

SANJAY AGRAWAL (Professor in Electrical Engineering)

Former Pro-Vice Chancellor, Chhattisgarh Swami Vivekananda Technical University (state Government University), Bhilai, Chhattisgarh, India

M No: 9999266576; Email: 09sanjay76@gmail.com, sanjay.agrawal@ignou.ac.in

Education

Post Doctoral Fellow	SMERC, University of California, Los Angeles, CA, USA
PhD	Indian Institute of Technology Delhi, New Delhi, India
M.Tech	U.P. Technical University, Lucknow, UP, India
B.E.	MMM University of Technology, Gorakhpur, UP, India
PGDDE	IGNOU, New Delhi

Teaching Experience (22 Year 06 Months)

Presently, Professor in Electrical Engineering, School of Engineering and Technology. IGNOU, New Delhi. (Central Government University)

Former Pro- Vice Chancellor, Chhattisgarh Swami Vivekananda Technical University (CSVТУ), Bhilai, CG, India (**on deputation from IGNOU, New Delhi**)

Some responsibilities other than University work

Chairman, National Assessment and Accreditation Council (NAAC) of various peer teams

Member, National Board of Accreditation (NBA) of various peer teams

Chairman, Selection committee, National Testing Agency, Delhi

Chairman, Guidelines for Diploma/B.E/B.Tech Program for Working Professionals in AICTE Approved Institutions, AICTE, Delhi.

Chairman, Review Committee Meeting under PMKVY, AICTE, Delhi.

Chairman, Jammu & Kashmir Employability Enhancement Training (JEET) Scheme, AICTE, Delhi.

Member, Selection committee, National Testing Agency, Delhi

Member, Question Paper Setting for various examinations, National Testing Agency, Delhi

Member, Selection committee, Staff selection committee, Delhi

Member, Selection committee, Kendriya Vidyalaya Sanghathan, Delhi

Member, Course Committee meeting of Electronics & Hardware Skill Course, CBSE, Delhi

Member, Selection committee, Rajasthan Public Service Commission, Delhi

Member, Question Paper Setting and syllabus finalization for various examinations, Uttarakhand Public Service Commission, Delhi

Member, Board of studies, Electrical Engineering Department, Aligarh Muslim University, Aligarh

Member, Board of Studies for the Faculty of Engineering and Technology, IGDTUW, Delhi

Member, Board of Studies, Electrical Engineering Department, Krishna Institute of Engineering and Technology, Ghaziabad

Patent

Title of the Invention: Improved Hybrid Solar Collector

File no: 202011044377 (October 12, 2020)

Status: Published

Title of the Invention: Hybrid Photovoltaic Thermal Apparatus with V-Groove Absorber

File no: 364184-001 (May 13, 2022)

Status: Published

Title of the Invention: Sheet and Tube based Hybrid Photovoltaic Thermal System

File no: 367354-001 (July 06, 2022)

Status: Published

Sponsored Projects:

1. Completed as Co-PI Project title “**Development of Low Cost Single Family Solar Cooker**” Sponsored by CSVTU, Bhilai during 2019-2021.
2. Completed as Co-PI Project title “**UV resistant Solar Dryer for Food Processing**” Sponsored by CSVTU, Bhilai 2019-2021.
3. Worked as member of Project titled “**Clean drying technology for locally available medicinal plants and seasonable vegetables of IIT Delhi**” Sponsored by "Ministry of food processing industries (MOFPI) Delhi" during 2009-2011.
4. Worked for Project titled “**Automatic power factor correction**” sponsored by Applied Electro-Magnetic PVT LTD, Noida, UP during 2006-2007.

MOOCs Course Developed under SWAYAM:

1. **Coordinator of Course “ Emerging Technologies in Renewable Energy Sources”(04 Credit)**
Under this Course, lecture recorded by coordinator himself: 10.
On offer from July 2023
2. **Coordinator of Course “ Power generation technologies”(04 Credit)**
Under this Course, lecture recorded by coordinator himself: 10.
On offer from July 2023
3. **Coordinator of Course “ Principles of Electrical Sciences”(04 Credit)**
Under this Course, lecture recorded by coordinator himself: 38.
On offer from July 2020 to Jan 2023 in every cycle.
4. **Coordinator of Course “Renewable Energy Technologies and Their Uses” (04 Credit).**
Under this Course, lecture recorded by Coordinator himself: 25.
On offer from July 2021 to Jan 2023 in every cycle.
5. **Coordinator of Course “ Industrial Automation and Drives ”(04 Credit)**
Under this Course, lecture recorded by coordinator himself: 10.

On offer from July 2024

6. **Coordinator of Course “Maintenance and Testing of Electrical Machines ”(04 Credit)**

Under this Course, lecture recorded by coordinator himself: 10.

On offer from July 2024

SWAYAM PRABHA:

Coordinator of Course

1: **Mechanical and Electrical Safety Management.**

Under this Course, lecture recorded by Coordinator himself: 10

2. **Introduction to Industrial safety Engineering**

Face book Lecture delivered during Pandemic (April-September 2020): 34

Publications:

International Journal Publications: 70 (Total citation: **2470**, i-10 Index-**39**, h-index-**27**) as per Google scholar.

1. Sanjay Agrawal and G.N. Tiwari, “*Energy and exergy analysis of hybrid micro-channel photovoltaic thermal module.*” Solar Energy 85 (2011) 356-370. **Impact factor is 7.18 (Number of citation: 252)**
2. Sanjay Agrawal and G. N. Tiwari, “*Performance evaluation of hybrid modified micro-channel solar cell thermal tile: an experimental validation,*” International Journal of Engineering Science and Technology 3(2011) 244-254. **Impact factor is 0.805 (Number of citation: 16)**
3. Sanjay Agrawal and Arvind Tiwari, “*Experimental validation of glazed hybrid micro-channel solar cell thermal tile.*” Solar Energy, 85 (2011) 3046-3056. **Impact factor is 7.18 (Number of citation: 103)**
4. **Sanjay Agrawal**, C.S. Rajoria and G.N.Tiwari, “*Overall thermal energy and exergy analysis of hybrid photovoltaic thermal array.*” Solar Energy 86(2012)1531-1538. **Impact factor is 7.18 (Number of citation: 40)**
5. **Sanjay Agrawal**, G.N Tiwari and H.D. Pandey, “*Indoor experimental Analysis of glazed hybrid photovoltaic thermal tiles air collector connected in series.*” Energy and Building, 53(2012) 145-151. **Impact factor is 6.7F (Number of citation: 53)**
6. **Sanjay Agrawal** and G. N. Tiwari, “*Exergoeconomic analysis of glazed hybrid photovoltaic thermal module air collector.*” Solar Energy, 86(2012)2828-2838. **Impact factor is 7.18(Number of citation: 72)**
7. C.S. Rajoria, **Sanjay Agrawal** and G. N. Tiwari, “*Carbon credit earned by hybrid photovoltaic thermal array.*” Journal of Fundamentals of Renewable Energy and Applications, doi:10.4303/jfrea/R120304. **(Number of citation: 03)**
8. G.K.Singh, **Sanjay Agrawal** and G. N. Tiwari, “*Analysis of Different Types of Hybrid Photovoltaic Thermal Air Collectors: A Comparative Study*” Journal of Fundamentals of Renewable Energy and Applications, doi:10.4303/jfrea/R120305. **(Number of citation: 18)**
9. Amit Dash, Sanjay Gairola and **Sanjay Agrawal**, “*Design and development of fuzzy logic controller to control the speed of permanent magnet synchronous motor.*” International Journal of Engineering Science & Research, 2012(47)1373-1383. **Impact factor is 3.449**
10. **Sanjay Agrawal** and G.N.Tiwari, “*Overall energy, exergy and carbon credit earned by different type of hybrid photovoltaic thermal air collectors*” Energy conversion and Management, 65(2013)628-636. **Impact factor is 10.4 (Number of citation: 108)**

11. C.S. Rajoria, **Sanjay Agrawal** and G.N.Tiwari “*Exergetic and enviroeconomic analysis of novel hybrid PVT array*” Solar Energy, 88(2013)110-119. **Impact factor is 7.18(**Number of citation: **84)**
12. **Sanjay Agrawal**, and G. N. Tiwari “*Enviroeconomic analysis and energy matrices of glazed hybrid photovoltaic thermal module air collector*” Solar Energy, 92(2013)139-146. **Impact factor is 7.18(**Number of citation: **54)**
13. **Sanjay Agrawal** and Pooja “*Biologically Inspired Computing Technique for Optimizing Discontinuous Mathematical Functions*” GJEIS, 02(2013) 18-23. **Impact factor is 0.9166**
14. DeepikaChuhan, **Sanjay Agrawal** and Mahendra Kumar Suman, “*Photovoltaic Thermal System And Their Various Aspects: A Review.*” International Journal of Scientific & Technology Research, 2013(02)79-88. **Impact factor is 0.675 (**Number of citation: **05)**
15. DeepikaChuhan, **Sanjay Agrawal** and Mahendra Kumar Suman, “*Policies For Development of photovoltaic Technology:A Review.*” International Journal of Software & Hardware Research in Engineering, 2013(01)52-57.
16. Sonveer Singh, **Sanjay Agrawal**, Arvind. Tiwari, I.M. Al-Helat, D.V.Awasthi “*Modeling and Parameter Optimization of Hybrid Single Channel Photovoltaic Thermal Module Using Genetic Algorithms*” Solar Energy, 113 (2015) 78-87. **Impact factor is 7.18(**Number of citation: **54)**
17. **Sanjay Agrawal**, and G. N. Tiwari “*Performance analysis in terms of carbon credit earned on annualized uniform cost of glazed hybrid photovoltaic thermal air collector*” Solar Energy, 115 115 (2015) 329-340.**Impact factor is 7.18(**Number of citation: **52)**
18. Sonveer Singh, **Sanjay Agrawal**, G.N.Tiwariand Deeipka Chauhan “*Application of Genetic Algorithm with Multi-objective Function to Improve the Efficiency of Photovoltaic Thermal System*” Solar Energy, 117(2015) 153-166.**Impact factor is 7.18(**Number of citation: **28)**
19. Sonveer Singh, **Sanjay Agrawal**, Rajit Gadh “*Optimization of SCGPVT Array Using Evolutionary Algorithm (EA) and Carbon Credit Earned by the Optimized Array*” Energy Conversion and Managment, 10(2015) 303-312.**Impact factor is 10.4(**Number of citation: **23)**
20. Sonveer Singh, **Sanjay Agrawal**, “*Parameter Identification of the glazed photovoltaic thermal system using Genetic Algorithm-Fuzzy System (GA-FS) approach and its comparative study*” Energy Conversion and Management, 105(2015) 763-771.**Impact factor is 10.4 (**Number of citation: **25)**
21. C.S. Rajoria, **Sanjay Agrawal** and G.N.Tiwari “*Exergetic and enviroeconomic comparison of PVT arrays based on optimum air flow configuration*” Solar Energy, 122 (2015), 1138-1145.**Impact factor is 7.18(**Number of citation: **28)**
22. C.S. Rajoria, **Sanjay Agrawal** , Amit K. Dash, G.N. Tiwari, M.S. Sodha “*A newer approach on cash flow diagram to investigate the effect of energy payback time and earned carbon credits on life cycle cost of different photovoltaic thermal array systems*” Solar Energy, 124 (2016),254-267.**Impact factor is 7.18 (**Number of citation: **26)**
23. Sonveer Singh, **Sanjay Agrawal** “*Design, Modeling and Performance Analysis of Dual Channel Semitransparent Photovoltaic Thermal Hybrid Module in the cold environment*” Energy Conversion and Management, 114 (2016) 241–250. **Impact factor is 10.4(**Number of citation: **40)**
24. C.S. Rajoria, **Sanjay Agrawal**, Subhash Chandra, G.N. Tiwari, D.S. Chauhan “*A Novel investigation of Building Integrated Photovoltaic Thermal (BiPVT) System: a Comparative Study*” Solar Energy, 131 (2016) 107-118. **Impact factor is 7.18(**Number of citation: **50)**
25. Sonveer Singh, **Sanjay Agrawal** “*Efficiency maximization and Performance Evaluation of Hybrid Dual Channel Semitransparent Photovoltaic Thermal Module using Fuzzified Genetic Algorithm*” Energy Conversion and Management, 122 (2016) 449-461. **Impact factor is 10.4. (**Number of citation: **21)**
26. G.S. Chaurasia, **Sanjay Agrawal**, N. K. Sharma “*A meta-heuristic firefly algorithm based smart control strategy and analysis of a grid connected hybrid photovoltaic/ wind Distributed Generation System*” Solar Energy, 150 (2017) 265–274. **Impact factor is 7.18(**Number of citation: **45)**

27. Sumit Tiwari, **Sanjay Agrawal**, G.N. Tiwari “*PVT air collector integrated Greenhouse Dryers: A Review*” Renewable & Sustainable Energy Reviews, 90 (2018), 142-159. **(Number of citation: 62) Impact factor is 16.7**
28. Subhash Chandra, **Sanjay Agrawal**, D S Chauhan “*Soft computing based approach to evaluate the performance of solar PV module considering wind effect in laboratory condition*” Energy Reports, 4 (2018), 252-259. **(Number of citation: 15).**
29. A Dash, **S Agrawal**, S Gairola, S Singh “*Optimization and Performance Characteristics of Building Integrated Photovoltaic Thermal (BIPVT) System in Cold Climatic Conditions*” Asian Journal of Water, Environment and Pollution 15 (3), 63-72, 2020. **(Number of citation: 02).**
30. Subhash Chandra, **Sanjay Agrawal**, D S Chauhan “*Effect of Ambient Temperature and Wind Speed on Performance Ratio of Polycrystalline Solar Photovoltaic Module: an Experimental Analysis*” International Energy Journal, RERIC, AIT, 2 (2018), 171-180. **(Number of citation: 17).**
31. Sourav Diwania, **Sanjay Agrawal**, Anwar S Siddiqui “*Performance enhancement of single-channel glazed photovoltaic thermal module using Whale Optimisation Algorithm and its comparative study*” International Journal of Ambient Energy, Taylor & Francis, 1 (2018), 2521-11. **(Number of citation: 02).**
32. AK Dash, S Gairola, **S Agrawal**, S Shukla “*A Novel Investigation and Comparative Study on Building Integrated Photovoltaic Thermal (BIPVT) System*” International Journal of Mathematical, Engineering and Management Sciences 4 , 2019. **(Number of citation: 05).**
33. S Diwania, A Gupta, AS Siddiqui, **S Agrawal**, Y Pal “*Performance assessment of hybrid PVT air collector using GSA-CS algorithm*” IOP Conference Series: Materials Science and Engineering, 691 (1), 012062, 2019.
34. A Gupta, **S Agrawal**, Y Pal “*Effect of thermoelectric materials in electrical and thermal performance of photovoltaic thermal (PVT) collector*” IOP Conference Series: Materials Science and Engineering, 691 (1), 012036, 2019. **(Number of citation: 03).**
35. AK Dash, **S Agrawal**, S Gairola, S Shukla “*Exergoeconomic and Enviroeconomic Analysis of Building Integrated photovoltaic Thermal (BIPVT) System and its Optimization*” IOP Conference Series: Materials Science and Engineering, 691 (1), 012078, 2019.
36. S Diwania, A Gupta, AS Siddiqui, **S Agrawal** :*Exergetic Analysis of Glazed Photovoltaic Thermal (Single-Channel) Module Using Whale Optimization Algorithm and Genetic Algorithm*” Intelligent Computing Techniques for Smart Energy Systems, Springer, 591-600, 2020. **(Number of citation: 03).**
37. Sourav Diwania, **Sanjay Agrawal**, Anwar S Siddiqui “*Photovoltaic–thermal (PV/T) technology: a comprehensive review on applications and its advancement*” International Journal of Energy and Environmental Engineering 11 (1), 33-54, 2020. **(Number of citation: 78).**
38. A Gupta, S Diwania, **S Agrawal**, AS Siddiqui, Y Pal: *A Bibliographical View on Research and Developments of Photovoltaic and Thermal Technologies as a Combined System: PV/T System*” Intelligent Computing Techniques for Smart Energy Systems, Springer, 713-722, 2020. **(Number of citation: 05).**
39. AK Dash, S Gairola, **S Agrawal**, S Shukla “*Analysis, Design, and Comparison of Different Building-Integrated Photovoltaic Thermal (BIPVT) System for Indian Meteorological Condition*” Advances in Energy and Built Environment, Springer, 145-157, 2020.
40. A Gupta, **S Agrawal**, Y Pal “*Performance Evaluation of Hybrid Photovoltaic Thermal Thermoelectric Collector Using Grasshopper Optimization Algorithm With Simulated Annealing*” Journal of Solar Energy Engineering 142 (6), 2020. **(Number of citation: 02).**
41. **Sanjay Agrawal**, Sachin Goyal, Vinay K. Deolia “*A Comparative study of FLC Tuned PID Controller and Conventional PID Controller for the Pitch Control of Wind Turbine in Turbulent Winds*” International Journal of Advanced Science and Technology 29 (03), 446 – 454. 2020.
42. S Diwania, AS Siddiqui, **Sanjay Agrawal**, R Kumar “*Performance assessment of PVT-air collector with V-groove absorber: A theoretical and experimental analysis*” Heat and Mass Transfer, Springer 29 (03), 1-15. 2020.

43. S Chandra, A Yadav, S Agrawal, DS Chauhan “*Material and temperature dependent performance parameters of solar PV system in local climate conditions*” Materials Today: Proceedings, Elsevier 26 (02), 878-882, 2020.
44. S Diwania, AS Siddiqui, **Sanjay Agrawal**, R Kumar “*Role of Optimization Algorithms in Enhancing the Performance of Photovoltaic Thermal (PV/T) Systems*” Advances in Renewable Energy and Sustainable Environment, Springer 667, 253-263. 2020.
45. Rohit Tripathi, **Sanjay Agrawal**, Rashmi Agraawal, Devender Singh, RN Shaw “*Synchronization, Fault Detection of PV Array and Grid with MPPT Techniques Using MATLAB/Simulink*” Innovations in Electrical and Electronic Engineering, Springer 661, 271-282. 2021.
46. S Diwania, **S Agrawal**, AS Siddiqui, S Singh “*Photovoltaic–thermal (PV/T) technology: a comprehensive review on applications and its advancement*” International Journal of Energy and Environmental Engineering, Springer, 11 (1), 33-54, 2020.
47. A Gupta, **S Agrawal**, Y Pal “*Energy and exergy performance evaluation of a novel photovoltaic-thermoelectric system combined with tube and sheet serpentine water collector*” International Journal of Green Energy, Taylor & Francis 1-15, 2021
48. Pankaj K Gupta, Abhishek Misal, **Sanjay Agrawal** “*Development of low cost reflective panel solar cooker*” Materials Today: Proceedings, Elsevier, 217, 223-234, 2021.
49. AK Yadav, VK Deolia, **S Agrawal** “*Exploring the Resonant Characteristic of Third Order Passive Filter based Quasi-Z-Source Inverter*” International Journal of Electronics, Taylor & Francis, doi.org/10.1080/00207217.2021.1892201, 2021.
50. Arvind Yadav, Vinay Kumar Deolia, **Sanjay Agrawal** “*Dual Current Loop Control for a Third-Order Passive Damped Filter Based Quasi-Z-Source Inverter*” ECTI Transactions on Electrical Engineering, Electronics, and Communications 19(01), 12-22, 2021.
51. S Diwania, **S Agrawal**, AS Siddiqui, “*Performance assessment of PVT-air collector with V-groove absorber: A theoretical and experimental analysis*” Heat and Mass Transfer, Springer Berlin Heidelberg, 57 (4), 665-679, 2021.
52. AK Dash, **S Agrawal**, S Gairola, CK Garg “*Parameter evaluation and performance analysis of a BIPVT system for the different climates of India: A comprehensive study*” Smart Computing, CRC Press, 533-539, 2021.
53. S Diwania, **S Agrawal**, AS Siddiqui, “*Modeling and assessment of the thermo-electrical performance of a photovoltaic-thermal (PVT) system using different nanofluids*” Journal of the Brazilian Society of Mechanical Sciences and Engineering, Springer, 43 (04), 01-18, 2021.
54. Arvind Yadav, Vinay Deolia, and **Sanjay Agrawal** “*Decoupled Control of Quasi-Z Source Inverter for Decentralized Renewable Energy Application*” in International Journal of Power Electronics, Inderscience Publishers, 14 (1), 37-55, 2021.
55. A Gupta, **S Agrawal**, Y Pal “*Performance analysis of the photovoltaic-thermoelectric system combined with serpentine type water collector*” International Journal of Energy Research, John Wiley & Sons, Inc, 45(13) 19147-19164, 2021
56. Arvind Yadav, Vinay Deolia, and **Sanjay Agrawal** “*Indirect closed loop control of Quasi-Z-Source inverter for standalone solar PV based energy conversion system*” in International Journal of Power and Energy Conversion, Inderscience Publishers, 12 (3), 236-251, 2021 (SCOPUS).
57. Harish Kumar Ghritlahre, Manoj Verma and **Sanjay Agrawal**, “*Development of novel cabinet solar dryer using UV sheet and its performance evaluation: An experimental Study*” Solar Energy 239 (2022) 1-9. **Impact factor is 7.18.**
58. Harish Kumar Ghritlahre, Manoj Verma, Jyoti Singh Parihar, Dilbag Singh Mondloe, **Sanjay Agrawal**, “*A detailed review of various types of solar air heaters performance*” Solar Energy 237 (2022) 173-195. **Impact factor is 7.18.**
59. **Sanjay Agrawal**, G.S. Chaurasia, Ambarisha Mishra “*Simulation & Performance Analysis of a 7.5 kVA Diesel based Stand-by Distributed Generation System using MATLAB*” in Indian Journal of Engineering and Materials Sciences (IJEMS). (SCOPUS) 29 (2022) 622-629.

60. **Sanjay Agrawal**, Jitender Kumar“*Comparative Analysis of Hybrid Photovoltaic Thermal (PV/T) Solar Dryer*” in Asian Journal of Water, Environment and Pollution. (SCOPUS) [DOI 10.3233/AJW230012].
61. Sachin Goyal, Vinay Kumar Deolia, **Sanjay Agrawal**, “*Development of novel cabinet solar dryer using UV sheet and its performance evaluation: An experimental Study*” ECTI Transactions on Electrical Engineering, Electronics, and Communications 20(02) (2022) 296-305. **Impact factor is 3.54.**
62. Harish Kumar Ghritlahre, Manoj Verma, Jyoti Singh Parihar, Dilbag Singh Mondloe, **Sanjay Agrawal**, “Experimental Investigation of Mixed Mode Ultraviolet Tent House Solar Dryer Under Natural Convection Regime” Solar Energy 251(2023), 51-67. **Impact factor is 7.18**
63. Satish Kumar, Neelam Dewangan, Geetanjali Verma, Harish Kumar Ghritlahre, Manoj Verma, Yogesh Kumar, **Sanjay Agrawal**, Shiena Shekhar, “Performance analysis of natural and forced convection mixed mode UV tent house solar dryer for potato drying” Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 45(4)(2023), 11482-11504. **Impact factor is 2.9.**
64. Neelam Dewangan, Geetanjali Verma, Harish Kumar Ghritlahre, Manoj Verma, Satish Kumar, Yogesh Kumar, **Sanjay Agrawal**, “An experimental investigation of mixed-mode tent house solar dryer using ultraviolet sheet for drying potato slices” Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 45(4)(2023), 11446-11466. **Impact factor 2.9.**
65. Awaneendra Kumar Tiwari, Kalyan Chatterjee, **Sanjay Agrawal**, Gyanendra Kumar Singh, “A comprehensive review of photovoltaic-thermal (PVT) technology: Performance evaluation and contemporary development” Energy Reports 10(2023), 2655-2679. **Impact factor is 5.2.**
66. Sourav Diwania, Maneesh Kumar, Varun Gupta, **Sanjay Agrawal**, Pavan Khetrapal, Neeraj Gupta, “Insight into the Investigation of Thermo-Electrical Performance of Hybrid Photovoltaic-Thermal Air-Collector” Journal of The Institution of Engineers (India): Series B(2024), 1-4. **Impact factor is 5.2.**
67. Sachin Goyal, Vinay Kumar Deolia, **Sanjay Agrawal**, “Performance Evaluation of GA-Optimized TSFL Pitch Controller for 2 Mass Drive Train HAWTs” Journal of Electrical Engineering & Technology (2024), 3515–3526. **Impact factor is 1.3.**
68. Satish Kumar, Harish Kumar Ghritlahre, **Sanjay Agrawal**, Shiena Shekhar, “Different methods for boosting the thermal performances of solar drying systems: A review” AIP Conference Proceedings 3111(1)(2024).
69. Satish Kumar, Harish Kumar Ghritlahre, **Sanjay Agrawal**, Shiena Shekhar, “An experimental investigation of active mixed-mode solar dryer utilizing north wall reflector” Energy Sources, Part A: Recovery, Utilization, and Environmental Effects 46(1)(2024), 16813-16835. **Impact factor is 2.9.**
70. Satish Kumar, Harish Kumar Ghritlahre, **Sanjay Agrawal**, Shiena Shekhar, “Investigation of a novel mixed-mode solar dryer using north wall reflector: An experimental study” Solar Energy 282(2024), 112909. **Impact factor is 7.18**

International Conference Publications: 13

1. **Sanjay Agrawal**, Sachin Gopal Soni, “*Volatge based maximum power point tracking for PV module,*” International Conference on Advanced Renewable Energy, June 2010, National Institute of Technology, **Bhopal**. (Oral: Presented personally).
2. **Sanjay Agrawal** and G.N. Tiwari, “*Design, Fabrication and Testing of micro-channel solar*

3. *cell thermal (MCST) tiles in indoor condition*,”(WREC-2011), Linkoping university, Linkoping, **Sweden**, May 2011. (Oral: Presented personally).
4. **Sanjay Agrawal**, Arvind Tiwari and G.N. Tiwari, “*Hybrid photovoltaic thermal air collectors: A Review*,” (SOLARIS-2012), Indian Institute of Technology Delhi and Bag Energy Research Society Varanasi, **Varanasi**, India, February 2012. (Oral: Presented personally).
5. **Sanjay Agrawal**, C.S. Rajoria and G.N. Tiwari, “*Exergoeconomic and Enviroeconomic analysis of hybrid photovoltaic thermal air collectors*,” (SOLARIS-2013), University The Granada, **Granda, Spain**, May 2013. (Oral: Presented personally).
6. Sonveer Singh, **Sanjay Agrawal**, D.V. Awasthi “*Optimization of Design Parameters of Glazed Hybrid Photovoltaic Thermal module Using Genetic Algorithms*,”**IEEE International Conference on Innovative Applications of Computational Intelligence on Power, Energy and Controls with their impact on Humanity (CIPECH-14)** on 28- 29 November 2014.(**Number of citation: 02**).
7. Sonveer Singh, **Sanjay Agrawal**, D.V. Awasthi “*Electrical energy analysis and optimization of single pass unglazed PVT system using evolutionary algorithm*,”**IEEE 1st International Conference on Next Generation Computing Technologies (NGCT)**, **2015** on 4-5 Sept. 2015.(DOI: 10.1109/NGCT.2015.7375233).
8. Subhash Chandra, Sanjay Agrawal, Durg Singh Chauhan and C.S. Rajoria “*An Enhancement in Electrical Efficiency of Photovoltaic Module*,”**IEEE Seventh POWER INDIA International Conference 2016**.
9. S Sonveer Singh, Amit Kumar Dash, Neeraj Kumar, **Sanjay Agrawal** “*Parameter extraction and performance evaluation of glazed PVT module for Indian climatic conditions based on soft computing technique*,”**21st Century Energy Needs-Materials, Systems and Applications (ICTFCEN)2016**.
10. S Chandra, A Yadav, **S Agrawal**, DS Chauhan “*Experimental investigation of optimum wind speed for material dependent temperature loss compensation in PV modules*,”**IEEE 3rd international conference on condition assessment techniques in electrical systems (CATCON)2017**.
11. CS Rajoria, PK Gupta, S Agrawal, GN Tiwari, D Singh “*Effect of Different Photovoltaic Materials on Energetic and Exergetic Performance of Photovoltaic Thermal Arrays*,”**MATEC Web of Conferences 95, 01006.2017**
12. A Yadav, S Chandra, V Deolia, **S Agrawal** “*Z source inverter application and control for decentralized photovoltaic system*,”**IEEE 3rd international conference on condition assessment techniques in electrical systems (CATCON)2017**.
13. A Yadav, V Deolia, **S Agrawal** “*Influence of parasitic resistance on dynamic response of a Quasi-Z-Source connected system*,”**International Conference on Power Electronics & IoT Applications in Renewable Energy and its Control (PARC)**, **2020**.
14. R Tripathi, **S Agrawal**, RN Shaw “*Impact of Number of Collector on Energy Profile from Concentrated Fully Covered Hybrid Photovoltaic (CHPV) System*,”**IEEE 5th International Conference on Computing Communication and Automation (ICCCA)**, **2020**.
15. Sachin Goyal, Vinay Kumar Deolia, **Sanjay Agrawal**, Indresh Yadav “*An Adaptive Fuzzy Tuned PID Pitch Controller For Large VSWT Wind Turbine*,” **3rd International conference on Power Electronics and IoT Applications in Renewable Energy and its Control -PARC2024**.

Book Published:

1. **Sanjay Agrawal**, Rajeev Mishra 2023. Renewable Energy Technologies , All India Council for Technical Education (AICTE), New Delhi ., **ISBN 78-81-961834-3-1**.
2. Sonveer Singh, **Sanjay Agrawal**, 2022. Control Systems, I.K. International publishing

HousePVT . Ltd., **ISBN** 978-93-90620-01-2.

3. Sonveer Singh, **Sanjay Agrawal**, 2012. Analog and Digital Electronics, I.K. International publishing House PVT . Ltd., **ISBN** 978-93-86768-57-5.
4. G.N. Tiwari, R.K. Mishra, C.S. Rajoria, **Sanjay Agrawal**, 2012. Proceeding of International Conference on Energy Security, Global warming and Sustainable Climate, SOLARIS 2012, I.K. International publishing House PVT . Ltd., **ISBN**: 978-93-8232-03-9.

Honour/Award:

Sl.No.	Name of the Awards	Awarding Institution	Year
1.	Bhaskara Advanced Solar Energy (BASE) fellowship	DST and Indo US science and technology forum (IUSSTF).	2015
2.	Best Paper Award	Madan Mohan Malaviya University of Technology, Gorakhpur, UP	2011

Invited/Expert talk: 68

Interactive Radio Counseling: 15

Tele counseling: 20

Details of Programmes developed (ODL):

1. PG Certificate in Industrial safety (PGCINDS), Launched in Jan 2021 as Programme Coordinator.
2. MSc in Renewable Energy and Environment, Launched in Jan 2022. (Team member for this Programme and Course Coordinator of three courses).
3. PG Diploma in Industrial safety launched in July 2022 as Programme Coordinator.

Details of Programmes developed (ONLINE):

1. PG Diploma in Industrial safety launched in January 2025 as Programme Coordinator.

IGNOU-GUYNA Motor Cycle repair and maintenance Skill Development Project: (August 2021 onwards)

Coordinating, Preparing Videos for Online Platform.

Details of Programmes Coordinated (Jan 2012-June 2019):

1. B.Tech in Electrical Engineering (BTELVI)
2. B.Tech in Electronics & Communication Engineering (BTECVI)
3. Diploma in Electrical Engineering (DELVI).
4. Diploma in Electronics & Communication Engineering (DECVI)

Chapters published in book:04

Units written in Self Learning Material:02

Units Edited in Self Learning Material: 27

PhD Thesis Guided: (09 awarded+04 in progress)

S.No.	Name of candidate:	Year of registration	Year of completion/ award
1	Dr. Sonveer Singh	2013	2016
2	Dr. Deepika Chauhan,	2013	2017
3	Dr. Subhash Chandra	2015	2018
4	Dr. G. S. Chaurasia	2012	2020
5	Dr. Saurav Diwania,	2016	2021
6	Dr Arvind Kumar Yadav	2015	2021
7	Dr. Amit Das	2013	2022
8	Dr. Anmol Gupta	2016	2023
9	Dr Sachin Goyal	2016	2024
10	Mr Awnenndra Kr Tiwari	2021	ongoing
11	Mr Satish Kumar Singh	2022	ongoing
12	Mr Yogesh Kumar	2022	ongoing
13	Ms Purvi Chandrakar	2023	ongoing
14	Mr Nikhil Kumar	2023	ongoing

Membership of Professional body:

Fellow member of Institution of Engineers (India) (membership no: 92411502)

Chartered Engineer of Institution of Engineers (India) (membership no: 92411502)

Senior Member of Institution of Electrical and Electronics Engineers (IEEE) USA(membership no: 92411502)

Life member of Indian Society for Technical Education (India) (membership no: LM 142043)

General Secretary, Indian Society for Technical University.

Vice President, Global Association for Training and Research, New Delhi (GATER)

Training programmes designed and conducted, duration and dates

SNo.	Programme	Dates	Place	Number of Participants
1	One day workshop on “Energy Conservation and Renewable Energy”	April 22, 2014	IGNOU, New Delhi	60
2	“Use of Scientific and Technical Terminology in Science and Technology” Sponsored by CSTT, MHRD	November 25-26, 2019	IGNOU, New Delhi	100
3	One week online Faculty Development Programme (FDP”	June 08-12, 2020	IGNOU, New Delhi	120
4	One day online seminar on “Need and Importance of Industrial safety”	June 13, 2021	IGNOU, New Delhi	100
5	One week online Faculty Development Programme (FDP” Sponsored by ATAL-AICTE, New Delhi	August 23-27, 2021	IGNOU, New Delhi	200
6	One day webinar on “Energy Conservation Day”	December 14, 2021	IGNOU, New Delhi	100
7	“National Education Policy for Technical Education Excellence and Scientific Terminology in Indian Language” Sponsored by CSTT, MHRD	June 23-24, 2023	CSVТУ, Bhilai, Chhattisgarh	100
8	“Enhancing Next Generation Technical Education and Scientific Terminologies with Indian Languages” Sponsored by CSTT, MHRD	July 08-09, 2024	CSVТУ, Bhilai, Chhattisgarh	100

Prof Sanjay Agrawal,
(Former Pro Vice Chancellor Chhattisgarh Swami Vivekanand Technical University (CSVТУ), Bhilai)
Professor in Electrical Engineering, School of Engineering and Technology, IGNOU, New Delhi-110068
M no: +91- 9999266576 (M)
Email: , 09sanjay76@gmail.com, sanjay.agrawal@ignou.ac.in

Google scholar link:

https://scholar.google.com/citations?view_op=list_works&hl=en&user=JZroyGIAAAAJ

Research gate link:

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