Riyaaz Uddien Shaik

Education

University of Rome 'La Sapienza' Master (II-level) in Satellite Systems & Services Grade - 110/110 University College of Engineering, Osmania University Masters in Mechanical Engineering (Design for Manufacture) Marks - 1158 / 1500 (Distinction).

BS Abdur Rahman University *Bachelors in Mechanical Engineering* CGPA - 7.45 / 10 (First Class).

Velammal Matriculation Higher Secondary School *Higher Secondary Examination (Computer Science)* Marks - 1129 / 1200 (94%).

Velammal Matriculation Higher Secondary School Secondary School Certificate Marks - 467 /500 (93%).

Master (II-level) Thesis

Title: Modeling of Propellant Gauging System for 'PRISMA' Satellite

Supervisor: Ing. Gianluca Ascanio

Organization: *OHB-Italia S.p.A,* Italy.

Summary: Developed the propellant gauging tool using the bookkeeping, PVT and thermal gauging methods for the 'PRISMA' which is an earth observation satellite of Italian Space Agency having its launch in March 2019.

Master (II-level) Activities

- During afternoons, I learned to analyze satellite images for agricultural applications using *Matlab* (*Image processing*) toolbox, SNAP & ENVI and to correlate the data at EOSIAL remote sensing lab.
- **Summer Internship** at *EOSIAL lab* on 'Phenological Study of Multi-Temporal Satellite Images for Crops Classification'.
- As a team, we have designed a Small Object Scanning Satellite (SOS) for space situational awareness where my contribution was to design ADCS sub-system for SOS and to prepare conceptual phase 'A' report.
- Learned to analyze telemetry data (almanac & ephemerides) for finding out the orbit and GDOP using *Matlab* at GNC lab.
- Involved in industrial visits to Italian Space Agency, European Space Agency (ESRIN), Practica di Mare and Thales Alenia Space Itlay.

Rome, Italy Dec'17 - Dec'18

Hyderabad, India Nov'14 - Jan'17

> **Chennai, India** *June'10 - May'14*

Chennai, India April 2010

Chennai, India May 2008

Master Thesis

Title: EN Coating on Graphite Carrier Plates for High Temperature Oxidation Prevention.

Supervisor: Dr. Pramod H. Borse, Scientist 'F', Center for Nano-materials, ARCI.

Organization: International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), India.

Article: Shaik Riyaaz Uddien, Malobika Karanjai, Joydip Joardar, Pramod H.Borse. '*Multifunctional nickel-phosphide film deposition on graphite via. a cost-effective technique* '. Applied Surface Science (Submitted).

Internships

1. 'Modeling and Analysis of Aerodynamic Structure for Rail Coach' at *Integral Coach Factory, Southern Railways,* Chennai, India. (Bachelor's Project)

2. 'Design of Resin Lining Machine for Propellant Hardware' at *Indian Space Research Organization*, Sriharikota, India. (Bachelor's Summer Internship)

3. 'Design and Analysis of Electron Beam Welding Fixture for Air Intake Assembly' at *Defense Research & Development Laboratory,* Hyderabad, India. (Master's Summer Internship)

4. 'Electroless Nickel Plating on Iron Powder' at *International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI)*, Hyderabad, India. (Mini-Project)

Vocational Training

Topic: Reverse Engineering & CAE.

Course: Automotive Student Orientation Program (aSOP).

Description: As a team, we have done Reverse Engineering of Pressure Relief Valve, Tata Ace Vehicle, Anti-Lock Braking System of Trucks and SAEINDIA BAJA Vehicle.

Organization: SAEINDIA & WABCO-TVS (INDIA) Limited.

Academic Achievements

1. Awarded Full Merit Scholarship for high school studies from *Velammal Matriculation Higher Secondary School,* India.

Awarded Full Merit Scholarship for bachelor studies from *B.S.Abdur Rahman University*, India.
State Topper in High School Mathematics Examination conducted by *Tamil Nadu Matriculation Board*, India.

4. Awarded Full Merit Industrial Scholarship for Master's (II-level) in Satellite Systems and Services at University of Rome 'La Sapienza'.

Computational skills

Image Processing: Matlab (Image Processing), SNAP & ENVI.

Programming: Matlab & GNU Octave.

Modelling: AutoCAD, PTC Creo, Solid Works & ChemSketch.

Analysis: ANSYS & Match (Phase Analysis).

Others: LaTeX, Origin & Integrated Manufacturing Information System (IMIS).

Instruments used

X-Ray Diffractometer, Scanning Electron Microscope, Optical Microscope, Opto-digital Microscope, Optical Profilometer, Scratch tester, X-Ray Photoelectron Spectroscopy, Raman Spectroscopy & Nano-indentation Hardness tester.

Language Proficiency Certifications

- Have cleared BEC Preliminary conducted by ESOL Examinations, University of Cambridge.
- Secured 192/200 in French language in Higher Secondary Examinations.
- Attended Italian Language (A1 level) course conducted by Centro Linguistico di Ateneo.

Conference Proceedings

[1]. Shaik Riyaaz Uddien, Malobika Karanjai, Joydip Joardar, Pramod H. Borse. *'Comparison of Nano-structured Nickel-Phosphide film on Graphite versus FTO Substrates'*. National conference - NCAMMT2017 at SRM University, Chennai.

[2]. M. JagadeeswaraRao, K.Buschaiah, **Shaik Riyaaz Uddien**. '*Comparable studies on the Multivariate Linear Regression Relationship of EDM Process Parameters*'. National conference - NCAMMT2017 at SRM University, Chennai.

Publications

[1.] Shaik Riyaaz Uddien, Malobika Karanjai, Joydip Joardar, Pramod H.Borse. '*Multifunctional nickel-phosphide film deposition on graphite via. a cost-effective technique*'. Applied Surface Science (Submitted).

[2]. K. Srujay Varma*, M. JagadeeswaraRao*, Shaik Riyaaz Uddien* 'Multi-response optimization and Regression Analysis of Process Parameters for wire-EDMed HCHCr steel using Taguchi's Technique'. Mechanics, Materials Science and Engineering Journal, ISSN 2412-5954, May 2017. (*First Authorship Shared)

[3]. Imran Shaik, **Shaik Riyaaz Uddien**, A.Krishnaiah, Radhakrishna Madabhushi, Shankarachar Sutar. *'Finite Element Analysis of fluid conveying Pipe with Clamped Ends'*. Mechanics, Materials Science and Engineering Journal (MMSE), ISSN 2412-5954, December 2017.

[4]. K.Srujay Varma, Shaik Riyaaz Uddien, G. Narendar, V. Durga Prasad. 'Grey Relational Analysis of wire-EDMed HCHCr using Taguchi's Technique.' MMSE, Vol 14, January 2018.