SHIVAM PANDEY

JUNIOR RESEARCH FELLOW, IIT ROPAR

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OBJECTIVE

To obtain a responsible position as an ASSISTANT PROFESSOR in an educational institute with an opportunity for continuous growth where my teaching and research experience will be helpful to students as well as organization.

SUMMARY OF QUALIFICATIONS

- Practical teaching experience at a graduation level facility (TA at SVNIT, Surat)
- Work experience at IIT, Ropar and familiarity with departmental activities
- Outstanding ability to teach, inspire, and develop young people
- Excellent written and oral communication abilities
- Strong organizational skills and proficiency with Microsoft Office tools

EDUCATION DETAILS				
COURSE & SPECIALIZATION		INSTITUTE	YEAR	% / CGPA
M.Tech (CAD/CAM)		Sardar Vallabhbhai NIT, SURAT	2020	7.53/10
B. Tech (Mechanical Engineering)		Shri Mata Vaishno Devi University	2017	7.25/10
Class XII		Radhika Bal Vidya Mandir	2012	81.80%
Class X		Radhika Bal Vidya Mandir	2010	9.8/10
WORK EXPERIENCE				
JUNIOR RESEARCH FELLOW		INDIAN INSTITUTE OF TECHNOLOGY ROPAR	<i>(</i> ,	11, MARCH, 2021- PRESENT
ROLES & RESPONSIBILITIES	 Leading and executing the project independently Modeling and designing of modular structures to support vegetation on rooftop of commercial buildings Product Design and Development Design calculations of components of small agricultural machinery/products IoT principles-based Automation Data handling of experimental results and documentation of project reports Purchase and Documentation of Equipment and parts Preparation of database for training program on 'Green Roofing' for builders and industrial personnel 			
	of commercial buildings Product Design and Development Design calculations of components of small agricultural machinery/products IoT principles-based Automation Data handling of experimental results and documentation of project reports Purchase and Documentation of Equipment and parts Preparation of database for training program on 'Green Roofing' for builders and industrial personnel			

SUBJECT KNOWLEDGE AND TEACHING EXPERIENCE

Voluntary teaching experience of GATE ME aspirants/ 12th **standard students**, Teaching on Social Platforms (Chegg.com)

SOFTWARE SKILLS: ANSYS, Creo, CATIA, SOLIDWORKS, CFD, UG NX, ANSA; **SOFT SKILLS:** Conflict Resolution, Effective communication, conformity, creativity, problem-solving, critical thinking, enthusiasm

FUNDAMENTAL SUBJECTS: Fluid Mechanics, Basic Thermodynamics, Heat Transfer, Strength of Materials, Machine Design, Theory of Machines, CAD/CAM

RESEARCH PAPERS IN PROGRESS

- Automation in Green Roofs: Implementation of IoT and Solar Thermal Energy for sustainable and smart green roofing systems
- Trends in Green Roof Technology for Sustainable Development: A Review

THESIS

TITLE: Numerical investigation on Influence of process parameters of Single Point Incremental Forming (SPIF) of tailor-welded blanks (TWBs) of AA6061-T6 and AA5083 material.

M.Tech PROJECT

- The effect of SPIF process parameters viz. step size, coefficient of friction, and sheet thickness is studied on % thinning, maximum plastic equivalent strain, Von-mises' stresses, and weld line shift in the weld region through finite elemental analysis.
 Numerical simulations have been carried out on ABAQUS/Explicit software.
- Step size significantly affects all output responses except in the case of % thinning, where sheet thickness is more significant than step size.
- Weld line shift increases as the step size increases, and it can be recommended that step size be well within 0.8 mm in experiments.

B. Tech PROJECT

TITLE: Study of Flat Plate Solar Collector

Design and Analysis of Flat Plate Solar Collector with a serpentine arrangement of riser tubes (copper) on the absorber plate (aluminum) for air and water heating.

ACHIEVEMENTS

GATE 2022 SCORE: 708GATE 2022 AIR: 923

6 times GATE ME qualified (from 2017 to 2022)

TRAINING

- Four weeks training in 'CATIA V5 R18/20' and 'ANSYS 14.0' from INDO GERMAN TOOL ROOM (MSME AHMEDABAD) (1st JULY 2015 to 28th JULY 2015).
- Summer training at BHARAT HEAVY ELECTRICALS LIMITED, RANIPUR, HARIDWAR (JUNE-JULY, 2016)
 TOPIC: GENERAL AWARENESS OF STEAM TURBINE MANUFACTURING.

POSITIONS OF RESPONSIBILITY

- Placement Coordinator in Training and Placement Cell of SMVDU in session 2016-2017.
- Extended service as a member of the STUDENT AFFAIRS COUNCIL of SMVDU from August 2014- May 2015.
- President of Drama Club, SMVDU in session 2016-2017.
- House Captain in "RESURGENCE- Annual Cultural and Literary Festival" of SMVDU during March 28-30, 2017.

PARTICIPATION

- Study tour organized by Faculty of Mechanical Engineering, SMVDU to BAGLIHAR HYDROELECTRIC POWER PLANT of JAMMU region.
- Study tour organized by Faculty of Mechanical Engineering, SMVDU, to RAIL COACH FACTORY, KAPURTHALA
 of PUNJAB region.
- Participated and qualified for the National rounds in a workshop organized by Robosapiens Ltd. at Shri Mata Vaishno Devi University, Katra.

EXTRACURRICULAR ACTIVITIES

- TITIKSHA 2013-2014, 2014-2015 & 2015-2016, annual college technical fest.
- Directed and won 1st prize in "Legendary Drama" in RESURGENCE (cultural fest) 2015.
- Volleyball, Kabaddi, and Chess in SARANG, an annual college sports fest.
- Event Coordinator and Won 1st prize in "Youth Parliament" in RESURGENCE 2014.
- Directed and won 1st prize in "Street Play" in RESURGENCE 2016.

STRENGTHS

- Confidence
- Patience
- Adaptable
- Quick learner
- Dedicated
- Determined

PERSONAL DETAILS

Father's Name: SATISH KUMAR PANDEY

• Permanent Address: 180, Pandey Katra, Near Allahabad Bank, Malipur, Jaunpur, UP- 222002

• DOB: 15/01/1996

• Languages Known: English, Hindi

• Nationality: Indian

HOBBIES & INTERESTS

- Reading and Writing Books and Articles
- Playing chess and solving puzzles
- Keen interest in Sketching and Theatre
- Travel Enthusiast and Philhellene, who loves to read novels in his spare time

REFERENCES

 Dr. Prabir Sarkar Associate Professor MED, IIT Ropar

Email: prabir.sarkar@iitrpr.ac.in

• Dr. Shailendra Kumar

Professor, Dept. of Mechanical Engineering

SVNIT, Surat

Email: skbudhwar@med.svnit.ac.in

• Dr. Kapil Chopra

Assistant Professor

School of Mechanical Engineering

Shri Mata Vaishno Devi University, Katra

Email: kapil.chopra@smvdu.ac.in