







Dr. Kalpana Chaudhary

Associate Professor, Department of Electrical Engineering

Indian Institute of Technology (BHU)

Working as a woman in STEM is a most rewarding and challenging experience for me. Woman has penetrated in almost all the challenging professional field and are outperforming. There was Male dominance in field of STEM across the world and particularly in India. However, several progressive Government policies opened the door for woman in almost all field including the STEM field.

Some of the notable achievements are:

Fellow, Institution of Engineers from Institution of Engineers, India, Senior Member, IEEE and SERB Power Fellow.

List of Publications: Books Published:

- 1. "Satellite Solar Power Station" by Kalpana Chaudhary, November 2011,
- 2. Lambert Academic Publishing GmbH & CO. KG, Germany, ISBN-13: 978-3-8465-9101-7.https://www.amazon.in/Satellite-Solar-Power-Station-
- 3. Architecture/dp/3846591017/ref=sr_1 18?dchild=1&keywords=satellite+solar+power+station&qid=1624294122&sr=8-18

Books' Chapter:

- 1. D Kumar, K. Chaudhary, "Design of 5.8 GHz Rectenna for Space Based Solar Power", Advances in Electronics, Communication and Computing, Springer, pp. 705-712.
- 2. D Kumar, K. Chaudhary, "Design Study of 5 GW Base Load Power Drawn from Satellite Solar Power Station", Advances in Power Systems and Energy Management, Springer, pp. 655-663.
- 3. D Kumar, K. Chaudhary, "5.8 GHz Antenna Array Design for Satellite Solar Power Station", Advances in Smart Grid and Renewable Energy, Springer, pp. 659-666.
- Kumar M., Kumar K., Chaudhary K. (2021) Modified Non-isolated Bidirectional DC–DC Converter for Regenerative Braking for Electric Vehicle Applications. In: Mohapatro S., Kimball J. (eds) Proceedings of Symposium on Power Electronic and Renewable Energy Systems Control. Lecture Notes in Electrical Engineering, vol 616. Springer, Singapore. https://doi.org/10.1007/978-981-16-1978-6_7.

Sponsored Research Projects: Two (Ongoing as Principal Investigator):

 Project Title: Prototype Development of Fuel Cell and Photovoltaic-Based Innovative Hybrid DC Power Pack for Remote Applications.

Funding Agency: Science and Engineering Research Board (SERB), Govt. of India

Cost of Project: INR 38.10 Lakh

Project Status and Duration: Ongoing (Three Years, Started w.e.f. 25.03.2021)

Project Title: Development of Energy Efficient and Compact Electric Drive Train for Fuel Cell Electric Vehicle.
Funding Agency: Science and Engineering Research Board (SERB), Govt. of India
Cost of Project: INR 49.17 Lakh

Project Status and Duration: Ongoing (Three Years w.e.f. 23.02.22)

What is unique about working as a Woman in STEM compared to other fields?

Working as a woman in STEM is a most rewarding and challenging experience for me. Woman has penetrated in almost all the challenging professional field and are outperforming. There was Male dominance in field of STEM