



# SRINIVAS UNIVERSITY

Mangalore-575001, Karnataka (India)

Research center for Quality in Higher Education

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**Mr. Rakshith Kumar P**  
**BE, M Tech (PhD)**

Srinivas University provides a platform for young researcher to promote research in all aspects of Engineering field for improving the quality of education.

My research work is to reduce hot corrosion oxidation and erosion degradation by a novel approach called Thermal spray coating. It's a new emerging trend in the field manufacturing and material science technology in the present work is to study high velocity oxygen fuel thermal spray coatings as superheater tubes protectors against degradation problems. And these coatings have been tested under laboratory conditions simulating the boiler erosion and corrosion mechanisms. The influence of the spray parameters on the porosity and oxidation has been studied in order to optimize the coatings structure. Interconnected porosity and spray oxidation must be avoided to attain the best coating resistance under corrosion and erosion mechanisms

Tribological and electrochemical coating properties have to be determining under standardized tests. Different erosion tests have been carried out in order to determine coatings resistance. X-ray diffraction studies show the main formed phases under corrosion mechanisms for the different studied alloys.

**Department:** Mechanical Engineering

**Specialization:** M.Tech in Machine design

**Research area:** Thermal coatings

### **Conferences and Publications :**

- Presented the paper in the International conference on Hot Corrosion Behavior of Iron Based Superalloy SS304 and SS316 for Boiler Applications
- Presented the paper in the National Conference on “**HVOF Thermal Spray Coating to Resist Hot corrosion and Oxidation for Power Plant Boiler Tubes**”, at REVA University Bengaluru, on 2nd March 2018.
- Attend and submitted Paper in National level conference on “**To combat Hot corrosion and oxidation degradation in boiler tube applications**”, at SJBIT, Bangalore on 9<sup>th</sup> May 2018.
- Attended 3 Day National level seminar on “**HYBRID VEHICLE**”, at SRCOE, Pune, on 13<sup>th</sup> March 2018.