**SOMBIT MANDAL**

**PROFILE**

A self-motivated person looking for an opportunity to work as a Post Graduate Engineer in an organization and willing to contribute development for the organization as well as personal growth.

**EDUCATION**

* **M.Tech Manufacturing Engineering**

**CGPA – 7.13 / 10**

Amrita Vishwa Vidyapeetham

* **B.Tech Mechanical Engineering**

**CGPA – 8.0 / 10**

Maulana Abul Kalam Azad University of Technology, Kolkata

* **Class 12** – 69%

Institution:

* **Class 10** – 81%

Institution:

**TECHNICAL INTERESTS**

Material Science

**PROJECTS**

**Investigation on aramid fiber reinforced PEKK high performance composite**

Details- From this project in-depth knowledge and hands-on experience on advance composite for ballistic applications has been gained. Thermogravimetric analysis(TGA) on fiber and matrix is done so that I can optimize the processing temperature and have the best output. Plasma surface treatment is done to enhance the surface energy so that I can propose the same composite for ballistic as well as structural applications also. The composite panel was tasted in National Forensic Sciences University (NFSU), Gandhinagar with 9mm

handgun bullet and speed of 430m/sec. In this testing it worked successfully.

**Development of transparent polycarbonate for ballistic application**

Details- In this project in-depth knowledge has been achieved with hands-on experience on how to make bullet proof polycarbonate, which can be used in defence application. We used dichloromethane

vapour as adhesive for sticking the polycarbonate layers. We made 20 layers of transparent polycarbonate and it got successful in bullet test. It was still intact when it was hit by two 9mm bullets.

**TECHNICAL SKILLS**

AutoCAD, Solid works, MS-Excel, Python, Arena simulation, Ansys

**LANGUAGES**

English, Hindi, Bengali