

My name is Jaishree Vyas. I am 26 years old from India. I have completed my masters in 2015 after that I was working as junior research fellow in Indian Institute of Technology Bombay. Currently, I am working at NDTonAIR project as an early stage researcher(ESR4) at Prof. K. Baršauska's Ultrasound Research Institute, Kaunas University of Technology on Guided wave inspection of aerospace components using contactless measurements.

In summer 2014, during my masters I had went to DRDO to work as an intern for 45 days. The Internship gave me an inclination towards research, where I have started learning the fabrication of thin films using different techniques like doctor blade, spin coating and dip coating for Dye sensitised solar cell. I have started working over solar simulator, impedance analyser and Film coating techniques during this internship

During the period of my master's project I have started my real exposure towards research, where I have learned the techniques of synthesising nanoparticles, characterising and analysing. Our group has successfully designed a system of synthesising nanoparticle using continuous wave laser and the technique of making uniform layer deposition inside the system. Which is precociously can be used for the multilayer and single layer thin films. The system is stable for synthesising the Titanium oxide powder and changing the phase of material from anatase to rutile. This gave me two publications in National Laser symposium, entitled as "Synthesis of TiO₂ nanoparticles film using CO₂ laser pyrolysis and effect of sintering on Anatase to rutile transformation" and "Various aspects of gas phase synthesis of TiO₂ nanoparticles films by CO₂ laser pyrolysis technique". With this experience I have gained the knowledge of characterizing strain of bulk material using XRD in different modes of operations which gave me the knowledge of spectroscopy.

For the characterisation of materials I have used different techniques like Raman spectroscopy, FTIR, SEM, TGA/DTA, SEM and TEM which helps me in further research and better results. The results were analysed by using computational techniques like Origin and MATCH software. The analysis part could be an advantage for me to do good research in the sector of materials.

After finishing masters, I was appointed at IITB, on a project of "Design, development and demonstration of indigenous hydrogen storage and fuel cell system for mobile and stationary applications of 5KW capacity".

Apart from research, I have coordinated many events in my bachelor's. I like spending time with my family and friends. I love exploring new places and photography.