SHRUTI MANOHAR AHUJA

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A dedicated research professional with 3+ years of experience in a MedTech spin-off from IIT Delhi. Extensive experience in the design and development of rapid diagnostics for infectious diseases in low/middle income country

Prime Minister's Research fellow (May 2021 cycle), CRNTS, IIT Bombay

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Current Designation
PhD Research Scholar, PMRF, IIT Bombay (CGPA-9.04)
01/2021-Present

Work Experience
Lead-R&D, Founder's staff, Valetude Primus Healthcare Pvt. Ltd., New Delhi (06/2017-01/2021)
Key Responsibilities
Leading the R&D team, conducting clinical validation. Working closely with the stakeholders and Board of Directors to strategize and execute the vision of developing diagnostic devices suitable for rural setting

Academic Qualifications
Delhi Technological University
Masters of Technology (CGPA-9.29)
Specialization: Industrial Biotechnology
08/2015-09/2017

North Maharashtra University
Bachelor of Engineering (78.08%)
Specialization: Biotechnology
07/2011-07/2014

Internship and Training
Summer internship at **TERI** (The Energy and Resources Institute)**,** on 'Studying marine algae growth and extraction of lipids using commercially feasible solvents'

Accolades
University Academic Topper in BE
Second University Academic Topper in MTech
Part of International Entrepreneurship Summer School (2021), Braunschweig, Deutschland
Qualified MH-SET 2017
Part of IEDC Entrepreneurship Camp (2014)
State level Chess player

Grants and Fellowship
PMRF 2021-2025
GATE Fellowship 2015-2017
IEDC Grant (2014) of INR 1 Lakh for the project, 'Fermentative production of amino acids: l-lysine and l-glutamic acid using Agricultural Waste to use as a plant growth nutrient'

Projects

PhD (01/2021-01/2025)
On-field, handheld, self-powered device for end-to-end wastewater surveillance for SARS-CoV-2 using PCB electrodes

MTech
Media Optimization for enhanced biomass, β-carotene and lipid production from *Dunaliella salina* using Box Behnken design

BE
IEDC and **NSTEDB** sponsored project 'Fermentative Production of Amino Acids: l- lysine and l-glutamic acid from *Corynebacterium glutamicum* using Agricultural Waste (Banana pseudotem)'

Publications
Ahuja, S., Kumar, M.S., Nandeshwar, R. et al. Longer amplicons provide better sensitivity for electrochemical sensing of viral nucleic acid in water samples using PCB electrodes. Sci Rep 12, 8814 (2022). https://doi.org/10.1038/s41598-022-12818-w

Ahuja. S, Roy. A, Kumar. L, Bharadvaja. N, (2019). 'Media optimization using Box Behnken design for enhanced production of biomass, beta-carotene and lipid from Dunaliella salina.' Springer Vegetos, 33(1). doi: 10.1007/s42535-019-00079-4

Technical skills
qPCR, Fluorescent Microscopy, Fluorescence assay in 96 well plate reader, UV/Vis Absorption Spectroscopy, HPLC, Self-assemble affinity Column to purify monoclonal antibody, SDS PAGE Electrophoresis, Conjugation of magnetic nanoparticles with antibody, Media optimization, Qiagen ESE log sensor, 3D-printing

Computer proficiency
Autodesk Fusion 360, Design Expert 10.0., MS Office