Dr. Shafqat Nabi Mughal

Present Address: Department of Electrical Engineering, SOET, BGSB University, Rajouri J&K -185234

Permanent Address: House No.84, Ward No.08, Gudhali Mohalla, Distt.Kishtwar J&K-182204

Email ID: snmughal@bgsbu.ac.in snmughal.bgsbu@gmail.com Moblile: 9419154432, 9797680416

Career Objective:

To secure a challenging position in a field where professional and personal growth develops in tandem and to deliver the best of my skills and knowledge in the very best interest of the company for which I shall be working.

Experience

Current Working:

Working as Head/Assistant Professor in the department of Electrical Engineering, Baba Ghulam Shah Badshah University Rajouri, Jammu and Kashmir w-e-f 27-March-2012 till present

Previous Experience:

- Worked as Lecturer in the department of Electrical Engineering, Baba Ghulam Shah Badshah University Rajouri, Jammu and Kashmir w.e.f 26-Sept-2011 to 27-March-2012 [*Duration-6 Months*]
- Worked as an Electrical Engineer with 'A' class Govt. Contractor, U/G-OFC. BSNL Contractor w.e.f July-2008 to July-2009 [*Duration-1year*]

Educational Qualification

Degree Board / Univ		Institution	Year of Passing	% age /CGPA
Ph.d	National Institute of	National Institute of	2022	8.75
(Electrical Engg)	Technology, Hamirpur	Technology, Hamirpur		
M.Tech	National Institute of	National Institute of	2011	8.54
(Power systems)	Technology, Hamirpur	Technology, Hamirpur		
B.E(Electrical)	University of Jammu	GCET Jammu	2008	69.3%
10+2	JKBOSE	SRML Jammu	2004	77.6 %
10 th	JKBOSE	Green Model Academy	2002	84.2 %
		Kishtwar		



Value Added Courses

- Successfully completed Two weeks course on "SMART GRIDS:FUTURE INTELLIGENT ELECTRICITY DISTRIBUTION GRIDS" organized by MNIT Jaipur under the "SCHEME FOR PROMOTION OF ACADEMIC AND RESEARCH COLLABORATION" program of Ministry of Education, Govt. of India w.e.f 4th-14th, Feb,2022
- Successfully completed Training and certification for HIL Specialist Certification on 10,May,2020
- Successfully completed Three weeks certified course on "Renewable Energy with specialization in Solar and Wind Energy" conducted by Department of Electrical Engineering, BGSBU and Sponsored by Counter Insurgency Force (Romeo) via Winnovation academy w.e.f 13-28 Feb,2019.
- One year diploma in Computer Applications.

Training & Projects

- 1. B.Tech project on "Load protector with remote switching facility"
- 2. M.Tech thesis on "Penalty evaluation for unscheduled interchange of power in deregulated power sector using frequency based tariff".
- 3. Ph.D thesis on "Techno-Economical Aspects with prediction of solar radiations for efficient utilisation of photovoltaic systems"

Position of Responsibility

2023-2024

• Performed duty as Session Chair for "Active Distribution Network" in Springer Nature's 3rd International Conference on Renewable Power (ICRP-2024) held on 28-29, March, 2024 at MAIT Delhi, India.

• Acted as **Organizing Chair** in Springer Nature's International Conference SIGMAA-2023, held on 15-16, December, 2023

• Performed duty as Session Chair for "Intelligent Tools and Techniques" in Springer Nature's 3rd International Conference SIGMAA-2023,held on 15-16,December,2023

 Received certificate of appreciation for organizing Special Session on "Application of Machine Learning in Prediction and Design of Renewable Energy Sources" in Springer Nature's 3rd International Conference SIGMAA-2023, held on 15-16, December, 2023

2022-2023

- Acted as Reviewer in the "International Conference on Computer, Electronics and Electrical Engineering and their applications (IC22E3-2023)" held from 8th to 9th June,2023 at National Institute of Technology Uttarakhand, India
- Invited as expert for designing Curriculum development for three year diploma in electrical engineering by Directorate of Skill Development, J & K on 11-05-2023
- Acted as **Organizing Secretary** in the 2nd International Conference on "Renewable Power (ICRP-2023)" sponsored by HAREDA Govt of Haryana and technically sponsored by Springer Nature, Jointly organized by department of EEE and ECE,MECW held from 28-29th,March,2023
- Acted as Reviewer for Journal of Cleaner Production (Elsevier) between October 2022 and December 2022

2021-2022

- Delivered Guest lecture on "Deregulation of Power System for Sustainable development" in FDP on Clean and Green Energy for Sustainable Development, organized by the Yogananda College of Engineering & Technology, Jammu, Jammu & Kashmir from 21-25, Feb, 2022
- Delivered Guest lecture on "Solar Energy Technology" organized by the Yogananda College of Engineering & Technology, Jammu, Jammu & Kashmir on 27, Dec, 2021

- Delivered Guest lecture on "Energy Conservation" on the eve of Energy conservation day organized by Institution of Engineers (India) Jammu Local Centre on 14-December-2021.
- Delivered Guest lecture on "Electrical Engineering" in Student Induction Program held in the School of Engineering & Technology, BGSB University, Rajouri on 28-September-2021.
- Delivered Guest lecture on "Solar Energy" in Student Induction Program held in the University Polytechnic, BGSB University, Rajouri on 14-September-2021.

2020-2021

- Performed duty as **Co Session Chair** in the ECCE Asia 2021, Singapore on 24-27, May, 2021.
- Performed duty as Session Chair in the E-National Conference & Exhibition on "Emerging & Innovative Trends in Engineering Technology" organized by the Government College of Engineering and Technology, Jammu on 23-24, April, 2021

2019-2020

- Delivered Guest lecture on "Wind Energy System" in FDP on "Clean and Sustainable Energy, organized by Yogananda College of Engineering & Technology Jammu. from 25-06-2020 to 28-06-2020.
- Performed duty as External Examiner of Project viva of Electrical Engineering Students, MIET, Jammu on 18th, Aug, 2020.
- Performed duty as Convener in National webinar on "Electrical Vehicles" organized by Dept. of Electrical Engineering, SoET, BGSB University Rajouri on 14-06-2020.
- Performed duty as **Session Chair** in "International Conference on Smart Energy and Communication (ICSEC) under Smart City Convergence" organized by Poornima Institute of Engineering & Technology, Jaipur on 20-21, March, 2020.
- Performed duty as Convener in Two-day workshop on "Technical & Scientific Manuscript Preparation with Latex" held at BGSB University, Rajouri on 25-26, September, 2019.
- Performed duty as **Session Chair** in 1st International Conference on Innovation in Modern Science and Technology organized by Siliguri Institute of Technology, Darjelling, India held on 20-09-2019 to 21-09-2019.

2018-2019

 Performed duty as Session Chair in International Conference on Manufacturing, Advance Computing, Renewable Energy and Communication (MARC-2018) organized by HMR Institute of Technology and Management on 19-20, July, 2018.

2017-2018

- Performed duty as Convener in One week STC on "Recent Advances in Power & Energy Engineering" w.e,f 12-03-2018 to 16-03-2018 organized by the department of Electrical Engineering, SOET, BGSBU.
- Performed duty as organizing committee member in "6th World Conference on Applied Science Engineering and Technology" held on 2-3 January, 2018 at GOA.

2016-2017

• Performed duty as Convener in Five Day Workshop on "Basics of Matlab-Programming and Simulation" organized by the department of Electrical & Renewable Energy Engineering, BGSB University Rajouri on 15-19,Nov,2016

2015-2016

- Delivered a Talk on "Frequency linked Tariff "in Two day seminar on "Advances in Electrical Engineering "organized by the department of Electrical & Renewable Energy Engineering. BGSB University Rajouri on 6-7, April, 2016
- Performed duty as Convener of Two Day National Seminar on "Advances in Electrical Engineering" organized by the department of Electrical & Renewable Energy Engineering, BGSB University Rajouri on 6-7, April, 2016

Earlier

- Hold the charge of Superintendent/Coding officer in the Diploma/Degree Examinations of BGSB University several times.
- Worked as the volunteer of NSS, during B.E.
- Worked with Bajaj Allianz as an Insurance advisor.
- Topper of district kishtwar in 10th result

Awards Received

AMP's 6th National Award for Excellence in Education 2022 by Association of Muslim Professionals.

- Young Scientist Award 2022 in Power Systems Engineering by REd TALKS INTERNATIONAL
- Best Researcher Award by VDGOOD Technology Factory in International Scientist Conference for Award Winners 2021 on Engineering, Science and Medicine to be held on 12, Nov, 2021 in Chennai, India.
- Best Researcher Award by VDGOOD Technology Factory in International Scientist Awards on Engineering, Science and Medicine held on 28-29, Aug, 2021 in Trivandrum, India.
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- Certificate of Appreciation for acting as Supervisor for the Project entitled "Wireless E-Car Charging System" which won 2nd Prize in IEEE National Level Project Expo-2021 jointly organized by IEEE Signal Processing and IEEE Communication Society, Vardhaman College of Engineering, Hyderabad on 24th, July, 2021.
- Award received for "Top 50 International Distinguished Young Researchers" given by Green Thinkerz in 2020.
- Best Paper award entitled "A proposal to regulate frequency in Deregulated Power System using Unscheduled Interchange Tariff" in 1st International Conference on Innovation in Modern Science and Technology organized by Siliguri Institute of Technology, Darjelling, India held on 20-09-2019 to 21-09-2019.
- Best Paper award entitled "Design & Techno-Financial Analysis of Solar Photovoltaic Plant for School of Engineering & Technology at BGSB University Rajouri" in International Conference on Manufacturing, Advance Computing, Renewable Energy and Communication organized by HMRITM, New Delhi held on 19-07-2018 to 20-07-2018.

Research Activities

<u>MEMBERSHIP</u>

- IEEE Senior Member (Membership No:97542724)
- Institution of Engineers Member(Membership No: M-1716799)
- Life Member Indian Society for Technical Education(Membership No: LM132229)
- Life Member of Green ThinkerZ Society w.e.f 2023
- Member of Institute of Doctors Engineers and Scientists(IDES Membership No. 5015)
- Member of International Association of Computer Science and Information Technology (IACSIT Membership No.80342328)
- Member of Editorial Board / Regional Editor of AES Journals.
- Member of International Association of Engineers (IAENG Membership No. 169604)
- Editor MAT Journals-Journal of Instrumentation and Innovation Sciences (e-ISSN:2456-9860)(A unit of ARV Infomedia Pvt. Ltd.)
- Editor CR Journals (Innovative Research in Communication Systems; Novel Approaches in Telecommunication and Novel Approaches in Digital Electronics)
- Reviewer Elsevier and SAGE International Journals.

RESEARCH INDEXES (as on 24-07-2024)

- 1. Google Scholar Citations: 273 h-index: 8
- 2. Research Gate Total research interest: 480 Citations: 146 Total Reads:48,399

Publications

* INTERNATIONAL JOURNALS

2023-2024

1. Naz, S.F., Ahmed, S., Mughal, S.N. *et al.* Optimizing fault tolerance of RAM cell through MUX based modeling and design using symmetries of QCA cells. *Sci Rep* **14**, 8586 (2024). https://doi.org/10.1038/s41598-024-59185-2

 Mughal, S.N., Sood, Y.R. & Jarial, R.K. Techno-economic assessment of photovoltaics by predicting daily global solar radiations using hybrid ANN-PSO model. *Energy Syst* (2024). https://doi.org/10.1007/s12667-023-00646-4

2022-2023

 Mughal, S.N., Hassan, M.S., Sood, Y.R., Jarial, R.K. (2022). Modelling and Performance Analysis Using Fuzzy Logic MPPT Controller for a Photovoltaic System Under Various Operating Conditions. In: Tomar, A., Malik, H., Kumar, P., Iqbal, A. (eds) Proceedings of 3rd International Conference on Machine Learning, Advances in Computing, Renewable Energy and Communication. Lecture Notes in Electrical Engineering, vol 915. Springer, Singapore. https://doi.org/10.1007/978-981-19-2828-4_30 [SCOPUS]

2021-2022

- Mughal, S.N., Nizam, M. (2022). A Microcontroller Based Hardware Implementation to Detect and Protect a Transformer Against Various Faults. In: Singh, P.K., Kolekar, M.H., Tanwar, S., Wierzchoń, S.T., Bhatnagar, R.K. (eds) Emerging Technologies for Computing, Communication and Smart Cities. Lecture Notes in Electrical Engineering, vol 875. Springer, Singapore. <u>https://doi.org/10.1007/978-981-19-0284-0_32</u> [SCOPUS]
- Gaurav Kumar, Shafqat Nabi Mughal (2022) Comprehensive Data Analysis of Power and Energy System: A Review of Microgrid Applications and Status. In: Malik H., Ahmad M.W., Kothari D. (eds) Intelligent Data Analytics for Power and Energy Systems. Lecture Notes in Electrical Engineering, vol 802.Springer,Singapore.https;doi.org/10.1007/978-981-16-6081-8_26[SCOPUS]
- Shafqat Nabi Mughal, Yog Raj Sood, R.K. Jarial (2022) "A Novel Hybrid Model for Predicting Hourly Global Solar Radiations on the Tilted Surface", Journal of Environmental Science and Technology, Springer https://doi.org/10.1007/s13762-021-03903-0.[SCIE]
- T.V.V. Pavan Kumar, Shafqat Nabi Mughal, Radhika Gautamkumar Deshmukh, S. Gopa Kumar, Yogendra Kumar, D. Stalin David, A highly consistent and proficient class of multiport dc-dc converter based sustainable energy sources, Materials Today: Proceedings,2021[SCOPUS]
- Shafqat Nabi Mughal, Yog Raj Sood and R.K. Jarial (2021) Design and optimization of photovoltaic system with a week ahead power forecast using autoregressive artificial neural networks, Materials Today: Proceedings. [SCOPUS].

2020-2021

- 9. Shafqat Nabi Mughal, Yog Raj Sood, R.K. Jarial, (2020) A Proposal on Techno-Financial Design aspects of Photovoltaic System for the Twin Districts of Rajouri and Poonch (Jammu & Kashmir), EAI Endorsed Transactions on Energy Web, Vol 8, issue 31, pp.1-11. Online First. DOI: 10.4108/eai.13-7-2018.165521. [SCOPUS]
- 10. Shafqat Nabi Mughal, Suhaib Ahmed, Gaurav Kumar, (2020) Uninterruptible Power Supply Design using Solar-Wind Hybrid combination with minimal use of Power supplied from the Grid, Dogo Rangsang Research Journal Vol-10 Issue-07 No. 7 July 2020, UGC Care Group I Journal ISSN : 2347-7180[UGC APPROVED]
- 11. Surya Prasada Rao Borraa, Vishal Moyal, Shafqat Nabi Mughal, Praful Nandankard, Er. S. John Pimo and Asadi Srinivasulu,(2021) An Efficient Shape Adaptive Techniques for the Digital Image Denoising, Turkish Journal of Computer and Mathematics Education Vol.12, issue 9, pp. 2709-2719.[SCOPUS]
- 12. Praful Nandankar, Rukhsana Thaker, Shafqat Nabi Mughal, Malgireddy Saidireddy, Anusha Linda Kostka J E, M V Aditya Nag, (2021) An Iot Based Healthcare Data Analytics Using Fog And Cloud Computing, Turkish Journal of Physiotherapy and Rehabilitation Vol. 32, issue 3, pp. 3401-3409. [ESCI, SCOPUS]
- 13. Shafqat Nabi Mughal, Yog Raj Sood & R.K. Jarial (2021) A Neural Network-based Time-Series Model for Predicting Global Solar Radiations, IETE Journal of Research, DOI: 10.1080/03772063.2021.1934576 [SCIE]

2019-2020

- 14. Gaurav kumar, Shafqat Mughal, Sreenu Banoth (2019) "Design and Development of an AC/DC Microgrid for Isolated Power System and grid connected system" Think India Journal. Vol-22-Issue-4-October-December-2019 pp.7031-7035 ISSN: 0971-1260 (UGC APPROVED).
- 15. Mughal S.N., Sood Y.R., Jarial R.K. (2020) A Proposal for Evaluating the Clearness Index Based on Extra Terrestrial Radiations at a Given Site. In: Dawn S., Balas V., Esposito A., Gope S. (eds) Intelligent Techniques and Applications in Science and Technology. ICIMSAT 2019. Learning and Analytics in Intelligent Systems, vol 12. pp.524-531, Springer, Cham
- 16. Mughal S.N., Sood Y.R. (2020) A Proposal to Regulate Frequency in Deregulated Power System Using Unscheduled Interchange Tariff. In: Dawn S., Balas V., Esposito A., Gope S. (eds) Intelligent Techniques and Applications in Science and Technology. ICIMSAT 2019. Learning and Analytics in Intelligent Systems, vol 12. Springer, Cham.
- 17. Mohammad S.S., Maqbool U., Firdous A., Navid T., Padder Z.N., Mughal S.N. (2020) Application of Demand-Side Management Techniques for Sustainable Energy. In: Kapur P., Singh G., Klochkov Y., Kumar U. (eds) Decision Analytics Applications in Industry. Asset Analytics (Performance and Safety Management). Springer, Singapore.

<u>2018-2019</u>

- 18. Hassan M.S., Mughal S.N., Jarial R.K., Sood Y.R. (2019) A Comparative Analysis of Different Maximum Power Point Tracking Algorithms of Solar Photovoltaic System. In: Mishra S., Sood Y., Tomar A. (eds) Applications of Computing, Automation and Wireless Systems in Electrical Engineering. Lecture Notes in Electrical Engineering, vol 553, pp. 217-229, Springer, Singapore[SCOPUS]
- 19. Mughal S.N., Sood Y.R., Jarial R.K. (2019) Design and Techno-Financial Analysis of Solar Photovoltaic Plant for School of Engineering and Technology at BGSB University, Rajouri (J&K). In: Mishra S., Sood Y., Tomar A. (eds) Applications of Computing, Automation and Wireless Systems in Electrical Engineering. Lecture Notes in Electrical Engineering, vol 553, pp.231-243, Springer, Singapore [SCOPUS]

20. Shafqat Mughal, Rukhsana Thaker, "A Novel Approach for Harmonic Analysis using Matlab" published in the International Journal of advance engineering and Research development "Emerging Trends and Innovations in Electronics and Communication Engineering - ETIECE-2017"Volume 5, Special Issue 01, Jan.-2018 e-ISSN (O): 2348-4470 p-ISSN (P): 2348-6406(UGC-APPROVED at serial 2232)

- Shafqat Mughal, Yog Raj Sood, R.K.Jarial, "A review on Solar Photovoltaic technology and future trends", International Journal of Scientific Research in Computer Science Engineering and Information technology(IJSRCSEIT-2018), Vol 4, Issue1, ISSN: 2456-3307(UGC APPROVED at serial no. 1849)
- 22. Rukhsana Thaker, Yusera Farooq khan, **Shafqat Mughal** "Fog Approach in Internet of Things: A Review" International Journal of Scientific Research in Computer Science Engineering and Information technology(IJSRCSEIT-2018), Vol 4, Issue1, ISSN: 2456-3307(UGC APPROVED at serial no.1849)

2016-2017

23. Shafqat Mughal, Umar Maqbool, Tahleela Navid, Aaqib Firdous, Zahid Nazir, Ashish Sangra "Load assessment and Future Energy Strategies" Published in the International Journal of Research and Scientific Information, Vol III, Issue VII, July 2016, pp.95-98 (ISSn:2321-2705)

2015-2016

24. Shafqat Mughal "J and K- A Power Potential Source or Power Deficit State "Published in the International Journal of Research and Scientific Information, Vol.II, Issue VII July 2015, pp.14-17(ISSn:2321-2705)

2010-2011

- Shafqat Mughal, Yog Raj Sood "Restructuring Developments and Issues in Indian Power System" Published in the International Journal on Recent Trends in Engineering & Technology, Vol. 05, No. 02, Mar 2011,pp.95-98(ISSN:2158-5563) (UGC approved at serial no.813)
- 26. Shafqat Mughal "The Scenario of Restructuring and Deregulation in Peru-Developments and Issues "Published in the International Journal of Electronics And Computers 3(1), 2011, pp. 75-79 (UGC APPROVED at serial no.1424)
- 27. Pankhuri Kishore, **Shafqat Mughal**, Yog Raj Sood"A Novel Approach for Tracking the Optimal Location of A Substation" Published in the International Journal of Electronics And Computers 3(1), 2011, pp. 1-5 (**UGC APPROVED at serial no.1424**)
- 28. **Shafqat Mugha**l, Yog Raj Sood, "Penalty evaluation in Deregulated power system using UI tariff", Published in the International Journal of Advances in Engineering Sciences Vol.1, Issue 3, July, 2011, pp. 1-7

* INTERNATIONAL CONFERENCES

- Shafqat Mughal, Yog Raj Sood,"Availability based Tariff-A Mean of Resource adequacy and Reliability in Indian Power System" published in the Proceedings of Ist International conference on science and engineering(ICSE-11) held on 21-23.jan.2011 at Rohtak (Haryana)
- Shafqat Mughal, Yog Raj Sood, "Availability Based Tariff-Discussion and Issues."Published in the Proceedings of International Conference on Deregulated Environment and Energy Markets (DEEM-2011) held on 22-23, July, 2011 at Chitkara University Punjab.
- Shafqat Mughal "A novel method of Penalization for Unscheduled Interchange of Power in Deregulated Power System using UI Tariff" Published in the Proceedings of *International Conference on Emerging Trends in Engineering(ICETE-11)* held on 4-5,May,2011 at Karnataka.pp.547-550
- 32. Pankhuri Kishore, Shafqat Mughal, Yog Raj Sood "A new Proposal for finding the Optimal Location and planning of a Substation" Published in the proceedings of 5th International Multi conference(ISSN-2011) held on 18-20,Feb,2011 at Klawad (Haryana)
- 33. Hasmat Malik, **Shafqat Mughal**, Yog Raj Sood, R.K.Jarial "Application and Implementation of Artificial Intelligence in Electrical system" Published in the proceedings of *International conference on advances in computing and communication(ICACC-2011)* held on 8-10,april,2011 at Nit Hamirpur (Himachal Pradesh)

- 34. Pankhuri Kishore, **Shafqat Mughal**, Hasmat Malik "HVDC Light-An Eco Friendly Tool for Power System Advancement" Published in the Proceedings of *International Conference on Emerging Trends in Engineering(ICETE-11)* held on 4-5,May,2011 at Karnataka.pp.517-522
- 35. Hasmat Malik, Abdul Azeem, **Shafqat Mughal**, Surinder Singh "Artificial Intelligence Techniques for Incipient Fault Diagnosis and Condition Assessment in Transformers" Published in the Proceedings of *International Conference on Emerging Trends in Engineering(ICETE-11)* held on 4-5, May, 2011 at Karnataka.pp.5-8

* NATIONAL CONFERENCES

- 36. **Shafqat Mughal**, Pankhuri Kishore "Implementation and application of HVDC in context to new electric industry" Published in the proceedings of *National conference on emerging trends in engineering and sciences (NC-2010)* held on 27-29,Nov,2010 at Samrat Ashok technological institute Vidisha (M.P)
- 37. Shafqat Mughal "The changing scenario of Electricity trading and Power market mechanism in India." Published in the Proceedings of *National Power engineering conference (NPEC10) pp6-12* held on 2-3, Dec, 2010 at Thiagarajar College of Engineering, Madurai (Tamil Nadu)
- 38. Shafqat Mughal, Yog Raj Sood, Pankhuri Kishore "The scenario of Privatization and restructuring in context to Indian Power system." Published in the proceedings of *National conference on Innovative Developments in Next Decade Challenge, Issues and Solutions(Idnd-2011)* held on 11-12, Feb, 2011 at Jodhpur(Rajasthan)
- 39. Shafqat Mughal, Pankhuri Kishore."Importance and key Issues Concerned with HVDC technology" Published in the proceedings of *National conference on Innovative Developments in Next Decade Challenge, Issues and Solutions (Idnd-2011)* held on 11-12,Feb,2011 at Jodhpur(Rajasthan)
- 40. Pankhuri Kishore, **Shafqat Mughal** "An Approach for Understanding Substation in Context to Its Importance and Need For Optimally Locating It" Published in the Proceedings of *National conference on research methods in science, technology and management (REMET-2011)* held on 26-27,March,2011 at Solan (Himachal Pradesh)
- 41. Neeten Sharma, Shafqat Mughal "Green Energy Resources/Technologies Scenario in India" Published in the proceedings of National Conference on Emerging Technologies in Renewable energy & Electrical Engineering-2012 (ETREEE-2012) held on 25-26,Feb,2012 at Sangam University Rajasthan
- 42. Shafqat Mughal, Neeten Sharma, Pankhuri Kishore "An Analysis of Power Quality Problems and Its Mitigation" Published in the proceedings of *National Conference on Emerging Technologies in Renewable energy & Electrical Engineering-2012 (ETREEE-2012)* held on 25-26,Feb,2012 at Sangam University Rajasthan.
- 43. Shafqat Mughal, Neetan Sharma, "EAP Material-A revolution in the Electric Actuation Technology" Published in the proceedings of *National Conference on Technology Advances in Electrical & Renewable Energy Engineering(EREECON-2013)* held on 23-24,2013 at Techno India NJR Institute of Technology, Udaipur. .(ISBN:978-81-7906-325-5)
- 44. Neetan Sharma, Shafqat Mughal "Solar Roadways Embedded with Piezoelectric System and Thermocouple Technology" Published in the proceedings of *National Conference on Technology Advances in Electrical & Renewable Energy Engineering(EREECON-2013)* held on 23-24,2013 at Techno India NJR Institute of Technology, Udaipur.(ISBN:978-81-7906-325-5)
- 45. Neetan Sharma, Shafqat Mughal "3E's in Exploring Green World" Published in the proceedings of National Conference on Technology Advances in Electrical & Renewable Energy Engineering (EREECON-2013) held on 23-24, 2013 at Techno India NJR Institute of Technology, Udaipur. .(ISBN:978-81-7906-325-5)
- 46. **Shafqat Mughal**, "The Impact of Frequency Linked Tarrif System in India" Published in the Proceedings of *National conference* and Exhibition on Emerging and Innovative Trends in Engineering Technology(NCEEITET-2014) held on 9-10,jan,2015 at GCET Jammu (J & K)

WORKSHOPS/ SEMINARS /STCs Etc.

<u>2023-2024</u>

- 1. Participated in One month duration faculty development programme on **"Data Science"** organized by SkillDzire in collaboration with AICTE from02-06-2024 to 02-07-2024.
- 2. Attended and Performed duty as Coordinator in 21 days Master Class on **"Autonomous Vehicle Design"** organized by Pantech e Learning from 13-03-2024 to 02-04-2024.
- 3. Participated in AICTE recognized Faculty Development Programme on "Big Data Analytics in Smart Grid" conducted by Electrical Engineering Department from 12-02-2024 to 16-02-2024
- 4. Participated in NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme (MM-TTP) of UGC organized by UGC-MMTTC Shri Mata Vaishno Devi University,Katra, Jammu from 22-01-2024 to 31-01-2024.
- 5. Attended and Performed duty as Coordinator in 30 days Master Class on **"Internet of Things"** organized by Pantech e Learning from 25-12-2023 to 24-01-2024.
- 6. Attended and Performed duty as Coordinator in 21 days Master Class on **"Data Science"** organized by Pantech e Learning from 08-11-2023 to 02-12-2023.
- 7. Attended and Performed duty as Coordinator in 30 days Master Class on **"Battery Management System"** organized by Pantech e Learning from 16-09-2023 to 16-10-2023.

<u>2022-2023</u>

- 8. Participated in One week AICTE recognized Faculty Development Programme "Open Source Tools for Research" conducted by Computer Science and Engineering Department from 15-05-2023 to 19-05-2023 at NITTTR, Chandigarh.
- 9. Attended and Performed duty as Convener in International Webinar on "Key Emerging Technologies in the Clean Energy Transition" organized by the department of Electrical Engineering, SoET, BGSB University Rajouri (J & K) India on 07, April, 2023.
- Participated in UGC- approved Short-Term Professional development programme on "Implementation of NEP-2020 for University and College Teachers" organized by Staff Training and Research Institute of Distance Education, IGNOU, New Delhi held from November 07-16,2022 and obtained 'A' Grade.
- 11. Participated in One week online faculty development programme on **"Taking Research to Next Level"** organized by the department of Mechanical Engineering & department of Basic Science, in association with IQAC,ISNT and IIC Cell, Sri Venketshwara College of Engineering, Bengaluru from 26-30,Septmber,2022
- 12. Participated in 5-Day Faculty development programme on **"Enhancing Research Eco-system in the campus"** organized by the Research & Development Cell Malla Reddy Engineering College Telangana w.e.f 22-26,Aug,2022

<u>2021-2022</u>

- 13. Attended and Performed duty as Coordinator in 30 days Master Class on **"Machine Learning"** organized by Pantech e Learning from 25-05-2022 to 24-06-2022.
- 14. Participated in Webinar on **"STEM Education and IEEE Pre-University Education Resources"** organized by IEEE India Council on April 23rd, 2022 through online.
- 15. Attended and Performed duty as Convener in National Webinar on "Role of Energy Managers to conserve energy for future generation" organized by the department of Electrical Engineering, SoET, BGSB University Rajouri (J & K) India on 22, April, 2022.
- Participated in AICTE sponsored QIP Short Term Course on "Power Quality Issues and Solutions for Grid Connected Electric Vehicles" organized by Electrical Engineering department, NITTTR Chandigarh from 14-19, March, 2022.
- 17. Participated in One Month National Level Workshop on **"Research Methodology**" from 11-02-2022 to 10-03-2022 organized by ESSGEE DIGISKILLS.
- Participated in Two week FDP on "Higher Education in the Post Covid-19-Era: Challenges, Strategies and Innovations" organized by the Centre for Hospitality and Tourism, School of Management Studies, BGSBU Rajouri (J & K) from 14th-27th, Feb, 2022.
- 19. Participated in Two week FDP on **"IoT & Applications (Smart Systems)"** jointly organized by Electronics and ICT Academics under the "Scheme of financial assistance for setting up of Electronics and ICT Academics" of the Ministry of Electronics and Information Technology (MeitY), Government of India from 14th-25th, Feb, 2022.
- 20. Participated in Five day FDP on **"Computational Intelligence in Control, Power and Instrumentation"** organized by the department of Electrical & Electronics Engineering, Institute of engineering and Management, Kolkata, India from 31st Jan to 04th Feb,2022
- 21. Attended and Performed duty as Convener in National Webinar on "Career Guidance Opportunities" organized by the department of Electrical Engineering, SoET, BGSB University Rajouri (J & K) India on 08, Feb, 2022.
- 22. Participated in Five day FDP on "Recent Emerging Trends in Electrical Engineering" organized by the department of Electrical Engineering, GCET Jammu from 31st Jan to 04th Feb,2022
- 23. Participated in one week FDP on "Post COVID Green and Sustainable Development Practices in Manufacturing Industries" organized by the department of Mechanical Engineering ,CVR College of Engineering ,Hyderabad from 17th to 21st January,2022.
- 24. Attended and Performed duty as Coordinator in 30 days Master Class on "Artificial Intelligence" organized by Pantech e Learning from 06-12-2021 to 04-01-2022.
- 25. Participated in One week FDP on "Modern Trends in Manufacturing Processes and Control Techniques in Renewable Energy System" organized by the department of Mechanical Engineering, National Institute of Technology Delhi, India from 16th to 21st November,2021
- 26. Attended and Performed duty as Convener in National Webinar on "BGSBU THEN AND NOW" organized by the department of Electrical Engineering, SoET, BGSB University Rajouri (J & K) India on 07, Aug, 2021.

- 27. Attended and Performed duty as Convener in National Webinar on "Use of Technology in Engineering Ethics" organized by the department of Electrical Engineering, SoET, BGSB University Rajouri (J & K) India on 31, July, 2021.
- 28. Participated in Five day Short Term Training Programme on "Blockchain Technology, Research Avenues, and its Applications" organized by the department of Computer Science and Engineering, Institute of Technology, Nirma University, Ahmedabad, India during 12-17th, July, 2021

<u>2020-2021</u>

- 29. Participated in Five day Master Class on "Power Electronics using MATLAB" organized by Pantech Prolabs India Pvt Ltd. From 12-16, April, 2021.
- 30. Participated in Five day online workshop on "Fuzzy Logic Systems in Engineering Applications(FLSEA21)" organized by the department of Electrical and Electronics engineering ,National institute of Technology Sikkim from 15-19,March,2021
- 31. Participated in one week AICTE Sponsored online Short Term Training Programme on "Recent Advances in Industrial Robotics & Applications" organized by Department of Electrical Engineering SRES's Shree Ramchandra College of Engineering Pune from 7th to 12th December 2020.
- 32. Participated in 4 Days Online Workshop on "Train the Trainers on Examination Reforms" Organized by BVB College of Engineering and Technology, Hubballi in collaboration with National Project Implementation Unit (NPIU) from 4th to 7th December, 2020.
- 33. Participated in AICTE Sponsored one week Online Short Term Training Program on "Smart Grid Technology" organized by Department of Electrical Engineering Arya College of Engineering & I.T., Kukas, Jaipur (Raj.) India from 23rd to 28th November, 2020.
- 34. Participated in the course of HIL Specialist Certification Organized by Typhoon Hil on 10 August 2020.
- 35. Participated in the "FDP" on Topic "Artifical Intelligence" organized by Yogonanda College of Engineering and Technology, Jammu, J&K from 10/07/2020.

<u>2019-2020</u>

- 36. Participated in Six Day Faculty Program on "Energy Management Systems" Organized by Department of Electrical and Electronics Engineering R.D.M Engineering College Tamilnadu, India from 8th June to 13th June, 2020.
- 37. Participated in A Five Day Faculty development Programme on "Recent Innovations & Technologies in Electric Vehicles" organized by Department of Electrical & Electronics Engineering, Gates Institute of Technology Anantapuramu, Andra Pardash from 8th to 12th June, 2020.
- 38. Participated in 3 days National Level Faculty Development Programme titled "Practical Applications of Machine Learning" organized by Department of IT, DR. N.G.P. institute of Technology through Google Meet from 08.06.2020 to 10.06.2020.

- 39. Participated in one week on line Faculty Development Program on "Advances in Electrical Engineering." Organized by Department of Electrical Engineering, PVG's COET, Pune from 8th June to 13th June, 2020.
- 40. Participated in online WGCapD Webinar Series on "Remote Sensing in Crop Monitoring and Assessment" from 19th May to 9th June, 2020.
- 41. Participated in one week FDP on "Modern Trends in Electrical Drives" (MTED), organized by Department of Electrical Engineering, NIT, Nagpur and The Institution of Engineers (I), Nagpur Local Centre from 19th to 23rd May 2020.
- 42. Participated in HIL Specialist certification organized by HIL Academy 10 May 2020.
- 43. Participated in Series of Webinars on "Cutting Edge Technologies in Electronics & Communication Engineering" organized by Department of Electronics & Communication Engineering from 14th May to 16May, 2020
- 44. Participated in One week Online Faculty Development Program on "MOODLE: Learning Management System "organized by Department of Electronics Engineering, AMU, Aligarh from 27th to 31st May, 2020.
- 45. Participated in a short course on "Learn to Design own Solar Home System" organized by Energy Literacy Drive of Energy Swaraj Foundation on 12 May, 2020.
- 46. Participated in online FDP on "Data Sciences" organized by Indian Institute of Information Technology (IIIT Nagpur) From 25-05-2020 to 29-05-2020.
- 47. Participated in online FDP on "Artificial Intelligence" organized by Motilal Nehru National Institute of Information Technology Allahabad Nagpur from 11-05-2020 to 15-05-2020.
- 48. Participated in Faculty Development Programme on "MATLAB & its application in AI & ML" organized by Department of ECE, NIT Patna and AEC, Kumbakonam, Tamilnadu from 19th to 26th May, 2020.
- 49. Participated in Faculty Development Programme(Online live instructor-led)on "Machine Learning & Its Applications" organized by Electronics and ICT Academy, IIT Roorkee from 04 May to 12 may, 2020.
- 50. Attended and Performed duty as Convener in National webinar on "Electrical Vehicles" organized by Dept. of Electrical Engineering, SoET, BGSB University Rajouri on 14-06-2020.
- 51. Participated in One week online Faculty Development Program (FDP) on "Moodle- Learning Management System" Organized by the KIS Vishwanathrao Deshpande Institute of Technology from 4th May to 8th May, 2020.
- 52. Attended and Performed duty as Convener in Two-day workshop on "Design in Power Electronics" held at BGSB University, Rajouri on 06-10, Feb, 2020.
- 53. Attended and Performed duty as Convener in Two-day workshop on "Technical & Scientific Manuscript Preparation with Latex" held at BGSB University, Rajouri on 25-26, September, 2019.

<u>2018-2019</u>

54. Participated in Two weeks Faculty Development Program on "Machine Learning" organized by the department of Computer Sciences, BGSB University from 22-04-2019 to 04-05-2019.

- 55. Participated in one week AICTE recognized STC on "Science & Technology for Sustainable Development through ICT" conducted by Electrical Engineering Department from 04-02-2019 to 08-02-2019.
- 56. Participated in one day workshop on "Intellectual Property Rights" organized by Institution Innovation Council (IIC), Baba Ghulam Shah Badshah University, Rajouri on 25th January, 2019.
- 57. Participated in one week AICTE recognized STC on "Artificial Intelligence & Optimization through ICT" conducted by Electrical Engineering Department from 21-01-2019 to 25-01-2019.
- 58. Participated in one day workshop on "Intellectual Property Rights" organized by Institution Innovation Council (IIC), Baba Ghulam Shah Badshah University, Rajouri on 25th January, 2019.
- 59. Participated in one week AICTE recognized STC on "Tools for Scientific Research in Engineering & Science through ICT" conducted by Electrical Engineering Department from 12-11-2018 to 16-11-2018.
- 60. Participated in One week workshop on "Machine Learning: Tools and Techniques" organized by the department of Computer Science Engineering, BGSBU in collaboration with Aligarh Muslim University w.e.f 31-10-2018 to 04-11-2018
- 61. Participated in one day workshop on "Analysis of Complex Datasets using STATA" organized by the department of Economics, BGSB University on 16-10-2018.
- 62. Participated in one day seminar on "Cloud Computing-Microsoft Azure" organized by department of Computer Science Engineering, BGSB University on 06-10-2018
- 63. Attended Three weeks "UGC-SPONSORED Special Summer School Refresher Course in Sciences" from HRDC University of Kashmir w.e.f 09-08-2018 to 07-09-2018.
- 64. Participated in one week AICTE recognized STC on "Internet of Things through ICT" conducted by Computer Science & Engineering Department from 06-08-2018 to 10-08-2018.
- 65. Participated in one week AICTE recognized STC on "Life Skills Development through ICT" conducted by Curriculum Development Center from 30-07-2018 to 03-08-2018.
- 66. Participated in MHRD-TEQIP-KITE Five day TEQIP-III Summer Training Program on Active Learning Workshop on the theme Pedagogy and Research Conducted in IIT Bombay w.e.f 04-06-2018 to 08-06-2018.

2017-2018

- 67. Participated in Two Day Workshop on "Outcome Based Education" organized by School of Engineering & Technology, BGSB University w.ef. 19-20, March, 2018.
- 68. Attended and Performed duty as Convener in One week STC on "Recent Advances in Power & Energy Engineering" w.e,f 12-03-2018 to 16-03-2018 organized by the department of Electrical, SOET, BGSBU.
- 69. Participated in One week "Professional Development Training under TEQIP-III at Indian Institute of Management Tiruchchirappalli. w.e.f 19-23, Feb, 2018.
- 70. Participated in one week AICTE recognized STC on "MATLAB and LABVIEW with its Hardware Interface through ICT" conducted by Electrical Engineering Department from 29-01-2018 to 02-02-2018.

- 71. Attended a one week workshop on Applications of Statistical Techniques using various softwares (WASTVS-2017) organized by the department of Mathematics, NIT Hamirpur (H.P) held on 20-26 Nov, 2017.
- 72. Attended a six day workshop on Real Time Simulation in Electrical Domain using Typhoon HIL and MATLAB Simulators (RTSED-2017) held on 03-08, Oct, 2017.

<u>2016-2017</u>

- 73. Participated in the LibreOffice Suite Base Training organized at Baba Ghulam Shah Badshah University Rajouri in January 2017.
- 74. Attended and Performed duty as Convener in Five Day Workshop on "Basics of Matlab-Programming and Simulation" organized by the department of Electrical & Renewable Energy Engineering, BGSB University Rajouri on 15-19,Nov,2016

<u>2015-2016</u>

- 75. Attended and Performed duty as Convener of Two Day Seminar on "Advances in Electrical Engineering" organized by the department of Electrical & Renewable Energy Engineering, BGSB University Rajouri on 6-7, April, 2016
- 76. Participated in Eight day workshop on "C-Programming" organized by the department of Mathematical Sciences BGSB University Rajouri. w.e.f 01-04-2016 to 09-04-2016

<u>2014-2015</u>

77. Attended "UGC-SPONSORED GENERAL ORIENTATION COURSE" from ASC University of Jammu held on 12-Jan-2015 to 10-Feb-2015.

<u>2012-2013</u>

78. Attended a National Seminar on "Applications of Mathematics to Science and Technology" organized by the Department of Applied Mathematics BGSB University Rajouri J&K (India) on 29-09-2012.

2006-2007

79. Attended a Short term course on "Assembly and Maintenance of Personal Computers" conducted by DOEACC CENTRE SRINAGER/JAMMU held on 23-04-2007 to 18-05-2007.

PATENTS

1. One patent "A SMART APPLICATION FOR DELIVERING MEDICINE AT HOME USING E-PRESCRIPTION" published on 11-06-2021 in the Patent office India (Application No.202141021276 A)

LIST OF PROJECTS GUIDED

S.No	Project title	Batch	Year of project guided
1	Fault Detection in a SCADA based on low voltage distribution system	2009	2013
2	2KVA Servo voltage Stablizer	2009	2013
3	Tesla Coil	2009	2013
4	Automatic Power line fault detection system	2009	2013
5	Security system based industrial automation	2009	2013
6	Automatic Power factor detection and correction	2010	2014

7	GSM based prepaid energy meter	2010	2014
8	Remote monitoring of parameters of transformer	2010	2014
9	Power grid syncronization failure	2010	2014
10	Solar energy measurement system conveyed over RF using PIC Microcontroller	2011	2015
11	Energy conservation in green buildings	2011	2015
12	IGBT buck convertor using Microcontroller	2012	2016
13	MATLAB based hydroelectric dam control with overflow GATE and water level control with turbine status	2012	2016
14	Improved power quality converters	2012	2016
15	Prepaid energy meter with theft detection	2012	2016
16	Load assessment and grid integration of BGSBU	2012	2016
17	Protection of transformer using microcontroller and GSM technology	2014	2018
18	Solar driven uninterrupted power supply management	2014	2018
19	Hybrid Model of solar and wind generating system	2015	2019
20	ZIGBEE based remote monitoring of 3-Phase paramters of transformer with voice announcement and wireless PC interface	2015	2019
21	Smart waste management	2016	2020
22	Photovoltaic based hydro pump with hybrid hydro power	2016	2020
23	Photovoltaic powered DC water pump	2017	2020
24	Hybrid bicycle	2017	2020
25	Smart wireless battery charging with charge monitor	2017	2021
26	Wireless e-car charging system	2017	2021
27	Substation monitoring over Aurdino using GSM	2018	2022
28	IOT based monitoring of distribution transformer	2018	2022
29	Dual Axis Solar Tracker with weather Monitoring	2019	2023
30	Differential Current Protection of Transformer using Aurdino voice Alert and Circuit Breaker	2019	2023

RESEARCH PROJECTS

S.	Project	Title of	Funding	Sanctioned	Role	Co-	Sanctioned	Status
Ν	Туре	Project	Agency	Amount		investigator	Date	
0.				(in Rs)				
1	Research	A self- sustainable load management system for BGSB University Rajouri	TEQIP- III	3 Lakhs	Principal investigator	Dr. Suhaib Ahmed Batt	06/01/2020	Completed
2	Research	An ANN based Solar Radiation prediction for accurate Photovoltaic prediction.	TEQIP- III	3 Lakhs	Principal investigator		06/01/2020	Completed
3	Research	Design of fault	TEQIP-	2 Lakhs	Co-Principal	1.Dr. Suhaib	06/01/2020	Completed

		tolerant random access memories in quantum dot cellular automata for ultra-low power application.	Π		investigator	Ahmed Batt & 2. Prof.Mohd. Asger		
4	Research	Design an intelligent controller for hybrid micro- grid for isolated power supply.	TEQIP- III	2.58 Lakhs	Co-Principal investigator	Mr. Gaurav Chaudhary	06/01/2020	Completed

Personal Profile

Name Date of Birth Marital Status Nationality Sex Religion Father's Name	· · · · · · · · · · · · · · · · · · ·	Shafqat Nabi Mughal 29 th January, 1986 Married Indian Male Islam Ghulam Nabi Mughal
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I hereby declare that the above information provided by me is true to the best of my knowledge and belief.

Place: Rajouri

Date: 24-07-2024

(Shafqat Nabi Mughal)