

Curriculum Vitae

Name: Tejas Chafekar

Program: Mechanical Engineering (MSE)

Senior Undergraduate,
Department of Mechanical Engineering,
BITS-Pilani University, India.

N-13 Sneh Paradise, Near MIT College,
Paud Road, Kothrud, Pune, Maharashtra, India

Contact: +91-9850675025

Personal URL: <http://tejaschafekar.synthasite.com>

Email: tejaschafekar@yahoo.co.in

Objective: To seek Masters potentially followed by PhD from your university so as to lay a strong foundation of my research oriented future career in Mechanical Engineering.

Education: Birla Institute of Technology and Science-Pilani University (BITS)
BE (Hons) Mechanical Engineering, June 2009
CGPA: 9.65(/10) **Major GPA: 10 (/10)** **Department Rank 1(/73)**

Fergusson College, Pune, India
Higher Secondary School - SSC board (XII) 2005
Science Stream- Aggregate- 90.0% Vocational: Electrical Maintenance- **99.5%**

Jnana Prabodhini Prashala, Pune, India.
Secondary School - CBSE Board (X) 2003
Aggregate- **93.4%** **Class rank 2(/42)**

Test Scores: GRE : 1370 / 1600 Verbal: 570/800, Quant 800/800, AWA 5/6
TOEFL : 110 /120 (iBT)

Awards and Honors:

Fellowships:

- (2006) Kishore Vaigyanik Protsahan Yojana (KVPY) - Awarded by Indian Institute of Sciences (IISc), Bangalore - One of the 5 students who received the fellowship for the year.

Scholarships:

- (2005) TATA Technologies Scholarship
- (2003) National Talent Search Scholarship (NTS) Awarded by Government of India

Research Experience:

Summer Internships:

- (2008) **Jet impingement studies** as applied to gas turbine blade cooling.
Guide: Prof. S. V. Prabhu (Department of Mechanical. Engineering, **IIT-Bombay**)
Measurement of pressure distribution due to jet impingement on a concave surface to assist heat transfer experiments for designing gas turbine cooling passages for aircrafts.
- (2008) **Flow visualization studies** for submerged and impinging jets.
Guide: Prof. S. V. Prabhu (Department of Mechanical. Engineering, **IIT-Bombay**)
Flow pattern characterization for submerged impinging jets to assist heat transfer results for localized cooling of electronic components.
- (2007) Novel concepts for **Designing of Knee Joints**.
Guide: Prof. B. Ravi (Department of Mechanical. Engineering, **IIT-Bombay**)
Developing a novel design for knee joints for artificial knee prosthesis, to overcome the drawbacks of present ball joint designs.

Final Year Project:

- (2008) Experimental **Vibration analysis of Perforated Plates**.
Guide: Dr P.M. Singru (Assistant Professor & Group Leader, Mech Engg –BITS)
Designing of perforated plates with different patterns of perforations so as to sustain the given external excitation.

Curriculum Vitae

Name: Tejas Chafekar

Program: Mechanical Engineering (MSE)

Junior Year Project:

- (2007) **Designing of Active steering system:**
Guide: Prof. B.J.C. Babu (Dean, Student welfare, Mech Engg Dept-BITS)
Designing of electronic steering system to replace the Ackermann linkage. It facilitated pure rolling at all the points on the trajectory and hence good control on stability.

Sophomore Year Project:

- (2006) **Termite Resistant Paper** from harmful and allergic weeds:
Guide: Dr. Sunil Bhand (Assistant Professor & Group Leader, Chemistry Dept –BITS)
A novel technique of preparing a termite resistant paper from harmful and allergic weeds was developed for weed control and pollution abatement.

Professional Experience:

- (2007) **Bharat Forge LTD, Pune, India**
Designing of dresser tool holder for crankshaft grinding machine.
Guide: Mr. B. G. Suresh (Machine Component Division, BFL)

Teaching Experience:

- (2008) **Teaching Assistant** for Production Techniques Lab (Pneumatic Lab - BITS)

Publications:

- (2008) Jet impingement studies as applied to gas turbine blade cooling,
FMFP Conference India. (*Abstract selected, results for paper expected soon*)
(2008) Flow visualization studies for submerged and impinging jets,
FMFP Conference India. (*Abstract selected, results for paper expected soon*)
(2008) a novel approach of using harmful and allergic weeds to make a termite resistant paper. **Canadian Journal of Chemistry**, Canada. (Submitted, under review)

Technical Skills:

Mechanical Skill Set	ProE, Catia V5R16, Ansys10, Fluent, AutoCAD
Programming Languages	C, C++, Assembly Level
Operating Systems:	Windows 98, XP, Vista

Positions of Responsibilities:

President	Maharashtra Mandal (Regional Association) BITS-Pilani (07-08)
Event Manager	Junk Yard Wars (QUARK-08- Tech fest-BITS)
Placement Coordinator	Department of Mechanical Engineering
Member	Core Organizing Committee (QUARK-07-Tech Fest-BITS)
Member	Technical Committee MESA at BITS-Pilani Goa. ('07-'08)
Active Participation	Rural Development Program.