

Semiconductor enthusiast with apt materials processing skills.

SKILLS

Metallography

Etching

Phase Analysis

Optical Microscopy

Python

C

MATLAB

Excel

LaTeX

Prezi

EDUCATION

Master of Science, Materials Science and Engineering

University of Florida, Gainesville 


08/2019 – Present

Gainesville, FL, USA

Courses (expected to undertake)

- Advanced Electronic Materials Processing
- Structural and Mechanical Properties of Materials
- Materials Thermodynamics

Bachelor of Technology, Metallurgy and Materials Science

College of Engineering, Pune 

07/2014 – 07/2018

Pune, MH, India

Courses

- Electronic and Magnetic Materials
 - Physical Metallurgy
 - Nano-materials Processing
 - Statistics
 - Metallurgical Thermodynamics
 - Structural Metallurgy
 - Materials Joining
 - Linear Algebra
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PROJECTS

Fabrication of Electroplated Meta-conductor for RF Transmission Lines (08/2019 – Present)

- Aiming to Fabricate Co/Cu Meta-conductor to curb Transmission Line Resistance at high frequency current

Synthesis of Nano-crystalline glass embedded with Moly-Disulfide Quantum Dots(QDs) (06/2018 – 08/2018)

- Attempted synthesis of Nano-crystalline glass embedded with MoS Quantum Dots(QDs) via Melt and Quench route
- Characterized the glass using X Ray Diffraction

Bainite Maximization in SAE 4140 Steel (06/2017 – 05/2018)

- Designed CCT and TTT Cycle to optimize Bainite fraction in SAE 4140 Steel
- Obtained 89.5 percent Bainite via Continuous Cooling route

Analysis of factors affecting Crash-worthiness of TRIP-assisted Multi-phase Steels (01/2017 – 04/2017)

- Analyzed welding and strength parameters of TRIP Steels

Impact of elemental impurities on Steel Properties and Performance (12/2016 – 01/2017)

- Attended and observed the Secondary Steel Making process
- Analyzed effects of elemental impurities on Steel properties

Heat Treatment and Material Characterization Survey (07/2016 – 07/2016)

- Surveyed Heat Treatment and Forging process and performed Hardness Testing

CERTIFICATES

Python Data Structures (08/2019 – 08/2019)

edX course offered by U Mich, Ann Arbor

Introduction to Python (08/2019 – 08/2019)

edX course offered by U Mich, Ann Arbor

Six Sigma Yellow Belt (08/2019 – 08/2019)

Professional course offered by 6sigmastudy.com

Nanotechnology: A Maker's Course (06/2019 – 07/2019)

Coursera course offered by RTNN

Electronic Materials and Devices (01/2019 – 04/2019)

NPTEL course offered by IIT Madras

Semiconductor Materials and Devices (01/2019 – 04/2019)

NPTEL Course offered by IISc Bangalore

ADDITIONAL EXPERIENCE

Content Developer Being Jigyasa

09/2018 – 05/2019

Pune, MH, India

An organisation created to instill curiosity (Jigyasa) in the School Students by developing co-curricular content

Tasks/Achievements

- Developed Prezi content for Classroom Curriculum Contributed in the CSR initiated by TATA, BAJAJ, ERICSSON
- Crafted articles for Newsletter CURIOSITY CAPSULE
- Contributed in the CSR initiated by TATA, BAJAJ, ERICSSON

Contact: Rajat Agarwal - thinkrajat@gmail.com

HONOR AWARDS

National Talent Search Scholarship (04/2011 – 03/2018)

National Council for Educational Research and Training (NCERT)

- Qualified amongst 1000 students to receive scholarship
 - Received annual stipend of INR 24000 for 6 years
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LANGUAGES

English 

Hindi 

Marathi 
