
Research Intern
Supervisor: Dr. Janeesh P.A.
Project: Evaluation of Polymeric Nanoparticles Encapsulated Drug Delivery System in Myocardial Infarction
- Cultivated and maintained H9C2 and MCF-7 cell lines for experimental studies.
- Executed staining tests, including Coumarin-6 and DAPI staining, to visualize and assess the incorporation of novel drug eluting nano particle into the cells.
- Conducted Western blot analysis to examine the expression of nano particle and its interaction with key apoptosis-related proteins, utilizing the ChemiDoc system for precise band analysis.
- Operated and optimized techniques such as RT-PCR, FT-IR, SEM, AFM, and CHNS analyzer to support research objectives and gather analytical data.

INTERNSHIPS

Center for Advanced Cancer Research Laboratory, Kerala   June 2024 - July 2024
Research Intern
- Cultured H9C2 and MCF-7 cell lines for cancer research.
- Performed Coumarin-6 and DAPI staining to assess nanoparticle incorporation.
- Conducted Western blotting for apoptosis protein analysis using ChemiDoc.
- Utilized XPS, RT-PCR, FT-IR, SEM, AFM, and CHNS analyzers for data collection.

Likhitha's Diagnostics and Speciality Laboratory, Hyderabad   August 2023 - September 2023
Intern
- Gained hands-on experience in microbiology, serology, hematology, biochemistry, and pathology.
- Analyzed blood samples and conducted radiology assessments for disease evaluation.

Institute of Genetics & Hospital for Genetic Diseases, Hyderabad   October 2022
Intern
- Focused on clinical diagnosis, cytogenetics, and molecular techniques for genetic disease analysis.
- Gained practical experience in advanced genetic diagnostic and research methodologies.

CONFERENCES

1. Presented a poster on "Design of Nano-based Cardiovascular Devices" at the 2nd International Conference on Biotechnology and Interdisciplinary Technologies (iCBIT - 2024). (Certificate)

SKILLS

Programming Software: python, MATLAB, SQL, Data Science Foundation, ImageJ.
Instruments: XPS, HPLC, BET, SEM, TEM, FT-IR, AFM, CHNS and RT-PCR analyzer.

CERTIFICATIONS

- Data Science Foundation Certificate - Infosys SpringBoard Link
- Introduction to Databases - Nxt-wave Link

LEADERSHIP EXPERIENCES

1) Member, Street Cause Club (2021-2022) – Coordinated team activities, including feeding animals and organizing career guidance sessions at educational institutions. Facilitated team meetings and contributed to community service planning and execution.
2) Class Representative, 10th Standard (2017) – Served as the class representative at Dr. K.K.R's Gowtham School, Hyderabad.

REFERENCE

Name of the professor: Dr.C.Obula reddy
Designation: Assistant professor
Department: Biotechnology
Location: Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad, India, 500075
College Email ID: cobulareddy_biotech@cbit.ac.in

Name of the professor: Dr.Sanjeeb kumar Mandal
Designation: Assistant professor
Department: Biotechnology
Location: Chaitanya Bharathi Institute of Technology, Gandipet, Hyderabad, India, 500075
College Email ID: sanjeebkumar_biotech@cbit.ac.in