

I-STEM Software Request - Guide Approval Form

User Details

- **Name of Researcher:** Dhritisundar Paramanik.
- **User Type:** [☒] Ph.D. Scholar [☐] Postdoctoral Researcher [☐] Bachelor's [☐] Masters
- **Institution Name:** S.N. Bose National Centre for Basic Sciences.
- **Institutional Contact No:** 033 2335 5706
- **Research Topic:** Understanding the electronic transport through single molecule junctions.

Software Request Details

- **Software Name:** MATLAB

Justification for Software Request: I want MATLAB and its toolboxes to help me with my MCBJ method research on single-molecule junctions. Data collection from the NI PXI 5922, signal processing, conductance histogram analysis, and shot noise investigations all require MATLAB. Its sophisticated statistical tools and numerical solvers facilitate the modeling of bias-dependent conductance changes and quantum transport. Furthermore, MATLAB's automation and visualization features are essential for improving my glove box-based MCBJ system. Having access to MATLAB will greatly improve my research workflow's accuracy and efficiency.

Guide/Supervisor Approval

I, Atindra Nath Pal,

- Confirm that the above-mentioned researcher is affiliated with our institution
- Have reviewed the software request and its relevance to the researcher's academic work
- Approve the software request for research purposes

Approval Confirmation

- I approve the software request
- The software aligns with the researcher's research objectives
- The request meets the institutional research guidelines

Guide/Supervisor Signature: Atindra Nath Pal

Date: 25/04/25

Official Stamp/Seal:

Dr. Atindra Nath Pal
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Important Notes

1. This form must be signed and scanned
2. The scanned copy must be uploaded with the software request
3. Electronic signatures are acceptable if from an official institutional email