



Syed Hasan Saeed, Ph.D.

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[Google Scholar](#) | [Scopus](#) | [Research Gate](#) | [LinkedIn](#) | [Yolasite](#) | [Wordpress](#) | [Youtube](#)

PROFILE

RESEARCH INTEREST:

Instrumentation, Renewable Energy

SUMMARY OF RESEARCH ACCOMPLISHMENT:

- Contributions to the field of instrumentation, sensors and renewable energy, focusing on the development and optimization of innovative technologies that enhance the efficiency and reliability of renewable energy systems.
- Our research has resulted in the publication of high-impact journals such as Energy Elsevier Q1, where my work on has been widely cited.
- Optimization and sizing of SPV/Wind hybrid renewable energy system: A techno-economic and social perspective.
- Effect of annealing temperature on a highly sensitive nickel oxide-based LPG sensor operated at room temperature (SCIE).

PROFESSIONAL MEMBERSHIP:

- Fellow Member of IETE (Membership No. F-228541)
- Professional member of Association for Computing Machinery (Membership No. 3621743)
- Fellow Member of Institution of Engineers (IE) (Membership No. F-124841-5)
- Life Member of Instrument Society of India, IISC Bangalore. (Membership No.: LM-2468)
- Life Member of Solar Energy Society of India (SESI) (Membership No.: FM/033/2015)

COURSE TAUGHT:

- Basic Electrical Engineering
- Digital Electronics
- Automatic Control System
- Power Electronics
- System & Automatic Control
- Power System

- Circuit Theory
- Network system & Analysis

ADMINISTRATIVE/DEPARTMENTAL RESPONSIBILITY

- Head of the department from 2010 to 2022 & 2024 to till now
- Member of Academic Council
- Chief Proctor at Integral University, Lucknow for three years
- Member of IQAC
- Assistant Center Superintendent of Examination
- Convener of syllabus design/ review committee for B.Tech. (ECE) and M. Tech (Renewable Energy).

STUDENTS SUPERVISION

Ph.D. Supervised (Completed): More than 10

Ph.D. Supervision (Ongoing): 04

PUBLISHED/ACCEPTED SCI/SCOPUS RESEARCH PAPERS

- Syed Hasan Saeed, Bal Gopal, 'Study of TGS 822 Sensor for Electronic Nose Applications', MASAUM, A Journal of Basic and applied Sciences, Vol. 1, No.2, September 2009, pp 260-264, [www.masauumnt.com/archives/mjbas/vol. 1/.../mjbas_010218.pdf](http://www.masauumnt.com/archives/mjbas/vol.1/.../mjbas_010218.pdf)
- Syed Hasan Saeed, Hasin Alam "ELECTRONIC NOSE IN FOOD AND HEALTH APPLICATIONS: A REVIEW" is published in an International Journal of Computing and Corporate Research (IJCCR), Vol. 2, Issue 6, November 2012 (Impact factor 1.3)
- Syed Hasan Saeed, Hasin Alam "Modern Applications of Electronic Nose: A REVIEW" International Journal of Electrical and Computer Engg (IJECE) Vol. 3, No. 1, February 2013, pp 52-63, ISSN:2088-8708 (Impact factor 1.2)
- Syed Hasan Saeed, Hasin Alam and Saifur Rahman "The Electronic-Nose: An Introduction & Commercial Applications is accepted to publish in a National Journal of Advances in Physical Sciences and Research (APSR).
- Saifur Rahman, Prof. T. Usmani, Dr.S.H.Saeed, REVIEW OF ELECTRONIC NOSE AND APPLICATIONS, published at IJCCR, Vol. 3 Issue 2, March 2013
- Mohd Maroof Siddiqui, Saifur Rahman, Syed Hasan Saeed, Anurag Banodia, "EEG Signals Play Major Role To Diagnose Sleep Disorder", International Journal of Electronics and Computer Science Engineering (IJECSE), Published on 22nd March, 2013
- Hasin Alam Syed Hasan Saeed, M. Jawed Siddiqui, "Developments In Electronic Nose Systems" International Journal of Electronics, Communication & Instrumentation Engineering Research and Development (IJEIERD) ISSN 2249-684X Vol. 3, Issue 4, October 2013, pp 105-112, Impact Factor (JCC):4.7283
- Hasir Khan, Mohd. Maroof Siddiqui, Syed Hasan Saeed, Ragini Tripathi, "An Overview of Embedded System", IJESCE, vol. 5, No. 2, December 2013.
- Pratiksha Rai, Shailendra Kumar, S.H.Saeed, "Design of Floating Multiplier Using Vedic Aphorisms", International Journal of Engineering Trends and Technology (IJETT), vol. 11 Number- 3, ISSN: 2231-5381, May-2014.
- Shri Om Mishra, Shailendra Kumar, S.H.Saeed, "Implementation of Fuzzy Logic Controller for Speed Control of Motor using VHDL", vol. 11, Number 3, May-2014. International Journal of Engineering Trends and Technology (IJETT), vol. 11 Number- 3, ISSN: 2231-5381, May-2014.

- Yogendra Singh Yadav, Shailendra Kumar, S.H.Saeed, "Implementation of Switching System for High Speed Data Transmission using VHDL", International Journal of Engineering Trends and Technology (IJETT), vol. 11 Number- 3, ISSN: 2231-5381, May-2014.
- Sandeep Narain, Syed Hasan Saeed, "MIMO System Performance Evaluation High Data Rate Wireless Networks using Space Time Block Codes with Orthogonal Strnalucture", International Journal of Modern Engineering Research (IJMER), vol. 4, Issue 6, ISSN: 2249-6645, June 2014
- Devender Singh, Syed Hasan Saeed, "Design and Development of Gate Signal for 36-volt 1000Hz Three Phase Inverter", International Journal of Modern Engineering Research (IJMER), vol. 4, Issue 6, ISSN: 2249-6645, June 2014.
- Syed Hasan Saeed, Mohd. Juned, "Design of High-Performance Binary Adders Based on Quantum Dot Cellular Automata" International Journal of High-Performance Communication System and Networking.
- Mohammad Anas, Shrish Bajpai, Syed Hasan Saeed "Design of Affordable and Effectual DIY Solar Kit", International Journal of Engineering Trends and Technology (IJETT), vol. 21, Number 1, March-2015.
- Balendu Bhushan Pandey, Mohd. Maroof Siddiqui, Syed Hasan Saeed, Saif Ahmad "Amba Advance High-Performance Bus-DMA Interfacing" (IJAESTR), vol.3, Issue 1, ISSN:2321-1202, March-2015.
- Amra Wahab, Mohd. Maroof Siddiqui, Syed Hasan Saeed, Dr. Geetika Srivastava, "Review: Sleep Disorder Breathing (Sleep Apnea)", (IJAESTR), vol. 3, Issue 1, ISSN:2321-1202, March-2015.
- Piyush Charan, Tahsin Usmani, Syed Hasan Saeed, "A Comprehensive Study of Various on Demand Routing Protocols in Manets" International Journal of Electronics and Communication Engineering (IJECE); ISSN(Print): 2278-9901; ISSN(Online): 2278-991X; vol-4, Issue-2, Mar-2015; Impact Factor (JCC)- 2015: 3.2029; Index Copernicus Value (ICV)- 2015:3.0; NASS Rating: 3.06".
- Imran Ullah Khan, S. Kumar, S. Hasan Saeed, N.R. Kidwai, "Next Generation Video Coding Systems (H.265/HEVC) and its Comparison from H.264/AVC Video Codec" International Journal of Engineering Technology and Applied Sciences (IJETMAS), vol. 3, issue 4, ISSN 2349-4476, April 2015.
- Mohd. Farhan, Saifur Rahman, S. Hasan Saeed, Saima Rahman "Low Frequency Filter Design with the help of OTA" International Journal of Engineering Technology and Applied Sciences (IJETMAS), vol. 3, issue 4, April 2015, Impact Factor 2.24.
- S. Hasan Saeed, Shrish Pandey, "A Survey on Early Detection of Critical Diseases by Human Breath Analysis", International Journal of Advanced Research in Electrical , Electronics and Instrumentation Engineering (IJAREEIE), vol. 5, issue 6, June 2016, Impact Factor 5.621
- Shri Om Mishra, S. Hasan Saeed, Optimization of electronic sensors for distinguishing contamination because of solid waste gases||, International Journal of Electrical and Computer Engineering (IJECE), ISSN: 2088-8708, Vol. 09, Issue 5 (October 2019), 01 -08.
- Shri Om Mishra, S. Hasan Saeed, "A Review on Optimization of Electronic Sensors for Detecting Pollution Due to Solid Waste Gases", 201 9 JETIR March 201 9, (ISSN-2349-5162, Volume 6, Issue 3, 439-445.
- Shri Om Mishra, S. Hasan Saeed, Environment Monitoring Using Electronic Sensors For Detecting Pollution Due To Solid Waste Gases Using Five Sensors|| IOSR Journal of Engineering (IOSRJEN), Vol. 08, Issue 7 (July. 2018), ISSN (e): 2250-3021, ISSN (p): 2278-8719 || V (V) || 42-49. (SCOPUS Indexed)
- Shri Om Mishra, S. Hasan Saeed, "A review on gas sensors for environment monitoring using electronic sensors for detecting pollution due to solid waste gases" published in International Journal of Engineering Research and General Science Volume 5, Issue 5, September 2017. (SCOPUS Indexed)
- Shrish Pandey, S. Hasan Saeed, N.R. Kidwai, "Simulation and Optimization of generic algorithm-artificial neural network based air quality estimator" Indonesian Journal of Electrical Engineering and Computer Science, Vol. 19 No.2, ISSN:2502-4752, DOI:10.11591/ijeecs.v9.i2pp775-783, pp:775-783 (SCOPUS Indexed).

- Shrish Pandey, S. Hasan Saeed, Shailendra Kumar, "Simulation and Optimization of Artificial Neural Network Based Air Quality Estimator", International Journal of Recent Technology and Engineering (IJRTE), ISSN:2277-3878, Vol.8 Issue 3, September 2019 (SCOPUS Indexed).
- Anshuman Parkash Singh, S. Hasan Saeed, "Localization based Energy Optimization in Hetrogenious Wireless Sensor Network", Vol.29 No.8(2020), pp 4877-4886 (SCOPUS Indexed).
- Anshuman Parkash Singh, S. Hasan Saeed, " A New Strategy Adopted to save Energy to Localization a Moving Objects in WSN", International Journal of Emerging Trends in Engineering Research, Vol.8 No.4, April 2020, <http://doi.org/10.30534/ijeter/2020/7982020> (SCOPUS Indexed).
- Anshuman Parkash Singh, S. Hasan Saeed, "A Survey on Leach Based Protocols in Wireless Sensor Network", International Journal of Emerging Technology and Advanced Engineering" ISSN 2250-2549, Vol.7, Issue 7, July 2017
- Anshuman Parkash Singh, S. Hasan Saeed, "Path Reporting of an Object in WSN", ISSN 2349-5162, Vol.6 Issue 2. February 2019
- Faizan A. Khan, Nitai Pal, Syed. H. Saeed "Review of solar photovoltaic and wind hybrid energy systems for sizing strategies optimization techniques and cost analysis methodologies" Renewable and Sustainable Energy Reviews, Elsevier, ISSN: 1364-0321, DOI: 10.1016/j.rser.2018.04.107, Vol. 92, pp.937–947, 2018, (SCIE; I.F: 14.98). [Q1]
- Faizan A. Khan, Nitai Pal, Syed. H. Saeed, "Optimization and sizing of SPV/Wind hybrid renewable energy system: A techno-economic and social perspective" Energy Elsevier, ISSN: 0360-5442, DOI:10.1016/j.energy.2021.121114, Vol.233, pp.121114, 2021, (SCIE; I.F: 6.08). [Q1]
- Priya Gupta, Kuldeep Kumar, Narendra Kumar Pandey, Bal Chandra Yadav, Syed Hasan Saeed, "Effect of annealing temperature on a highly sensitive nickel oxide-based LPG sensor operated at room temperature" Applied Physics A (2021) 127:289, Elsevier, 27 March, 2021, doi.org/10.1007/s0039-021-0000-6. (SCIE)
- A.M. Khana , Meha Sharmab , M.I. Khanc , Sandhya Kattayatd , Garima Bhardwaje , M. Abu-Samakf , S.H. Saeeda , P.A. Alvic, "Optical gain characteristics of a novel InAlAs/InGaAs/GaAsSb type-II nano-heterostructure", Optik-international journal for light and Electron Optics 183 (2019) 842-848, Elsevier doi.org/10.1016/j.ijeo.2019.01.095 (SCIE)
- Mohd. Suhaib Kidwai , S. Hasan Saeed, —Recurrence Based Method to Determine the Neurological Disorders Through Electrical Signals of Brain||, published in SCOPUS indexed International Journal of Innovative Technology and Exploring Engineering (IJITEE), Vol. 8 Issue 5.
- Mohd Suhaib Kidwai, S. Hasan Saeed, —Statistical analysis of the method to determine the neurological disorders through electrical signals of brain||, published in UGC listed Journal of Emerging Technologies and Innovative Research, Vol. 6 Issue 2
- Mohd Suhaib Kidwai, S. Hasan Saeed, —Detection of neurological disorders through EEG signals by using the concept of recurrences||, is accepted for publication in SCOPUS, UGC Listed, International journal of electrical and computer engineering, Vol.9, Issue (4).

- Shirish Pandey, S. Hasan Saeed, N.R. Kidwai, "Simulation and optimization of genetic algorithm-artificial neural network based air quality estimator" Indonesian Journal of Electrical Engineering and Computer Science, Vol. 19, No. 2, August 2020, pp. 775~783, ISSN: 2502-4752, DOI: 10.11591/ijeecs.v19.i2.pp775-783 (SCOPUS INDEXED)
- Shirish pandey, S.Hasan Saeed, shailendra kumar, "Simulation and Optimization of Artificial Neural Network Based Air Quality Estimator", International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-8 Issue-3, September 2019, DOI 10.35940/ijrte.C4985.098319 (SCOPUS INDEXED)
- Mohammad Amir Ansari, Syed Hasan Saeed, and Deepak Balodi, "Charge Pump-Phase Frequency Detector based Phase-Locked Loop for Modern Wireless Communication—A Review", Proceedings of Trends in Electronics and Health Informatics, vol. 376, Springer, 03/22/2022, https://doi.org/10.1007/978-981-16-8826-3_42, ISSN: 2367-3389 (SCOPUS)
- Pratiksha Rai, Syed Hasan Saeed, "Detection of harmful gases present in the environment", Indonesian Journal of Electrical Engineering and Computer Science, Vol. 30, No. 1, April 2023, pp. 70~80, ISSN: 2502-4752, DOI: 10.11591/ijeecs.v30.i1.pp70-80.
- Pratiksha Rai , Syed Hasan Saeed, "Toxic gases detection using PARAFAC and PCA to protect the environment, www.elsevier.com/locate/matpr, <https://doi.org/10.1016/j.matpr.2023.03.360>, <https://ijeecs.iaescore.com/index.php/IJECS/article/view/27865>,
- Pratiksha Rai , Syed Hasan Saeed, "Harmful gases detection using artificial neural networks of the environment", ISSN: 2502-4752, Volume 30, pp, 1389-1398, DOI: 10.11591/ijeecs.v30.i3.pp1389-1398, 30/06/2023
- Mohammad Amir Ansari¹, Syed Hasan Saeed, Deepak Balodi, Mohd. Nauman Khan, "A low leakage and high-speed phase frequency detector-charge pump designed in nano dimension-based CMOS technology", Islamic Azad University, Iran, <https://doi.org/10.57647/j.ijnd.2024.1504.29>, vol. 15, p.p 1-10, 10/10/2024, <https://oiccpres.com/ijnd/article/view/8110>, (ESCI)
- Mohammad Amir Ansari¹, Syed Hasan Saeed, Deepak Balodi, Imran Ullah Khan, Zohaib Hasan Khan, "Design and Performance Analysis of a Low Jitter Charge Pump-Phase Locked Loop Architecture and Loop Filter in CMOS Process" Journal of Electrical Systems", ESR Groups, vol.20, pp 1713-1720, <https://doi.org/10.52783/jes.5397>, 07/23/2024, <https://journal.esrgroups.org/jes/article/view/5397>, (SCOPUS)

PAPER PUBLISHED IN INTERNATIONAL CONFERENCES

- Syed Hasan Saeed, V.K. Srivastava, Prof. Bal Gopal, 'Electronic Tongue: An Intelligent sensor', Proc. International Conference on Soft Computing (ICSC-2008), organized by Institute of Engineering & Technology, Alwar, Rajasthan, pp 313-320, November 8-10, 2008

- 2. Syed Hasan Saeed, Zia Abbas, Prof. Bal Gopal, 'Experimental use of Electronic Nose for Analysis of Volatile Organic Compound (VOC)', Proc. International Conference on Multimedia, Signal Processing and Communication Technologies, organized by Department of Electronics Engg., Aligarh Muslim University, Aligarh, pp , March 14-16,2009, this paper also available at digital library of IEEE
 - 3. Syed Hasan Saeed, Rasheed Ahmad, Md. Haris, 'Biomedical Sensors', paper accepted in 51 SVC Annual Tech. Conference, Chicago, USA, April 21, 2008
 - 4. Anand Mohan Mishra, Md. Maroof Siddiqui, Syed Hasan Saeed, Pameer, The Blue-Eyes Technology, Proc. International Conference on Intelligent Systems, Sustainable, New and Renewable Energy Technology & Nanotechnology, organized by Institute of Science and Technology, Klawad, Haryana, pp GS-27 to GS-30 on 16-18 March,2012
 - 5. Saifur Rahman, S. Hasan Saeed, M.J.Siddiqui, Saima Rahman, POLYMERIC CHEMORESISTOR MODEL USE IN DESIGN AND SIMULATION OF SENSOR, , Accepted at IMPACT-2013 AMU Aligarh sponsord by IEEE
 - 6. Mohd Maroof Siddiqui , Saifur Rahman, Syed Hasan Saeed, " EEG Signals Ply Major Role To Diagnose Sleep Disorder" 1st International Conference on Advancement in Electronics & Comm. Engineering (ICAECE-2013) R.D Engineering College, Ghaziabad on 22-23, March 2013.
 - 7. Syed Hasan Saeed, Saifur Rahman, Mohd. Juned, Neelabh Tiwari, Yogita Tiwari, "Efficient Combinational Logic Circuit Design Using Quantum Dot Cellular Automata", Conference Ambalika Institute of Management & Technology, Lucknow.
 - 8. Imran Ullah Khan, M.A.Ansari, Archana Yadav, S. Hasan Saeed, "Performance Analysis of H.264 Video Decoder: Algorithm and Applications", IEEE International Conference on Energy, Economics and Environment ICEEE-2015, 26-28 March 2015.
 - 9. Balendu Bhushan Pandey, Mohd. Maroof Siddiqui, Syed Hasan Saeed, Saif Ahmad "Amba Advance High-Performance Bus-DMA Interfacing" Proc. International Conference on Recent Advances in Computing, Communication and Electrical Technology (RACCET-2015), HRIT Ghaziabad, April 11-12, 2015.
 - 10. Syed Hasan Saeed, Md. Maroof Siddiqui "Review: Sleep Disorder Breathing (Sleep Apnea)" Proc. International Conference on Recent Advances in Computing, Communication and Electrical Technology (RACCET-2015), HRIT Ghaziabad, April 11-12, 2015
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PUBLISHED NON-SCI-SCOPUS BUT PEER REVIEWED RESEARCH PAPERS (NATIONAL CONFERENCE)

- Syed Hasan Saeed, Zia Abbas, Prof. Bal Gopal, 'Electronic Nose and Electronic Tongue: Evaluation and application' Proc. National Conference on Emerging Technologies [29-30 March,2008], organized by Integral University, Lucknow, pp152-157, march-2008
- Syed Hasan Saeed, Zia Abbas, Prof. Bal Gopal, 'Realization of Electronic Nose using TGS822 sensor for volatile organic compound recognition' Proc 2nd National Conference on Wireless and Optical communication (WOC200engineering College, Chandigarh, pp33-36, December 18-19,2008
- Syed Hasan Saeed, Zia Abbas, Prof. Bal Gopal and Vivek kumar Srivastava, 'Biosensors: An Emerging Trend in Biomedical engineering' Proc.2nd National Conference on Advancement of Technologies Soft Computing, organized by GLA Group of Institutions, Mathura, pp 58-64, January 24-25,2009
- Syed Hasan Saeed, Zia Abbas, Prof. Bal Gopal, 'Sense of smell: An Electronic Nose', Proc Proc.2nd National Conference on Advancement of Technologies Soft Computing, organized by GLA Group of Institutions, Mathura, pp 364-368, January 24-25,2009
- Syed Hasan Saeed, Vivek kumar Srivastava, Shwetica Srivastava and Vertika Srivastav, 'Taste Sensor', Proc Proc.2nd National Conference on Advancement of Technologies Soft Computing, organized by GLA Group of Institutions, Mathura, pp 369-377, January 24-25,2009

- Vivek Kumar Srivastava, Hasin Alam, S.H.Saeed and Shwetika Srivastava , ‘DVCC based MISO Filter based on 0.5 μ CMOS Technology’ Proc.2nd National Conference on Advancement of Technologies Soft Computing, organized by GLA Group of Institutions, Mathura, pp 355-363, January 24-25,2009
- Saifur Rahman, S. Hasan Saeed, Electronic Nose: An Introduction & Commercial Applications, Published at National Conference COITT 2013
- Syed Hasan Saeed, Saifur Rahman, Mohd. Juned, Neelabh Tiwari and Yogita Tiwari, “Efficient Combinational Logic Circuit Design Using Quantum Dot Cellular Automata” Published at National Conference COITT 2013
- Faizan Arif Khan, Nitai Pal, Syed Hasan Saeed “SPV/Wind Hybrid Energy System: Future of Rural India” presented in the 21st National Power System Conference (NPSC 2020) IIT, Gandhinagar, India December 17-19, 2020. Pp.1-6.(IEEE, Xplore 2020) [Organized by IIT-Gandhinagar, India].
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BOOK AUTHORED

- **“Automatic Control System”**, from Kataria & Sons, New Delhi
- **“Non-Conventional Energy Resources”**, with co-author D. K. Sharma from Kataria & Sons, New Delhi
- **“Electrical Machines & Control System”**, with co-author J.B. Gupta from Kataria & Sons, New Delhi
- **“Control System”**, from Kataria & Sons, New Delhi
- **“Control System I”**, from Kataria & Sons, New Delhi
- **“Basic System Analysis”**, with co-author Faizan Arif Khan from Kataria & Sons, New Delhi
- **“Basic of Signal & Systems”**, with co-author Faizan Arif Khan from Kataria & Sons, New Delhi
- **“Electromagnetic Field Theory”**, with co-author Faizan Arif Khan from Kataria & Sons, New Delhi

BOOK CHAPTER

- Faizan Arif Khan, Nitai Pal, Syed Hasan Saeed, “Stand-alone hybrid system of solar photovoltaics/wind energy resources: an eco-friendly sustainable approach” in Book : Renewable Energy Systems Modeling, Optimization and Control Academic Press DOI: 10.1016/B978-0-12-820004-9.00030-9, ISBN:978-0-12-820004-9, September 2021, pp.687-706.
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