KAWIN B K

B.Tech. Polymer Engineering Student | CIPET DPMT Graduate
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Professional Summary

Motivated Polymer Engineering student with hands-on experience in polymer processing, injection moulding, mould design, polymer characterization, and manufacturing technologies. Skilled in Creo, CATIA, AutoCAD, Fusion 360, MATLAB, and quality control methodologies. Strong interest in automotive plastics, additive manufacturing, and smart manufacturing systems.

Education

B.S. Abdur Rahman Crescent Institute of Science and Technology 2024–2027
B.Tech. Polymer Engineering CGPA: 6.83

Central Institute of Petrochemicals Engineering and Technology (CIPET) 2021–2024
Diploma in Plastics Mould Technology (DPMT) 75.26% (First Class)

Technical Skills

CAD & Design	Creo, CATIA, AutoCAD, Fusion 360, Generative Design, Engineering Drawing
Programming	Python (Basic), MATLAB
Polymer Processing	Injection Moulding, Compression Moulding, Extrusion, Blow Moulding, Polymer Compounding
Testing & Characterization	Tensile Testing, Impact Testing, Hardness Testing, Melt Flow Index (MFI) Testing, Material Analysis
Manufacturing	Mould Manufacturing, CNC Machining, Engineering Metrology, Quality Control, Process Optimization
Software	Microsoft Word, Microsoft Excel, Microsoft PowerPoint

Internship Experience

STAM Digital Tooling India Pvt. Ltd. Jan 2024 – Jun 2024
Institutional Trainee (Tool Design & Mould Development) Chennai, Tamil Nadu

- Completed a 6-month industrial training program focused on mould development activities.
- Assisted in mould design, manufacturing processes, and tooling operations.
- Observed CNC machining, mould assembly, dimensional inspection, and quality control procedures.
- Developed practical knowledge of injection mould tooling and manufacturing workflows.
- Strengthened CAD interpretation, engineering drawing, and production planning skills.

Hyundai Engineering Plastics India Pvt. Ltd. Jun 2025 – Jul 2025
Polymer Engineering Intern Chennai, Tamil Nadu

- Studied engineering plastics manufacturing processes and production workflows.
- Observed injection moulding operations and quality inspection procedures.
- Gained exposure to automotive plastics manufacturing and industrial quality standards.
- Developed understanding of process monitoring and manufacturing best practices.

Projects

Injection Mould Design and Development Jan 2024 – Apr 2024

- Designed injection mould components using Creo, CATIA, and AutoCAD.
- Created detailed 3D models and manufacturing drawings.
- Performed dimensional verification and design modifications.
- Strengthened CAD modelling and mould design skills.

Polymer Material Testing and Characterization Aug 2025 – Nov 2025

- Conducted tensile, impact, and hardness testing on polymer materials.
- Utilized MATLAB for data analysis and graphical representation.
- Compared mechanical properties of polymer samples.
- Prepared technical reports and performance evaluation summaries.

Certifications

- MATLAB Onramp – MathWorks
- Introduction to Solving Ordinary Differential Equations – MathWorks
- Python 3.4.3 Training – IIT Bombay (90%)
- Introduction to Computers Training – IIT Bombay (90%)
- QCad Training – IIT Bombay (68%)
- Fusion 360 CAD Training – Autodesk
- Generative Design – Autodesk
- Engineering Drawing – Autodesk
- Presentation Skills – Harvard Business Impact
- Writing Skills – Harvard Business Impact
- Ignite India Entrepreneurship Program (42 Hours) – Wadhwani Foundation

Conferences & Research Presentations

- Presented the paper "Advancing Smart Manufacturing: Recent Machine Learning Approaches for Optimisation and Quality Prediction in Injection Moulding" at APTSM-2025.
- Presented the paper "Development of Polylactic Acid (PLA) Based Components Using Additive Manufacturing for Automobile Applications" at ICNGMS-2026.

Leadership & Industry Exposure

- Volunteer, IMTOF & IPPEX 2026, Chennai Trade Centre.
- Participant, Planet X Inter-Collegiate Hackathon 2026.
- Participated in technical workshops, symposiums, conferences, and industry-oriented events related to Polymer Engineering and Manufacturing Technologies.

Areas of Interest

- Polymer Processing
- Injection Moulding
- Tool Design and Mould Manufacturing
- Polymer Testing and Characterization
- Quality Control
- Automotive Plastics
- Smart Manufacturing
- Additive Manufacturing