

Basell Polyolefine GmbH  
Human Resources - Silke Straub  
Industriepark Höchst, Building D 349/65926 Frankfurt  
am Main

Vijay Mosali  
Bauge straÙe 2b  
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March 4, 2020

## **Application for the position of "Ingenieur (m/w/d) R&D-Kunststofftechnikum"**

Dear Mrs. Straub,

With great interest I became aware of this advertised position in the Stepstone job market. My motivation for this position is excellent opportunities for all my knowledge and experience, and my passion and intellectual curiosity to work in the field of plastics.

Currently I am working as a 3D Printing Engineer at Clariant. My most important tasks includes filament extrusion and compounding processes for 3D printing applications. I lead the analysis and optimization of both of these processes and also provide solutions for customers. Apart from this I also have a previous experience of developing polyolefin 3D printing filaments at an Austrian research company Profactor GmbH. I also bring the knowledge of Injection molding and plastic testing methods if required.

I can bring different strengths to this position. I approach my tasks very reliably, responsibly and precisely. With me, your company gains an employee who is flexible, motivated and team-oriented. In addition, I was able to demonstrate strong communication skills, a high willingness to learn and a lot of creativity in previous projects.

Attached CV provides a good summary of my background and experience. Kindly let me know if you require any further information regarding my candidacy. I would be grateful to discuss my qualifications in a personal interview. I am available to start as soon as possible and I am expecting a salary of around 60,000 € per year. Thank you very much for your time and endeavour. I look forward to your invitation.

Yours sincerely,

Vijay Mosali

# Curriculum vitae

## Personal Data

**Name:** Vijayasekhara Reddy Mosali  
**Address:** Bauge straÙe 2b, 65451,  
Kelsterbach, Germany  
**E-mail:** vijayreddymosali@gmail.com  
**Phone:** +4917656772994  
**Date of Birth:** 10.05.1993  
**Nationality:** Indian  
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## Work Experience

**Nov 2018 - Present**

**Company:** Clariant Produkte (Deutschland) GmbH, Frankfurt am Main

**Position:** 3D Printing Engineer

3D printer filament production

- Led the analysis and optimization of complete process from drying to winding
- Modeling, design, and testing of new die heads to improve diameter stability and production output rates using single and twin-screw extruders
- Production of customer samples

Powder bed fusion compound production

- Cooperated with the powder development team to produce flame retardant polyamides
- R&D production of powders using direct extrusion emulsification techniques with polymer-PEG blends

Sourcing of production equipment

- Analysis, evaluation, and design of extrusion and filament production equipment including dryers, feeders, and winders

**Dec 2016 - Mar 2018**

**Company:** PROFACTOR GmbH, Steyr, Austria

**Position:** Research Engineer

- Development and extrusion of polypropylene and polyethylene 3D printer filaments
- Rapid prototyping of micro-needles, microfluidics and implants with stereo-lithography 3D printing

**May 2017 - Jan 2018**

**Company: PROFACTOR GmbH, Steyr, Austria**

**Position: Master thesis**

**Title:** Mastering, Polycopy, Ni-shim fabrication and injection molding of micro-needles for drug delivery and ECG sensor applications

**Sep 2015 – Nov 2016**

**Institutes: Aalen University, Aalen, Germany**

**Position: Work student**

**Project:** Determination of thermal and mechanical properties of extruded multi-layer films using DSC, DMA, TGA, tensile, and impact testing methods

## Academic Projects

**Apr 2015 – Aug 2016**

**Institute: Aalen University, Aalen, Germany**

- Analysis and optimization of extrusion and injection molding process parameters
- Optimization of extrusion blow molding process parameters using Design of Experiment (DOE) methodology
- Investigated the adhesion behavior of 3D printed parts on different substrates including glass, polypropylene, and polyethylene
- Injection molding process simulation by CAE mold flow software
- Evaluated the influence of nucleating agent addition on mechanical properties for Injection molded samples

## Education

**Mar 2015 – Feb 2018**

**Master of Science in Polymer Technology**

**Institute: Aalen University, Aalen, Germany**

**Focus:** Polymer materials and testing, Injection molding, Mold design, Extrusion, Blow molding, Melt rheology, CAE-mold flow simulation, Polymers in applications, Product quality, Design of experiments (DOE)

**Aug 2010 – Jun 2014**

**Bachelor of Technology in Mechanical Engineering**

**Institute: JNT University, Ananthapuramu, India**

**Focus:** Machine design, Machine kinematics, CAD/CAM, Finite element methods (FEM), Thermodynamics, Manufacturing technology, Automobile engineering, Mechanics of solids, Metallurgy & Material Science, Production technology, Robotics, Industrial management, Quality control

## Knowledge and skills

### Software Skills

- CAD software: Solid works, Auto desk Inventor
- Simulation software: CAE Mold flow
- 3D slicer software: Simplify 3D, Cura, MakerBot Print, PreForm
- Other: MS Office, Origin, Minitab 17

### Language Skills

- English - Fluent
- German - Basic
- Hindi - Basic
- Telugu - Mother tongue

### Hobbies and Interests

- Team sports, puzzle games, swimming, chess
- Travelling, reading books