Krishna Singh
Ph.D. Research Scholar
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Professional Experience

Jan 2016-	PhD Research Scholar, Centre for Energy Studies, IIT Delhi
July 2014- Dec 2016	Research Associate, Centre for Rural Development, IIT Delhi

Awards and Distinctions

2016-present	MHRD Fellowship for the doctoral work from the Ministry of Human Resource Development, Govt. of India.
2019	Awarded IITDA-Research and Innovation award for OPEN HOUSE 2019
2018	Awarded IITDA-Research and Innovation award for OPEN HOUSE 2018
2016	Awarded 1st prize by The Co-Curricular and Academic Interaction Council (CAIC), IIT Delhi (Topic- "Green Village Design Challenge").
2015	Awarded IITDA-Research and Innovation award for OPEN HOUSE 2015 ("Self–Energy Generating TEG-Cookstove")
2012-2014	Fellowship from All India Council of Technical Education (AICTE) for the Master of Technology program in Energy Science & Technology

Education

2016-present	Ph.D., Indian Institute of Technology Delhi, India
2012-2014	M. Tech in Energy Science & Technology, Jadavpur Univ. Kolkata, India
2008-2012	B. Tech in Electrical Engineering**,** Jalpaiguri Government Engineering College, Jalpaiguri, India

Worked in Research Projects

- Enhancing the performance of passivated interface heterojunction silicon solar cells by improving junction properties and by using plasmonic light trapping (RP03240).
- Development of Clean Cookstoves with Self Sustaining Power Generation and Pilot Demonstration (RP02852).

Patent Applied

Method for fabrication a heterojunction silicon solar cell at room temperature
Vamsi Krishna Komarala, Mrutyunjay Nayak, **Krishna Singh**, Sourav Mandal and Sonpal Singh (Technology Readiness Level: 5, Validated at Relevant Environment)
Indian Patent Application No.: 201811017912, Date of Filling: May 12, 2018.

Publications in International Journals

[1]. Effect of textured silicon pyramids size and chemical polishing on the performance of carrier-selective contact heterojunction solar cells
Krishna Singh, Mrutyunjay Nayak, Sapna Mudgal, Sonpal Singh, Vamsi K. Komarala (**Solar Energy,** 183, (2019) 469–475)

[2]. Carrier-Selective Contact Based Silicon Solar Cells Processed at Room Temperature using Industrially Feasible Cz Wafers
Mrutyunjay Nayak, **Krishna Singh,** Sapna Mudgal, Sourav Mandal, Sonpal Singh, and Vamsi K. Komarala (**Phys. Status Solidi A,** (2019) 1900208)

[3]. Performance analysis of micro turbine based grid connected biogas power plant in Purulia in West Bengal, India
Krishna Singh and Tushar Jash
Clean Technology and Environment Policy, 17, (2015) 789–795.

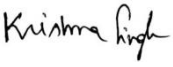
National-International Conferences

1. Characterization of Sputtered a-Si:H Passivated Silicon Surface by Temperature- and Injection-Dependent Lifetime Spectroscopy
Krishna Singh, Sourav Mandal, Sonpal Singh, and Vamsi K. Komarala
9th International Conference SiliconPV-2019, at Leuven, Belgium
AIP Conference Proceedings **2147**, 020014 (2019).

2. Silicon surface preparation for heterojunction solar cells
Krishna Singh, Sapna Mudgal, Vamsi K Komarala
National Conference on Renewable Energy Sources for Sustainable Climate SOLARIS 2017, at IIT BHU, Varanasi.

3. Performance analysis of micro turbine based grid connected biogas power plant in Purulia in West Bengal
Krishna Singh and Tushar Jash
4th International Conference on Advances in Energy Research; ICAER 2013, at IIT Bombay (ISBN: 978-81-928795-0-5).

It is certified that all particulars given by me in column above are true to the best of my knowledge.



(Krishna Singh)