SWAPNIL SURYAKANT SALVI

Final Year of M.Tech in Mechanical Engineering
School of Mechanical, Materials and Energy Engineering
Indian Institute of Technology Ropar
Nangal Road, Rupnagar – 140001
Punjab, INDIA

Phone: +91-902-902-3663
swapnil.salvi@iitrpr.ac.in
swapnilsalvi1993@gmail.com
www.swapnilsalvi.com
https://www.linkedin.com/in/salviswapnil/

Educational Details

- **Indian Institute of Technology Ropar, India**

  Master of Technology in Mechanical Engineering, 2016 –Present (Expected Date of Graduation: June 2018)
  CGPA – 8.66/10
- **Dwarkadas J. Sanghvi College of Engineering, Mumbai-56, India**
  Bachelor of Engineering (BEng), Mechanical Engineering, 2013 - 2016
  CGPA – 8.97/10
- **Shri Bhagubhai Mafatlal Polytechnic, Mumbai-56, India**
  Diploma, Mechanical Engineering, 2009 - 2013
  CGPA – 8.60/10

Experience

- **Teaching Assistant at Indian Institute of Technology, Ropar**
  July 2016 - Present
- **Inplant Trainee at TATA Power Company Limited**
  January 2013 - May 2013
  As an Inplant Trainee (5 months) at Combined Cycle Power Plant (CCPP: UNIT#7)
  Studied the working and maintenance of gas turbine and steam turbine. I was working on performance enhancement of super critical boilers as internship project.
- **Inplant Trainee at Heavy Engineering at Larsen & Toubro Limited**
  June 2011 - November 2011
  As an Inplant Trainee (6 months) at Environmental Health & Safety Department
  Worked on the project named as "HIRA - Hazard Identification and Risk Assessment" which concluded analysis of mostly all of the manufacturing processes carried out on shop-floor. My routine was related to carrying out audit work of workshop processes on the basis of standard industrial safety measures.

Competitive Tests

- **Graduate Record Examination (GRE)**
  Verbal = 151/170 Quantitative = 167/170 Analytical Writing = 3/6
- **Test of English as a Foreign Language (TOEFL iBT)**
  Total = 93/120
  Reading = 26/30 Listening = 20/30 Speaking = 23/30 Writing = 24/30
- **Graduate Aptitude Test in Engineering (GATE)**
  Score = 746/1000 Percentile = 99.32 All India Rank = 1352

Projects

- **Solar thermal energy storage** [June 2017 – Present]
  Final year project work, M.Tech in Mechanical Engineering (Under the guidance of **Dr. Himanshu Tyagi**)
  Working on mathematical, numerical modelling and analysis of different Phase Changing Materials (PCMs) as a working medium for latent heat thermal storage systems. Applying the concepts of energy storage using PCM in the areas like energy efficient buildings, thermal protection, etc.
- **Thermo-Electric Simultaneous Heating and Cooling** [June 2015 – March 2016]
  Final year project work, Bachelors of Engineering in Mechanical Engineering.
- **Hydraulic Trainer** [July 2012 – November 2012]
  Final year project work, Diploma in Mechanical Engineering

Conference Papers and Posters

I. **Salvi, S. S.**, Khullar, V., and Tyagi, H., "Numerical Modelling of Solar Thermal Energy Storage with Phase Change Materials", *International Conference on Sustainable Energy and Environmental Challenges (SEEC-2018)*, IISc Bangalore, India, Jan 01 – 03, 2018.

II. Bhalla, V., Garg, K., **Salvi, S. S.**, Badarla, V., Fulwani, D., Khullar, V., Rao, M., Chakrapani, A., Krishnan, N. and Tyagi, H. "Utilization of Nanoparticle-Based Solar Energy Systems for Improving the Overall Energy Efficiency of Buildings", *International Conference on Sustainable Energy and Environmental Challenges (SEEC-2018)*, IISc Bangalore, India, Jan 01 – 03, 2018.

III. **Salvi, S. S.**, Garg, K., Bhalla, V., Khullar, V., and Tyagi, H., "Numerical Modelling of Phase Change Material incorporated Brick Wall as a Thermal Energy Storage: Building's Energy Efficiency Applications", *International Symposium on Functional Materials (ISFM-2018): Energy and Biomedical Applications*, Chandigarh, India, Apr 13 – 15, 2018.

IV. Bhalla, V., Garg, K., **Salvi, S. S.**, Khullar, V., and Tyagi, H., "Effect of Blended Nanoparticles-laden Fluid on the Thermal Performance of Direct Absorption Solar Collector", *International Symposium on Functional Materials (ISFM-2018): Energy and Biomedical Applications*, Chandigarh, India, Apr 13 – 15, 2018.

V. Garg, K., Bhalla, V., **Salvi, S. S.**, Khullar, V., Das, S. K., and Tyagi, H., "Numerical Study of Direct Absorption Solar Collector Based Brine Recirculation Multistage Flash Desalination System for Small Scale Applications", *International Symposium on Functional Materials (ISFM-2018): Energy and Biomedical Applications*, Chandigarh, India, Apr 13 – 15, 2018.

VI. **Salvi, S. S.**, Garg, K., Bhalla, V., Khullar, V., and Tyagi, H., " Numerical Modelling of Thermal Energy Storage using Phase Change Materials: Energy Efficient Buildings Application", *Fifth International Conference on Computational Methods for Thermal Problems (ThermaComp-2018)*, IISc Bangalore, India, Jul 09 – 11, 2018. (*Accepted*)

VII. Garg, K., **Salvi, S. S.**, Bhalla, V., Khullar, V., Das, S. K., and Tyagi, H., "Thermal Performance of Direct Absorption Solar Collector based Single Stage Flashing Desalination System", *Fifth International Conference on Computational Methods for Thermal Problems (ThermaComp-2018)*, IISc Bangalore, India, Jul 09 – 11, 2018. (*Accepted*)

Activities

- Won 1st Prize in **ISME Project Competition** in D.J. Sanghvi College of Engineering.
- Participated in **National Level Project Competition** in Saraswati College of Engineering.
- Technical Head of ISHRAE: HVAC student chapter in Engineering studies (2014–2015)
- Achieved a certificate from CADD CENTRE for ANSYS.
- Participated in **State Level Paper Presentation** in Shri Bhagubhai Mafatlal Polytechnic.

Unofficial Transcripts (Masters in Technology – IIT Ropar):

Semester: I

Sr. No.	Subject Code	Course Title	Course. Credits (C)	Grade	Grade Points (G)	CxG	SOI		
							L	T	P
1	MEL626	THEORY OF ELASTICITY	3	B	8	24	3	0	0
2	MEL629	ADVANCED FLUID MECHANICS	3	C	6	18	3	0	0
3	MEL631	MANUFACTURING SCIENCES-I	3	B	8	24	3	0	0
4	MEL632	MATHEMATICS FOR ENGINEERS	3	A –	9	27	3	0	0
5	MEL633	NUMERICAL METHODS IN MECHANICAL ENGINEERING	3	B	8	24	3	0	0
		Total	15			117			

SGPA: 7.8

Semester: II

Sr. No.	Subject Code	Course Title	Course. Credits (C)	Grade	GPA (G)	CxG	SOI		
							L	T	P
1	MEL509	CONVECTION HEAT TRANSFER	3	B	8	24	3	0	0
2	MEL521	COMPUTATIONAL FLUID DYNAMICS	4	A –	9	36	3	0	2
3	MEL522	AIR CONDITIONING AND VENTILATION	3	A	10	30	3	0	0
4	MEL609	SOLAR THERMAL ENGINEERING	3	A	10	30	3	0	0
5	MEP502	EXPERIMENTAL METHODS FOR ENGINEERS	4	A	10	40	1	0	6
		Total	17			160			

SGPA: 9.41 CGPA: 8.66