

## GAURAV SINGH

SRF (Senior Research Fellow), Department of Mechanical Engineering,

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### **Personal Details:**

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Date of birth and place: 27/July/1991, Bikaner (Rajasthan)

Marital status: Single

Permanent address: Rampura, Street no. 18, Lalgarh, Bikaner (Rajasthan) 334004.

Language: Hindi, English, Punjabi and Marwari

### **Educational Profile:**

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2017- Present	SRF under DST project in Indian Institute of Technology (IIT Ropar) Also pursuing PhD from the IIT Ropar under the same project. (CGPA: 8.25)
2014 - 2016	M.Tech in Renewable energy (Center for energy and environment) Malaviya National Institute of Technology, Jaipur (MNIT, Jaipur) (CGPA: 7.33)
2008 - 2012	B. Tech (Mechanical Engineering) from Govt. College of Engineering and Technology, Bikaner (Marks: 68.15 %)
2012	12 <sup>th</sup> from RBSE, Ajmer (Marks: 74.15 %)
2010	10 <sup>th</sup> from RBSE, Ajmer (Marks: 79.67 %)

### **Work Experience Details:**

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July 2016 – June 2017	Teaching experience in Engineering Mentors Institute (GATE/ESE/State PSU study point)
July 2013- Dec 2013	COTEK Trainee at Mahindra and Mahindra Ltd (BMPL Motors) (service segment work)
Oct 2012- June 2013	Design engineer at Marksman Industries, Faridabad (Haryana) (Tool and die design work)

## **Research Publications:**

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### **Journal publications:**

1. Khan, Y., **Singh, G.**, Mathur, J., Bhandari, M. and Srivastava, P., 2017. Performance assessment of radiant cooling system integrated with desiccant assisted DOAS with solar regeneration. *Applied Thermal Engineering*, 124, pp.1075-1082. ([M.Tech thesis paper](#)).
2. **Singh, G.** and Das, R., 2019. Energy saving potential of a combined solar and natural gas-assisted vapor absorption building cooling system. *ASME Journal of Solar Energy Engineering*, 141(1).
3. **Singh, G.** and Das, R., 2019. A novel design of triple-hybrid absorption radiant building cooling system with desiccant dehumidification. *ASME Journal of Energy Resources Technology*, 141(7).
4. **Singh, G.** and Das, R., 2020. Comparative assessment of different air-conditioning systems for nearly/net zero-energy buildings. *International Journal of Energy Research*, 44(5), pp.3526-3546.
5. **Singh, G.** and Das, R., 2020. Energy Saving Potential of an Air-Conditioning System with Desiccant and Solar Assisted Ventilation. In *Advances in Mechanical Engineering* (pp. 1351-1359). Springer, Singapore.
6. **Singh, G.** and Das, R., 2019, July. Assessment of desiccant assisted compression and absorption based air-conditioning systems for hot-dry and composite climates. In *Journal of Physics: Conference Series* (Vol. 1240, No. 1, p. 012087). IOP Publishing.

### **Conference proceedings:**

1. **G. Singh**, R. Das, “Performance analysis of solar and natural gas based building cooling system” Paper presented in the proceedings of the International Conference on Sustainable Energy and Environmental Challenges (SEEC-2018) ,01 Jan – 03, January, 2018, IISc, India, Track no. T3.
2. **G. Singh**, R. Das, “Performance analysis of desiccant aided building cooling system” A poster presentation in International Workshop on Sustainable Energy, Power and Propulsion (ISEPP-2018) March 18-22, 2018, NIT- Kurukshetra, India.
3. **G. Singh**, R. Das, “Energy saving potential of an air-conditioning system with desiccant and solar assisted ventilation” Paper presented in International Conference on Recent Innovations and Developments in Mechanical Engineering NIT Meghalaya, Shillong, India, November 8 – 10, 2018 Paper No. IC-RIDME18: 186 ([Got best oral presentation award](#)).
4. **G. Singh**, R. Das, “Energy Analysis of a Building Air-Conditioning System with Sensible Heat Recovery Wheel and Indirect Evaporative Cooling” Paper presented in International Conference on Advanced Materials Energy & Environmental Sustainability, UPES, Dehradun, India, December 14-15, 2018 (ICAMEES-2018: Paper No. 186).

5. **G. Singh**, R. Das, “Assessment of desiccant assisted compression and absorption based air-conditioning systems for hot-dry and composite climates” paper presented in 2<sup>nd</sup> international conference on new frontiers in engineering, science and technology, February 18-22, 2019. NIT Kurukshetra. (NFEST 2019- ID 186).
6. **G. Singh**, R. Das, “Assessment of evaporative cooling and heat wheel assisted air-conditioning system for composite climate” paper presented in International Mechanical Engineering Congress, IMEC-2019, NIT Tiruchirappalli, Tamil Nadu, India, November 29– December 1, 2019 (IMEC-2019).

#### **Additional Information and Achievements:**

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- *Currently working as [Guest lecturer in Birla Institute of Technology, Pilani \(BITS, Pilani\)](#) under the WILP.*
- *Subject matter expert (SME) with TATA Consultancy services (TCS).*
- *Reviewer in the various Elsevier journal publications.*
- *Qualified three times GATE examinations with good score.*

#### **Skills:**

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- Quick learner
- Good listener
- Simplicity

#### **References:**

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1. Prof. Jyotirmay Mathur (Professor Malaviya National Institute of Technology, Jaipur)
2. Dr. Ranjan Das (Associate Professor Indian Institute of Technology, Ropar)

I hereby declare that all the given information is correct and accurate.