# Sourav Diwania, PhD From Jamia Millia Islamia

New Delhi, India-110025

#### **Curriculum Vitae**

1	Name	Sourav Diwania
2	Designation	Assistant Professor
3	Office Address	KIET Group of Institutions, Ghaziabad, India
4	Telephone Number	+91-9897014427
5	Email (Primary): souravdiwania123@gmail.com	Email (Secondary): sorav.diwania@kiet.edu
6	Specialization	Power Electronics, Photovoltaic-Thermal
7	Web link	https://www.linkedin.com/in/sourav-diwania-381903163/ https://www.researchgate.net/profile/Sourav_Diwania2 https://publons.com/researcher/3022425/sourav-diwania/ https://scholar.google.com/citations?user=Y2qRAM0AAAAJ &hl=en https://www.youtube.com/channel/UCMmghJhCTjDyk1GzXl ws67w

### **Employment Profile**

From	То	Name of	Location	Position Held and
		Organization		Responsibilities
10/07/2017	Till date	KIET Group of	Ghaziabad	Assistant Professor
		Institutions		
14//07/2015	08/07/2017	ABES Engineering	Ghaziabad	Assistant Professor
		College		

# **Academic Qualifications**

S.No	Qualification	Board/University	Percentage	Year
1	PhD (EE)	Jamia Millia Islamia, New Delhi	Submitted	2020
2	M.E (EE)	Punjab Engineering College (PEC), Chandigarh	91.67	2015
3	B.Tech (EEE)	ABES Engineering College, Ghaziabad	76.23	2013
4	12 <sup>th</sup> (Intermediate)	Khalsa Montessori Senior Secondary School, Bulandshahr	84.44	2009
5	10 <sup>th</sup> (Matriculation)	Khalsa Montessori Senior Secondary School, Bulandshahr	81.00	2007

# Reviewer of National/International Journals and Conferences (From 2018 till date)

S.No.	Journal/ Conference Name	Reviewed	Publisher
1	International Journal of Renewable Energy Research	12	IJRER
2	Journal of the Institution of Engineers- Series B	11	Springer
3	Energy and Buildings	02	Elsevier
4	Advances in Technology Innovation	01	AITI
	Total	26	Till date

# **Academic/Administrative Responsibilities**

Position	Faculty/Department/Institution	From	To
Hostel Secretary	Punjab Engineering College, Chandigarh	Jan-2015	July-2015
Project Co-Ordinator	ABES Engineering College, Ghaziabad	July-2015	June-2017
Member organizing committee CIPECH-2018	KIET Group of Institutions, Ghaziabad	Nov-2018	Nov-2018
Member organizing committee VCIPECH-2020	KIET Group of Institutions, Ghaziabad	Nov-2020	Nov-2020

#### **Awards/Achievements**

Year	Name of the Awards/Achievements	Awarding Organization
2015	2 <sup>nd</sup> Rank in Master in Engineering	Punjab Engineering
		College, Chandigarh
2013-2015	MHRD Scholarship for Master in Engineering	Punjab Engineering
		College, Chandigarh
2011	Certificate of Merit in B.Tech (2 <sup>nd</sup> Year)	ABES Engineering
		College, Ghaziabad
2012	Certificate of Merit in B.Tech (3 <sup>rd</sup> Year)	ABES Engineering
		College, Ghaziabad

# **National Level Written Exams Qualified/Post Offered**

S.No.	Exam Qualified/Post	Institutions/Organizations	Year
	Offered	_	
1	Assistant Professor	MSIT, Rohini	2020 (Post Offered)
2	Assistant Professor	ABES Engineering College, Ghaziabad	2015 (Post Offered)
3	Assistant Professor	Chandigarh University, Chandigarh	2015(Post Offered)
4	PhD Exams	DCRUST, Murthal	2016 (Rank-1)
5	PhD Exams	JMI, New Delhi	2016
6	GATE	IIT, Bombay	2013/2014
		-	(98.2/97.1 Percentile)
7	Junior Engineer	SSC-JE	2014

### **Details of Academic Work**

S.No.	Academic Detail
	PhD
	Thesis Title "Life Cycle Analysis of Single Pass Hybrid (PV/T) Air Collector" I have done simulation and mathematical modeling of single pass hybrid photovoltaic-thermal (PV/T) air-collector as well as photovoltaic-thermal (PV/T) water collector. An experimental prototype of hybrid PV/T air collector with V-Groove absorber in the air channel is also developed and numerical results are validated with the experimental output. I can also write research proposal to bring research grants & projects from different funding agencies.
1	<ul> <li>Additional experiences during PhD:</li> <li>Knowledge of mathematical modeling for hybrid photovoltaic-thermal (PV/T) air collector</li> <li>Good Understanding of various optimization algorithms such as Whale Optimization Algorithm (WOA) and Genetic Algorithm (GAs)</li> <li>Good understanding of the theory and application of solar PV in power conversion. Good knowledge of various variable parameters which affects the performance of PV/T system.</li> <li>Understanding of various topologies of PV/T system such as PV/T air collector, PV/T water collector and PV/T combi collector.</li> <li>Proficiency with the tools Anemometer, Pyranometer and Digital Multimeters.</li> </ul>

#### **M.E** (Master In Engineering)

Thesis Title "Modeling and Integration of PV Array with Utility Grid".

I have done the modeling and simulation of PV module and its integration with utility work. I have also worked upon the integration issues like control of reactive power and grid side voltage. I have also published two research papers in international conferences on the above topic.

#### **2** Additional Experiences during M.E:

- 1. Knowledge of modeling of inverter for solar PV integration.
- 2. Good understanding of switching waveforms, high power semiconductor switches such as IGBT and MOSFET.
- 3. Understanding of power electronics topologies such as AC/DC, DC/DC and DC/AC.

#### **Publications**

		Research Publi	cations in Jo	urnals	
S.No	Title of paper	Authors	My Roles as First Author/Cor r. Auth./Co- Auth.	Journal	Year and Publication Status
1	Performance assessment of PVT-air collector with V- groove absorber: A theoretical and experimental analysis	Sourav Diwania, Anwar S Siddiqui, Sanjay Agrawal, Rajeev Kumar	First Author	Heat and Mass Transfer (Springer)	2020 (SCI) Published
2	Photovoltaic-thermal (PV/T) technology: a comprehensive review on applications and its advancement	Sourav Diwania, Anwar S Siddiqui, Sanjay Agrawal, Sonveer Singh	First and Corr. Auth.	International Journal of Energy and Environmental Engineering	2019 (ESCI) Published
3	Performance enhancement of single- channel glazed photovoltaic-thermal module using Whale Optimisation Algorithm and its comparative study	Sourav Diwania, Sanjay Agrawal, Anwar S Siddiqui,	First and Corr. Auth.	International Journal of Ambient Energy (Taylor & Francis)	2018 (ESCI) Published
4	Modelling and assessment of the thermo-electrical performance of a photovoltaic-thermal (PVT) system using different nanofluids	Sourav Diwania, Sanjay Agrawal, Anwar S Siddiqui, Rajeev Kumar	First Author	Journal of the Brazilian Society of Mechanical Science and Engineering	2020 (SCI) Minor Revision Submitted

		Publications in Conferences			
S.No	Title of paper	Authors	Roles First Author/Cor r. Auth./Co- Auth.	Conference	Year and Place
1	Exergetic Analysis of Glazed Photovoltaic Thermal (Single- Channel) Module Using Whale Optimization Algorithm and Genetic Algorithm	Sourav Diwania, Anmol Gupta, Sanjay Agrawal, Anwar S Siddiqui,	First Author and Corr. Auth.	Intelligent Computing Techniques for Smart Energy 2018 (SCOPUS)	Manipal University, Jaipur. Dec 2018
2	A Bibliographical View on Research and Developments of Photovoltaic and Thermal Technologies as a Combined System: PV/T System	Anmol Gupta, Sourav Diwania, Yash Pal, Sanjay Agrawal, Anwar S Siddiqui,	Co-Author	Intelligent Computing Techniques for Smart Energy 2018 (SCOPUS)	Manipal University, Jaipur. Dec 2018
3	Impact of Inverter Interfaced DG Control Schemes on Distributed Network Protection	SK Singh, Rajveer Singh, Sourav Diwania, Ankit Singhal, Shivam Saway	Corr. Author	Recent Advances in Power Electronics and Drives, Proceedings of EPREC 2020 (SCOPUS)	National Institute of Technology, Jamshedpur 29-30 May, 2020
4	Performance assessment of hybrid PVT air collector using GSA-CS algorithm	Sourav Diwania, Anmol Gupta, Yash Pal, Sanjay Agrawal, Anwar S Siddiqui,	First Author and Corr. Author	IOP Conference Series: Materials Science and Engineering 2019. (SCOPUS)	GL Bajaj Institute of Technology, Greater Noida, April 2019.
5.	Role of Optimization Algorithms in Enhancing the Performance of Photovoltaic Thermal (PV/T) Systems	Sumit Kumar Sourav Diwania, Anwar S Siddiqui, Sanjay Agrawal,	Corr. Author	Advances in Renewable Energy and Sustainable Environment 2019 (SCOPUS)	National Institute of Technology, Kurukshetra, August 2019

# Participation in Workshops/ Symposia/ Conferences/ Colloquia / Seminars/ Schools etc. (mentioning the role)

S.No	Title of Activity	Role	Organized by	Sponsored	Duration
1	Faculty Development Program on "Energy Engineering: Economics Planning and Management"	Attended	Electrical & Electronics Engineering Department, KIET	AKTU	Jan 25- 29, 2021
2	Workshop on "AICTE Incorporating Universal Human Values in Technical Education (An AICTE Initiative)"	Attended	Online	AICTE	Aug 05 <sup>th</sup> -09 <sup>th</sup> 2020
3	Workshop on Innovative Teaching Learning Pedagogy	Attended	IT Dept. In association with HR Dept. KIET Group of Institutions	KIET	Jan 08-10 2020
4	Faculty Development Program (FDP) on " Entrepreneurship Development",	Attended	Department of Management Studies, KEC, Ghaziabad	TEQIP-III	Dec 18-30, 2018 (Two Week)
5	Faculty development program on" Adaptive Neural Fuzzy Inference System (ANFIS) & its Applications"	Attended	Electrical & Electronics Engineering Department, KIET	AKTU	July 10-14, 2017 (One Week)
6	Faculty Development Program on "Advance Computer Networks & Security"	Attended	Department of Electrical & Electronics Engineering, ABESEC, Ghaziabad	AKTU	July 11-15 <sup>th</sup> 2016 (One Week)
7	Faculty Development Program on " Emerging Trend and Challenges in Electric Power Systems"	Attended	Department of Electrical & Electronics Engineering, ABESEC, Ghaziabad	AKTU	Jan 18 <sup>th</sup> -22 <sup>nd</sup> 2016 (One Week)
8	Workshop on "Intellectual Property Right"	Attended		AICTE	July 5 <sup>th</sup> -9 <sup>th</sup> 2016

# References

Reference 1	Reference 1
Prof. Anwar Shahzad Siddiqui	Dr. Sanjay Agrawal
Professor	Associate Professor
Department of Electrical Engineering	School of Engineering and Technology,
F/O Engineering and Technology	Indira Gandhi National Open University,
Jamia Millia Islamia, New Delhi, India-110025	Maidan Garhi, New Delhi, India-110068
Mob No +91-9990505825	Mob No- +91-9999266576
Email ID- assiddiqui@jmi.ac.in	Email ID- sanjay.agrawal@ignou.ac.in

#### **Declaration**

I hereby declare that all the particulars above are true to the best of my knowledge and understanding.

#### Sourav Diwania