

Terms of Reference

About Medi Valley Incubation Council

The innovation arm of the pioneering medical device manufacturing ecosystem, the Andhra Pradesh MedTech Zone (AMTZ), Medi Valley Atal Incubation Centre is funded by NITI Aayog under the Atal Innovation Mission. Medi Valley is the only facility in the country dedicated to health technology and located within the medical devices manufacturing epicenter. Mentored by stalwart researchers, technology and innovation champions, leading manufacturers and eminent policy makers, Medi Valley handholds innovators along all stages from ideation to manufacturing. Enabling full access to AMTZ and its group of institutions, scientific, regulatory, manufacturing and trade facilities, Medi Valley is the only one of its kind in MedTech, Techno-Business Incubation, Need and Priority based Innovation and beyond.

Medivalley Lab's accreditation from NABL, BIS, and CDSCO is a testament to its commitment to quality, safety, and regulatory compliance in the field of medical testing and healthcare services.

Medical Technology Innovation is a multidisciplinary approach in encompassing aspect of several fields of science and engineering. Medi Valley has established state-of-the-art laboratory facility where innovators can tinker with their ideas in all domains of biomedical engineering.

Company Website:

<http://amtz.in/>

<http://kiht.in/>

<http://biovalley-amtz.in/>

<https://medivalley-aic.in/>

Job Title - Scientist – HPC Engineer - QMTL

Key Responsibilities

1. Architect and manage HPC clusters integrated with quantum simulators and cloud quantum backends
2. Enable hybrid quantum–classical workflows (VQE, QAOA, quantum-assisted reconstruction)
3. Optimize computing pipelines for CT/MRI reconstruction, denoising, and inverse problems
4. Manage GPUs, FPGAs, low-latency interconnects, and storage systems
5. Ensure scalability, security, and reproducibility of experiments
6. HPC systems (Linux, Slurm, MPI, CUDA/OpenCL)
7. GPU acceleration for scientific computing
8. Experience interfacing with quantum SDKs (Qiskit, Cirq, Braket, PennyLane)
9. Systems integration and performance profiling
10. Operational hybrid HPC–Quantum stack
11. Benchmark reports and compute efficiency metrics

12. Stable experimental runtime environment

Qualification & Experience

Qualification:

1. Experience: Minimum 2 experience in the relevant field.
2. Technical Skill Set experience in the respective field.
3. Computer literacy including advanced proficiency with Microsoft Office (Excel, Word & PPT).
4. Excellent communication and presentation skills, analytical, problem-solving skills and interpersonal abilities, Decision-making, excellent oral and written communication skills in English.
5. Must have Team Spirit, Agility, Leadership, Initiative, time management, prioritizing and the ability to handle a complex and varied workload.
6. Must maintain confidentiality and discretion in all aspects and be comfortable with a flexible working schedule to meet the needs of the Company.
7. Ability to handle urgent matters, multiple tasks, simultaneously and quickly complete the assigned tasks.
8. Willingness to Travel.
9. Age up to 35 years.