Project Proposal for Ph.D.

PhD Supervisors

<table>
<thead>
<tr>
<th>Role</th>
<th>Faculty</th>
<th>Academic Unit in IITD/Institute/University</th>
<th>Email ID (Official)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor 1</td>
<td>Dr. Ashish Misra</td>
<td>DBEB</td>
<td><a href="mailto:ashishmisra@iitd.ac.in">ashishmisra@iitd.ac.in</a></td>
</tr>
<tr>
<td>Supervisor 2</td>
<td>Dr. Neetu Singh</td>
<td>Biomedical Engineering</td>
<td><a href="mailto:sneetu@cbme.iitd.ac.in">sneetu@cbme.iitd.ac.in</a></td>
</tr>
<tr>
<td>Supervisor 3</td>
<td>Dr. Shyam Kumar Masakapalli</td>
<td>IIT Mandi</td>
<td><a href="mailto:shyam@iitmandi.ac.in">shyam@iitmandi.ac.in</a></td>
</tr>
</tbody>
</table>

Project requirements (Student qualifications, experience required, etc)

- B. Tech or M. Tech in Biotechnology/Chemistry/Biomedical Engineering with experience in microbial and mammalian cell culture AND/OR polymer characterization

Source of fellowship/funding

(CSIR/UGC/DBT/ICMR/ICAR/NEET-PG/DST-INSPIRE/IRD/FITT Project details, if any)

Sponsored (JRF/SRF, Industry) or Part-time candidate (no full-time funding available with the PI's)
### Role of Faculty Members involved:

The supervisors have expertise in the following areas relevant for the project.

- **Supervisor 1**: Bioprocessing and microbial engineering
- **Supervisor 2**: Design of biomaterials for tissue engineering applications
- **Supervisor 3**: Microbial derived chemicals and phytochemicals

Supervisor 1 and 3 will guide the selection of microbes for biopolymer production and optimization of growth and culturing conditions. Supervisor 2 will guide the use of the biopolymers and their investigation for tissue engineering applications. The complementary expertise of the supervisors is critical for the project.