

CV of Dr. Syed Akhtar Imam

Personal Information

Name: Dr Syed Akhtar Imam
 Date and Place of Birth: 04/ 01/ 1961, Muzaffarpur (Bihar), India
 Nationality: Indian
 Marital status: Married
 Residential address: A-109 Haji Apartment, 2nd Floor, Johri farm, Jamia Nagar, New Delhi-110025, India

Education

Degree	Specialization	Year	University, Country	Project / Thesis Title	Class or Division (% secured)
Ph.D.	Electronics and Communication Engineering	2008	Department of Electronics and Communication Engineering, Faculty of Engineering & Technology, Jamia Millia Islamia (Central University) New Delhi –110025 INDIA	Some Investigations Into Smell Sensors and Their Applications	
M. Tech	Instrumentation and Control	1998	Department of Electrical Engineering, Aligarh Muslim University, Aligarh (U.P.) INDIA	1.Study of Partial Discharge Characteristics in Insulating Materials in Presence of Liquid Nitrogen 2.Design and Analysis of Protective Grounding System for South Delhi	Ist Div With 69.22%
B. E.	Electrical Engineering	1995	Department of Electrical Engineering, Jamia Millia Islamia New Delhi INDIA	Design of 220 KV Double Circuit Over Head Transmission Line	Ist Div. with Hons., 87.22%
Diploma Engineering	Electrical Engineering	1983	U.P Technical Board With Specialization in Advance Electronics Measurements	Design and Development of Electrification of Mohripur Village Gorakhpur U.P	1-grade 72.20%

**Memberships
in Professional
Bodies**

1. Life Member, The Indian Society of Technical Education (ISTE)
2. Life Member, International Centre for Theoretical Physics (ICTP)
3. Life Member, Babul Ilm Education Society (Regd.), New Delhi.

**Professional
experience**

Associate Professor, Electronics and Communication Engineering, (Feb 2015 –Till date)
Electronics and Communication Engineering Department, Faculty of Engineering. &
Technology, Jamia Millia Islamia (Central University) New Delhi, India.

Sr. Assistant Professor, Electronics and Communication Engineering, (Feb 2007 –Feb 2015)
Electronics and Communication Engineering Department, Faculty of Engineering and
Technology, Jamia Millia Islamia (Central University), New Delhi, India

Lecturer [Assistant Professor], Electronics and Communication Engineering, (Feb 2002 –Feb
2007)
Electronics and Communication Engineering Department, Faculty of Engineering. &
Technology, Jamia Millia Islamia (Central University) New Delhi, India.

Lecturer [Temp], Electronics and Communication Engineering, (2000 –Feb 2002)
Electronics and Communication Engineering Department, Faculty of Engineering. &
Technology, Jamia Millia Islamia (Central University) New Delhi, India

Lecturer [Temp], Electronics and Communication Engineering, (1999 –2000)
University of Polytechnic Jamia Millia Islamia (Central University) New Delhi, India

Visiting Faculty, Alflah School of Engineering & Technology, Dhauj, Faridabad (1198-1999)

Visiting Faculty, G. B. Pant Govt. Polytechnic, Okhla, New Delhi (1998-1999)

Tech Asstt. and Senior Tech Asstt, (1986 –1999)

Department of Electrical Engineering, Faculty of Engineering. & Technology, Jamia Millia
Islamia (Central University) New Delhi, India

Supervisor, Electrical Maintenance Division-I, PWD, Div.- I, Lucknow (UP) (1983-1986)

**Undergraduate
Courses
Taught**

1. Electrical Measurement and Instrumentation
2. Electronics and Digital Instrumentation
3. Sensors and Transducers
4. Basics of Electronics and Communication Engineering
5. Microwave Engineering
6. Analog Electronics
7. Circuit Theory
8. Logic Design

**P.G.
Courses
Taught**

1. Advance and Intelligent Instrumentation
2. Biomedical Instrumentation
3. Sensing Technologies

- Ph.D. Guidance**
1. Some investigations into the performance of gas sensors and their applications
Candidate name: Rajesh Kumar, Department of Electronics and Communication Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi **(PhD awarded in 2012)**.
 2. Some investigations into energy constraint wireless sensor networks
Candidate name: Vibhav Kumar Sachan Department of Electronics and Communication Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi **(PhD awarded in 2014)**.
 3. Some investigations into the performance of various pattern recognition method used in sensors
Candidate name: Rahul Vivek Purohit Department of Electronics and Communication Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi **(PhD awarded in 2014)**.
 4. Study and investigation of hardware aspects of neural network and its applications
Candidate name: Maria Department of Electronics and Communication Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi **(PhD awarded in 2014)**.
 5. Investigations of design aspects of power aware routing protocol in wireless sensor network
Candidate name: Dharamveer YMCA Faridabad Haryana **(PhD awarded in 2014, As co guide)**.
 6. Digital predistortion to improve the linearity of the power amplifier
Candidate name: Aijaz Mehdi Zaidi Department of Electronics and Communication Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi **(Pursuing)**.
 7. Performance analysis of clustering algorithm for wireless sensor network (WSN) : A practical approach
Candidate name: Manoj Kumar Dubey Department of Electronics and Communication Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi **(Pursuing)**
 8. Design and analysis of algorithms for performance enhancement of wireless sensor network.
Candidate name: Amit Choudhary Department of Electronics and Communication Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi **(Pursuing)**
 9. Performance evolution of speaker recognition in a continuous speech recognition system using some novel techniques.
Candidate name: Priyanka Bansal Department of Electronics and Communication Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi **(Pursuing)**
 10. Design and analysis of energy efficient data transmission scheme using wireless sensor network.
Candidate name: Manish Kumar Department of Electronics and Communication Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi **(Pursuing)**

- Reviewer/ Examiner**
1. Reviewing a journal of repute "Invertis Journal of Science & Technology" since last five years
 2. Reviewing a journal of repute "KIET International |Journal on Communications & Electronics" since last two years

Publications

A. Journals

1. Shweta Vibhav Kumar Sachan **Syed Akhtar Imam** "Energy Detection for MIMO Decision Fusion in Underwater Sensor Network: Critical Review ",International Journal of Computer Applications, USA, Vol. 140 No.03, PP. 33- 38, April 2016
2. Richa Vibhav Kumar sachan **Syed Akhtar Imam** Energy-Efficient Wireless Sensor Networks Using Co-operative MIMO: A Technical Review, International Journal of Computer Applications, USA, Vol. 135, No.11, pp. 20-27, Feb., 2016
3. **Syed Akhtar Imam** Vibhav Kumar Sachan Vedprakasgh Dubey Design and Analysis of Energy-Efficient Communication Methods for Wireless Sensor Networks International Journal of Telecommunication and Radio Engineering, Russia, Vol.74, Issue 19 pp.1705-1715, December 2015,
4. Vibhav Kumar Sachan, Saurabh Kumar and **Syed Akhtar Imam**, "Energy Optimization using Different Modulation Techniques for Wireless Sensor Networks," International Journal of Advanced Engineering Science & Technological Research, *India*, Vol. 3, Issue 1, PP.325-331, March, 2015
5. Kanika Aggarwal , Vibhav Kumar Sachan and **Syed Akhtar Imam**, " Investigations into MIMO based Communication for Energy-constrained Wireless Sensor Networks," International Journal for Research Publication and Seminar, *India*, Vol. 6, Issue 3, PP.225-231, July-September, 2015.
6. Sourabh Kumar Vibhav Kumar Sachan **Syed Akhtar Imam** Design and Analysis of Energy-Efficient Communication Methods for Wireless Sensor Networks International International Journal of Advanced Engineering Science & Technological Research, *India*, Vol. 3, Issue 1,, PP. 170-178, November, 2015
7. **Syed Akhtar Imam**, Vibhav Kumar Sachan and S. Singh, "Data Aggregation Based Cooperative MIMO System For Wireless Sensor Networks: Performance Analysis." *International Journal of Computer Applications, USA*, Vol. 90, No. 4, pp. 1-7, March 2014. DOI: 10.5120/15559-4096
8. Vibhav Kumar Sachan, **Syed Akhtar Imam** , "Performance Analysis of Orthogonal Space–Time Block Codes for Wireless Communication Systems," *Journal of Active and Passive Electronics Devices, USA*, vol.9, No. 1, pp. 73-81, Feb 2014.
9. **Syed Akhtar Imam**, Vibhav Kumar Sachan, "Energy Efficiency Simulation Based on Virtual MIMO-Based Cooperative Communication for wireless sensor Networks," *International Journal of Telecommunication and Radio Engineering, Russia*, Vol.73, Issue 3, PP. 241-255, Jan 2014.DOI: 10.1615/TelecomRadEng.v73.i3.40
10. **Syed Akhtar Imam**, Vibhav Kumar Sachan and S. Singh, , "Design and Analysis of Energy Efficient Wireless Sensor Networks Using Data Aggregation Techniques," *International Journal of Advances in Electronic and Electric Engineering, India*, vol.3, no.8, pp. 1039-1044, Sep. 2013

11. H. Sharma, Vibhav Kumar Sachan and **Syed A. Imam**, "Energy-Efficiency of IEEE 802.15.4 Standard in Wireless Sensor Networks: Modeling and Improvement Perspectives". *International Journal of Computer Applications*, (ISSN -0975-8887), Cornell University Library Press, USA, Vol. 58, No.09, pp.12-19
12. Sarika Malhotra, R. K. Singh and **Syed A. Imam**, Reducing colour Transients in Monoscope Signal Generator by Analyzing and Correcting Signal Waveforms" *The IUP Journal of Telecommunication*, India, (ISSN -0975-5551), Vol. IV, No.4, PP69- 78, November 2012
13. Dharam Vir, S.K.Agarwal, **S. A .Imam** and Lalit Mohan "Performance Analysis of MTPR Routing Protocol in Power Deficient Node, *International Journal of AdHoc Networking System*, India, (IJANS), ISSN- 2249-0175-Online, 2249-2682-Print), pp. 67-75, Vol. 2 No-4 October-2012, DOI;10.5121/ijans.2012.2407
14. Vibhav Kumar Sachan, **Syed A. Imam**, "Maximizing Lifetime of Wireless Sensor Networks using Energy-Efficient Communication Methods" *International Journal of Telecomm and Radio Engineering*, Russia, (ISSN-0040-2508 ON LINE-1943-6009), Vol.71, Issue 7, PP.653-666, April 2012, DOI: 10.1615/TelecomRadEng.v71.i7.70.
15. Vibhav Kumar Sachan, **Syed A. Imam** "Performance Analysis of Cooperative MIMO Techniques in Wireless Sensor Networks". *The IUP Journal of Telecommunication*, India, (ISSN -0975-5551), Vol.4, No. 2, PP. 32-41, May 2012.
16. Vibhav Kumar Sachan, **Syed A. Imam** and M T Beg. "Energy-Efficient Communication Methods in Wireless Sensor Networks: A Critical Review". *International Journal of Computer Applications*,(ISSN -0975-8887), Cornell University Library Press, USA, Vol. 39, No.17, pp.35-48, February 2012, DOI: 10.5120/4915-7484.
17. Pawan Kr Shukla, R. K. Singh, **Syed A. Imam**, "Realization of Optical OFDM System using Frequency Combs and Modulators, (ISSN -0973-7383), *International Journal of Electronics Engg*, India, Vol. 4, No.-1, pp. 81-84, 2012
18. Vibhav Kumar Sachan, **Syed A. Imam**, M.T. Beg; "Design of Energy-efficient Wireless Sensor Networks Using Cooperative MIMO Techniques," *International Journal of Electronics Engineering*, India, (ISSN -0973-7383), Vol.3, No. 2, pp.317-321, Dec, 2011.
19. Rajesh Kumar, **Syed A. Imam**, M. T. Beg "Smart Gas Sensor for minimization of Enose" *Journal of Engineering Research and Studies*, (JERS), (ISSN number: 0976-7916), Vol- 1, Issue 2, Article no 17, pp. 125-132/JAN- MARCH.2011
20. Rajesh Kumar, **Syed A. Imam**, M. T. Beg "A Novel Design of Low Power Smart Wireless Gas Sensor" in *journal of computing, New York, USA* (ISSN NO: 2151-9617) Volume 3 Issue 5 (MAY 2011) Page: 93-98.
21. DdRajesh Kumar, **Syed A. Imam**, M. T. Beg "Smart Gas Sensor for Miniaturization of E-Nose" in *Journal of Engineering Research and Studies* (ISSN No: 0976-7916 (JERS), Issue 2, Vol. 1, Art. No 17, pp.125-132, Jan-March-2011
22. **Syed A. Imam**, Vibhav Kumar Sachan, "Energy Efficiency of MIMO Diversity Techniques in Wireless Sensor Networks", *Invertis Journal of Science & Technology*, India, (ISSN No-0973-8940) Vol.3, No. 3, pp.139-144, Sep, 2010.
23. **Syed A. Imam**, M R Khan, 'Bibliography on Electronic Nose and its applications' *Journal of Active and Passive Electronic Devices*, USA, (ISSN No. 1555-0281), vol. 5, Issue1-2, pp. 1-20, Jan-2010.
24. Jamal Maria, Khan M.R, **Syed A. Imam**, "Application Of Artificial Neural Network Based Electronic Tongue in Various Fields," *Invertis Journal of Science and Technology*, India, (ISSN No-0973-8940), Vol. 3, No. 3,pp. 176-183, July-Sept. 2010.

25. Jamal Maria, Khan M.R, and **Syed A. Imam**, "Detection of Tuberculosis Using Artificial Neural Network Based E-Nose for Telemedicine," *International Journal of Computer Science, System Engineering and Information Technology*, India, (ISSN-0974-5807), pp. 125-131, 2010.
26. Rahul Vivek Purohit, Syed A. Imam, "Fingerprint matching in India: An Overview", *Journal of engineering research and studies*, (E-ISSNo-0976-7916), Vol. 1, Issue-II, Oct-Dec 2010, Page 51-59.
27. Rajesh Kumar, and **Syed A. Imam** "Low Power Calorimetric Gas Sensor with microcontroller" in *International Journal of Computer Science & Knowledge Engineering*, India, (ISN:0973-6735), Vol.-4 No.1, January-June2010, pp. 43- 50. (from TRACE-2010
28. Rahul Vivek Purohit and **Syed A. Imam**, "A practical approach to rational verification", pp. 23-32, *AKG Journal of technology*, India, (ISSN 0975-9514), Vol. 1, Issue -1, June 2010.
29. Rajesh Kumar and **Syed A. Imam**, 'Entrepreneurship and Innovation in Engineering Education to meet recent changes in the world', *AKG Journal of Technology*, India, (ISSN 0975-9514) vol-1, No-1, pp. 63-66, Jan-2010.
30. **Syed A. Imam**, Vibhav Kumar Sachan; "Performance Analysis of an Adaptive Equalizer Using LMS Algorithm in wireless Communications system," *Masaum Journal of computing*, (ISSN No. 2076-0833), vol.1, issue 3, pp.419-422, Oct' 2009.
31. Hassan J Motlak, **Syed A. Imam** and S N Ahmad, 'A Novel Design of CMOS DO-CCII for use in Current Mode Applications' *The Icfai University Journal of Science and Technology*, India, (ISSN No. 0973-2268), Vol. 5, No. 1, pp. 16-26, March 2009.
32. Vibhav Kumar Sachan, **Syed A. Imam**; "Performance Analysis of MLSE Equalizer for MIMO wireless Communications system," *Masaum Journal of computing*, (ISSN No. 2076-0833), vol.1, issue 2, pp.292-296, Sep' 2009
33. Rajesh Kumar and **Syed A. Imam**, "Renovation of Gas Sensor Technology: A Review, *Masaum Journal of Reviews and Surveys*, (MJRS), (ISSN 2076-5932), Vol.-1, Issue-1, pp. 62-80, Sept.-2009 (on line available).
34. Maria Jamal, M R Khan, **Syed A. Imam**, 'Application of Artificial Neural Network Based ENose for Telemedicine', *MASAUM Journal of Basic and Applied Sciences*, (ISSN: 2076-0841), Vol. 1, No. 3, pp. 537-542, October 2009 (on line available
35. Rahul vivek Purohit , **Syed A. Imam**, "Feature Extraction Pattern Recognition: A Review", *Masaum Journal of Reviews and Surveys*, (ISSN 2076-5932), Vol.-1, Issue-1, pp. 27- 45, Sept.-2009 (on line available).
36. **Syed A. Imam** and M R Khan, 'TGS Sensors in Electronic Nose for Multimedia Applications: A Practical Approach', *Journal of Asia Pacific Business Review*, (ISSN1360-2381 (Print), 1743-792X, vol. III, No. 2, pp. 102-112, Dec-2007
37. D.R.Bhaskar, Dinesh Prasad and **Syed A. Imam**, 'Grounded capacitor SRCOs Realized through a simple general Scheme', *FREQUENZ, Journal of Telecomm.*, Germany, (ISSN: 2191-6349), vol-58, No.7-8, pp. 175-177, 2004.

B.
Conferences

1. **Syed Akhtar Imam**, Vibhav Kumar Sachan, "Design and Analysis of Energy-Efficient Wireless Sensor Networks Using Co-Operative MIMO with Data Aggregation," Proc. 1st International Engineering Conference, **Babylon University, IRAQ**, 22-23 December, 2015
2. **Syed Akhtar Imam** Amit Choudhary "Design Issues for Wireless Sensor Networks and Smart Humidity Sensors for Precision Agriculture: A Review ,International Conference on Soft Computing Techniques & Implementations (*ICSCIT 2015*), Manav Rachna International University, Haryana, 8-10 October, **2015**
3. **Syed Akhtar Imam**, Vibhav Kumar Sachan and H. Sharma, "Design and Analysis of Energy Efficient Wireless Sensor Networks for Environment Monitoring," Proc. *National Conference On Advances in Nano Technology and Renewable Energy (NCNRE-2014)*, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi, INDIA, pp. 662-669, April 28 -29, 2014
4. Vibhav Kumar Sachan, **Syed Akhtar Imam**, "Design and Analysis of Multi-hop Virtual MIMO-based Communication System for Wireless Sensor Networks," Proc. *National Conference On Advancements in Satellite Communications (NCASC – 2014)*, organized by AKGEC, Ghaziabad, Uttar Pradesh, INDIA, pp. 101-106, Feb. 14-15, 2014
5. Vibhav Kumar Sachan, **Syed Akhtar Imam**, "Orthogonal Space-time Block Coding for Wireless Sensor Networks:Performance Results," proc. *International Conference on Signal Processing and Communication (ICSC-2013)*, organized by Jaypee Institute of Information Technology, Noida, Uttar Pradesh, INDIA, pp. 182-187, December 12-14, 2013. DOI: 10.1109/ICSPCom.2013.6719777. **Paper available online on IEEE Xplore**
6. **Syed Akhtar Imam**, Vibhav Kumar Sachan and S. Singh, "Performance Analysis of Different Diversity Schemes for Energy Efficient Wireless Sensor Networks," Proc. 4th *International Conference Confluence 2013 – The Next Generation Information Technology Summit*, organized by Amity School of Engineering & Technology , Noida, UP, INDIA, pp. 8-12, September 26-27, 2013.
7. **Syed Akhtar Imam**, Vibhav Kumar Sachan and K. Aggarwal, "Energy and Delay Analysis of Energy-Constrained Wireless Sensor Networks Using Cooperative MIMO Techniques," Proc. 2nd *National Conference on Emerging Trends in Intelligent Computing and Communication (EICC-2013)*, organized by Galgotias Educational Institutions, Gr. Noida, UP, INDIA, pp. 330-335, April 26-27, 2013.
8. H Sharma Vibhav Kumar Sachan and **Syed A. Imam** "Performance Analysis of Modulation Schemes for Energy-Efficient Wireless Sensor Networks" *International Conf on Communication and Electronics (ICCF-2012)* pp. 126-132 ISBN No. 978-93-81583-69-2, Organized by KIET Group of Institution, UP, India Oct.-2012.
9. Vibhav Kumar Sachan **Syed A. Imam**. M R Khan "Life Time Analysis of Wireless Sensor" *International Conf on Communication and Electronics (ICCF-2012)* pp 110-115 ISBN No. 978-93-81583-69-2, Organized by KIET Group of Institution, UP, India Oct.-2012.
10. **Syed Akhtar Imam**, Vibhav Kumar Sachan and S. Singh, "Bit Error Rate (BER) Performance of error Control Codes For Wireless Sensor Networks," Proc. *International Conference on Emerging Trends and Developments in Science, Management and Technology (ICETDSMT-2013)*, organized by Raj Kumar Goel Institute of Technology, Ghaziabad, UP, INDIA, pp. 313-320, March 11-12, 2013.
11. Dharm Vir, S.K.Agarwal, **S. A. Imam**, Lalit Kumar, 'Quantative Workshop on Nanotechnology and Embaded Systems, Analysis and Evaluation of MANET Routing Protocols in effect varying Mobility Model using QUALNet Simulator, held at YMCA, Faridabad, India, 23rd July-03rd August-2012 .
12. Vibhav Kumar Sachan, **Syed A. Imam** and M T Beg. " Performance Analysis of STBC Encoded Cooperative MIMO System for wireless sensor networks ," Proceedings, IEEE

sponsored *International Conference on Signal Processing, Computing and Control (ISPC- 2012)*, organized by Jaypee University of Information Technology, Wakanaghat, HP, INDIA, March15 – 17, 2012. DOI: 10.1109/ISPC.2012.6224379, ISBN No. 978-1-4673-1317-9, **Paper available ONLINE on IEEE Xplore.**

13. Vibhav Kumar Sachan, **Syed A. Imam** and M. T. Beg , “Energy-efficient Modulation Techniques for wireless sensor networks,” Proceedings , *6th International Multi Conference on Intelligent Systems, Sustainable, New and Renewable Energy Technology & Nanotechnology (IISN-2012)*, Institute of Science and Technology, Haryana, India, pp. 31-36, March 16-18, 2012.
14. Vibhav Kumar Sachan, **Syed Akhtar Imam**, "Optimization of energy efficiency in wireless sensor networks using error control codes," *Students Conference on Engineering and Systems (SCES), 2012*, pp.1-6, organized by Motilal Nehru National Institute of Technology, Allahabad, India, 16-18 March, 2012 DOI:10.1109/SCES.2012.6199067, ISBN No. 978-1-4673-0454-2 , **Paper available ONLINE on IEEE Xplore.**
15. Vibhav Kumar Sachan, **Syed A. Imam**, “Energy Efficient Data Aggregation Techniques for Wireless Sensor Networks,” Proceedings 2nd National Conference on Advancement of Electronics & Communication Technology and Engineering (AECTE-2012), organized by IIMT College of Engineering , Gr. Noida, India, pp. 1-5, 16-17 Feb. 2012, ISBN No. 0976-7088 .
16. Vibhav Kumar Sachan, **Syed Akhtar Imam** and M T Beg. "Energy-efficiency of Virtual cooperative MIMO techniques in wireless sensor networks," Proceedings, *International Conference on Computer Communication and Informatics (ICCCI-2012)*, Organized by Sri Shakthi Institute of Engineering and Technology, Tamilnadu, INDIA, Jan.10 – 12, 2012.DOI: 10.1109/ICCCI.2012.6158868, ISBN No. 978-1-4577-1580-8, **Paper available ONLINE on IEEE Xplore.**
17. Jamal Maria, Khan M.R, **Imam S.A**, “Hardware Aspects of Artificial Neural Network And its Applications” Proceedings of International Conference on Advances in Computer, Electronics & Electrical Engineering (ICACEEE’12) 2012 March 25-27, Mumbai (ISBN:978-981.07-1847.3
18. Vibhav Kumar Sachan, **Syed A. Imam** and M. T. Beg , “Energy Analysis of Cooperative MISO Techniques with Data Aggregation in Wireless Sensor Networks,” Proceedings , *5th International Multi Conference on Intelligent Systems, Sustainable, New and Renewable Energy Technology & Nanotechnology (IISN-2011)*, organized by Institute of Science and Technology, Haryana , India, Feb.18 – 20, 2011
19. Vibhav Kumar Sachan, **Syed A. Imam**, ‘Energy Analysis for MIMO Based Communication in Wireless Sensor Networks’ Proceedings, *International Conference on Power, Control and Embedded System (ICPES-2010)*, organized by Department of Electrical Engineering , Motilal Nehru National Institute of Technology, Allahabad, India, 28 Nov. – 1 Dec.’ 2010, ISBN No.: 978-1-4244-8541-3 , **Paper available ONLINE on IEEE Xplore.**
20. Vibhav Kumar Sachan, **Syed A. Imam**, ‘Multi-hop Virtual MIMO-based Communication for Energy-constrained Wireless Sensor Networks’ Proceedings, *International Conference on System Dynamics and Control (ICSDC-2010)*, organized by Department of ICE, Manipal Institute of Technology, Manipal, India, 19-22 August’ 2010.
21. **S. A. Imam**, Vibhav Kumar Sachan , ‘A Survey on Wireless Sensor Networks’ Proc. of *National Conf on Electronics Design & Communication Technology (NCEDCT-2010)*, Organized by Department of Electronics & Communication Engineering, Haryana College of Technology & Management, Kaithal, Haryana, (India), pp-6, 14-15 May 2010.
22. Vibhav Kumar Sachan, **Syed A. Imam**; Data Aggregation Based Cooperative MIMO Diversity in Wireless Sensor Networks, Proceedings, *Fourth International Conference on Computer Application in Electrical Engineering : Recent Trends (CERA-09)* ,organized by Indian Institute of Technology, Roorkee, India, pp. 93-96, 19-21 Feb. 2010.

23. Jamal Maria, Khan M.R, **Imam S.A**, "Artificial Neural Network Based E-Nose and Their Analytical Applications in Various Field" Proceedings of 11th *International Conference on Control, Automation, Robotics And Vision (ICARCV 2010)*, 2010 December 7-10, pp. 691-698 Singapore (ISBN: 978-1-4244-7813-2, **IEEE Catalogue No:CFP10532-CDR**)
24. Rajesh Kumar, **S. A. Imam** "Low Power Calorimetric Gas Sensor With Microcontroller" in *International Conference On Trends And Advances In Computation And Engineering (TRACE-2010)* at Barkatullah University Institute Of Technology, Bhopal, 25-26th Feb 2010.
25. Rajesh Kumar, **S. A. Imam** "A Novel Design of Asynchronous Controller for Toxic Gas Sensor Array" in *International Conference on Advances in Communication, Network, & Computing (CNC- 2010)* at CALICUT, KERALA, INDIA , 4-5th October 2010, **Paper available ONLINE on IEEE CS Digital Library**, DOI 10.1109/CNC.2010.91
26. Jamal Maria, Khan M.R, **Imam S.A**, "Detection of Tuberculosis Using Artificial Neural Network Based E-Nose for Telemedicine, "Proceedings of *International Conference on Trends and Advances in Computation and Engineering (TRACE- 2010)*,2010 February 25- 26, Bhopal, India (ISBN:978-61-8387-398-7)
27. Jamal Maria, Khan M.R, **Imam S.A**, Jamal Arif "A Case Study In Supply Water And Treated Tube-Well Water Classification Using Artificial Neural Network Taste Classification Method," Proceedings of *National Conference on Advance Computing(NCAC-09)*,2009December 12-13, pp. 195-198,Anand ,India.(ISBN:978-81- 909376-0-3).
28. Rajesh Kumar, **S. A. Imam** and M R Khan, 'Development of CMOS based Gas Sensor' Proc. **IEEE Sponsored International Conf. On Multimedia, Signal Processing and Communication Technologies [IMPACT-2009]**, at AMU, Aligarh, pp147-151, March-2009, **Paper available ONLINE on IEEE CS Digital Library IEEE Xplore – IMPACT- 2009**, CFP0910G-CDR
29. Rajesh Kumar and **S. A. Imam**, 'A Comparative Study of Various Methods of Drift Correction in Gas Sensors for Poisonous Gas Detection in the Environment', Proc. *National Conf. On Recent Trends in Instrumentation Applications [RETINA'09]*, organized by Department of Electronics & Instrumentation Engineering, National Engineering College, K R Nagar, Kovilpatti, Taminadu (India), March-2009
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31. Jamal Maria, Khan M.R, **Imam S.A**, Jamal Arif "Diagnosis of Diabetes Mellitus Using Artificial Neural Network Based E-Nose For Telemedicine," Proceedings of *International Conference On Signals And Systems And Automation (ICSSA 2009)*, 2009 December 28-29, pp. 89-94, Vidyanagar, India.
32. **S. A. Imam** and M. R. Khan, 'Use of TGS-822 Sensor in an Electronic Nose: A Practical Approach' Proc. *National Conf. on Modern Trends in Electronics and Comm. Systems [MTECS-2008]*, at Department of Electronics Engineering, AMU, Aligarh, pp. 61-64, 2008, **Paper available ONLINE on IEEE CS Digital Library IEEE Xplore-MTECS-2008**
33. Rajesh Kumar and **S. A. Imam** and M R Khan, 'Detection and Identification of Chemical Compound based Gasses using Nano Sensors' Proc. Of *National Conf on Emerging Trends in Industrial Automation [NCEICS-08]*, Organized by Department of Electronics & Instrumentation Engg, Apeejay College of Engg, Sohna, Gurgaon-122103, (India), pp-21, Sept.-2008.
34. Rajesh Kumar and **S. A. Imam**, ' A review on Polymer Based Gas Sensor' *National Seminar on Polymer Science & Technology Vision & Scenario*, Jointly Organized by Jamia Millia Islamia and Asian Polymer Association, Dec-2008

35. **S. A. Imam** and M R Khan, 'An Investigation into Non Linear Least Square based method to Identify and Quantify Single and Mixed Contaminants in Air with an Electronic Nose', Proc. **IEEE (Madras) Sponsored International Conf. On Advances in Electronics and Communications [icon ADELCO-2007]**, at National Engineering College Kovilpatti, Chennai, pp. 835-843, Feb. 2007
36. **S. A. Imam** and M R Khan, 'Detection of Volatile Organic Compounds Using TGS-822 Sensor: A Practical Approach' Proc. **IEEE Sponsored International Conf. On Computer, Control, Communication and Instrumentation (3CI-2007)**, at R. V. College of Engineering, Bangalore, pp. 431-436, Nov-2007.
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38. **S. A. Imam** and M. R. Khan, "Electronic Nose: Applications in Medicine, Environmental Monitoring and Food Industries", Proc. **All India Seminar on Biomedical Engineering & Bio - Informatics (BMEBI-07)**, Organized by Anand Engineering College, Agra (India), pp. 26, 24-25th March-2007.
39. **S. A. Imam**, F. Iqbal and M. R. Khan, 'Realization of TGS-822 Sensor as an Instrument for detecting Volatile Organic Compounds: A Practical Approach' Proc. **IEEE (Pune) Sponsored National Conf on Emerging Trends in Signal Processing & Communication (ETSPC-2007)** AT Department of Electronics and Telecommunication, Maharashtra Academy of Engineering, Pune, pp. 360-365, 27-29th Dec.-2007.
40. Kunj Sood, Varun K Vermam and **S. A. Imam**, 'Application of Electronic Nose and use of TGS-822 Sensor: A Critical Study' Proc. **IEEE (Pune) Sponsored National Conf on Emerging Trends in Signal Processing & Communication (ETSPC-2007)** at Department of Electronics and Telecommunication, Maharashtra Academy of Engineering, Pune, pp. 366-371, 27-29th Dec.-2007.
41. **S. A. Imam** and M.R.Khan, 'Evaluation of Smell Sensors for Monitoring Air Pollution,' Proc. **National Conf. on Advances in Mech. Engineering. (AIME-2006)** Jointly organized by Ministry of IT, Govt of India and Dept. of Mech. Engineering., JMI, New Delhi, pp. 1125-1132, Jan-2006.
42. **S. A. Imam** and M R Khan, 'Evaluation of Techniques for Pattern Analysis of an Artificial Olfactory System' Proc. **Seminar On Recent Trends in Science, Technology & its Applications** [7,8 Jan-2006], Organized by S.D. College of Engineering, Muzaffar Nagar, (UP), pp. 100-107, Jan-2006.
43. M R Khan and **S. A. Imam**, 'On Evaluation of Various Neural Networks for Recognizing Fragrance Mixtures through Artificial Olfactory System' Proc. **Seminar On Recent Trends in Science, Technology & its Applications** [7,8 Jan-2006], Organized by S.D. College of Engineering, Muzaffar Nagar, (UP), pp. 81-88, Jan-2006.
44. Atif Ahmad and **S. A. Imam**, 'Radiation Effects on Re-Programmable FPGAS in Space and Their Applications' Proc. **National Conf. On Soft Computing and Machine Learning for Signal Processing, Control, Power and Telecommunication [NCSC-2006]**, Jointly Organized by College of Engineering, Bhubaneshwar, Orisa; DST, Govt. of India; IEEE Power Engineering Society, Kolkata Chapter; India National Academy of Engineering (INAE) and Central Power Research Institute (CPRI), New Delhi, pp. 28, March-2006
45. **S. A. Imam** and M R Khan, 'Evaluation of Electronic Nose for Identifying and Quantifying Single and Mixed Contaminants in Air' Proc. **Second J&K Science Congress**, Jointly Organized by University of Kashmir, Dept. of Science & Technology, Govt. of India, and J&K State Council for Science and Technology, pp. 211, 25-27th July-2006.
46. Mumtaz Umer, **S. A. Imam** & M.R.Khan, 'A Mathematical Approach for Decision Level Identity Fusion', Proc. **National Conf. on Modern Trends in Electronics and Comm. Systems [MTECS-2005]** Jointly Organized by IETE and Dept. of Electronics Engineering, AMU, Aligarh, pp. 196-199, March-2005.

47. **S. A. Imam** and M.R.Khan, 'Evaluation of Transient Response of Gas Sensors for Controlling a Gas/Odour Plume-Tracking Robot', Proc. *National Workshop on Recent Trends in Optoelectronic Materials and Devices (RTOMAD-2005)*, Organized by Govt. College, Bemina, Srinagar (Shere Kashmir Univ. J & K), pp. 7, Oct.-2005
48. **S. A. Imam**, M.R.Khan and M.T.Beg, 'Environmental Degradation Monitoring and Emerging role of Sensing Technologies, An overview', Proc. *International Conf. On Energy and Environment Strategies for Sustainable Development (ICEE-SSD)* [Jan 23-24, 2004], pp. 481-487, January-2004.
49. **S. A. Imam**, M.R.Khan & M.T.Beg, 'On Evolution of a Flexible Information System through Multisensor Integration and Fuzziness Alleviation', Proc. *Third Global Conf. on Flexible Information System Management* (March 13-15, 2004), pp. 658-666, March-2004.
50. A.S.Siddiqui, **S. A. Imam**, E. Hussain and Moinuddin: 'Protective Grounding, A Practical Approach', Proc. *International Symposium on Electrical Distribution in the Developing Countries*, Organized by Central Board of Irrigation and Power (Govt. of I)
51. M. Mohsin and **S. A. Imam**: 'On Modeling of Partial Discharge Studies, A Review', Proc. *International Conf. on CAD, CAM, Automation, Robotics and Factories of Future*, Published by Narosa Publication, Delhi, pp. 688-695, 1996.ndia), Delhi, pp. 214-221, 2000.

**Seminars /
Workshops
Lectures
Conferences
Conducted
Attended**

1. Attended 'Indo-Italian Workshop on Recent Advances in Material Science', held on Nov. 10 – 12, 1999, Jointly Organized by I.I.T., New Delhi, Indian Chapter of ICTP and Abdus Salam International Centre for Theoretical Physics, Trieste, Italy
2. Attended 'Indo-Italian Workshop on Recent Advances in Material Science', held on Nov. 10-1999 Salam International Centre for Theoretical Physics, Trieste, Italy
3. Attended 'International Conf. On Environmental Challenge in New Millennium' held on Nov 2015 at India International Center, New Delhi, Jointly organized by JMI and Indian Society of Environment Management New Delhi
4. Attended 'Symposium on Electricity Distribution in the Developing Countries', held on Jan.20-21, 2000, Workshop On "Nano-Materials" Jointly organized by Dept. of Physics, JMI New Delhi and the Society for Semiconductor Devices, India, November 01, 2002
5. Participated in a one-week short-term course of ISTE Sponsored Summer School on "Recent Trends in Electric Drives" Organized by Electrical Engineering, Dept, JMI, New Delhi, from 23rd to 28th April 2001
6. Participated in a Workshop on "Development of Quality Question Paper" for Teachers of Natural Science & Engineering Faculty, Organized by Academic Staff College, JMI, New Delhi, March 09-12, 2002.
7. Attended and participated in the 58th four week orientation programme from 03rd April to 01st May 2002, Organized by UGC-ASC, Jamia Millia Islamia New Delhi -110025 India and Obtained Grade "A".

8. Attended International Conf. on 'Energy and Environment Strategies for Sustainable Development (ICEE-SSD), Jointly Organized by JMI and Govt. of India at the Dept. of Mechanical Engineering, JMI, New Delhi, Jan 23-24, 2004.
9. Attended National Seminar on "Architecture for Masses", hosted by the Dept. of Architecture, JMI, New Delhi, October 11, 2003
10. Participated in a **two-week** short-term course on "Computer Aided learning" in Mechanical Engineering, Sponsored by ISTE/AICTE at Univ. Polytechnic, Faculty of Engineering & Tech. JMI, New Delhi, from 16th Feb to 27th Feb-2004.
11. Participated in a **one-week** short-term course on "Optical fiber communication systems" Organized by NITTTR, Chandigarh; from 15th march to 19th march 2004.
12. Attended Third Global Conference on "Flexibility and Technology Transfer", jointly organized by JMI & Global Institute of Flexible System Management, Delhi, at the Faculty of Engineering and technology, JMI, New Delhi, March, 13-15, 2004.
13. Participated in a **one-week** short-term course, Sponsored by ISTE/AICTE on "Trends in Intelligent Measurement and Control" organized at the Dept. of Instrumentation Engineering, MIT, Anna University, Chennai; 22-27th Nov.-2004.
14. Attended a **two-week** short-term course on "MATLAB and soft computing in Electrical Engineering" Sponsored by ISTE/AICTE organized at the Dept. of Electrical Engineering, JMI, New Delhi; 17- 31st December 2000
15. Attended National Workshop on 'Recent Trends in 'Optoelectronic Materials and Devices [RTOMAD-2005], Organized by Dept. of Electronics, Govt. Degree College, Bemina, Srinagar [J&K], October, 03-04, 2005
16. Attended **Second J & K Science Congress**, Jointly Organized by University of Kashmir, Dept. of Science & Technology, Govt. of India, and J&K State Council for Science and Technology, Srinagar (J & K), 25-27th July-2006
17. Attended National Seminar on 'Sustainable Development in South Asia Issues in Infrastructure and Environment' Jointly Organized by Academy of Third World Studies, Jamia Millia Islamia, and Planning Commission, Govt. of India, New Delhi, 22-23rd, August, 2006.
18. Attended One-day Seminar on 'Application of Conducting Polymers and Nano-materials in Science and Technology, Organized by Department of Applied Science & Technology, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi-25, 19th September-2006
19. Participated in a **One-week** short-term course on "Environmental Management at Univ. Polytechnic, JMI, New Delhi, Sponsored by ISTE/AICTE, 2-6th June, 2008
20. Successfully Completed **One-Week QIP** Short Term Course on '*Applications of Solar Energy and Earned Carbon Credits*' Organized by Centre for Energy Studies, **I.I.T. Delhi**, February 06 to 12, 2009.
21. Participated in a **One-Week QIP** Short Term Course on '*Learning on sustainability for Engineering Education*' Organized by Instrument Design and Development Centre (IDD Centre), **I.I.T. Delhi**, July 09 to 15, 2009

22. Participated in a **One-Week QIP** Short Term Course on '*Alternative Sources of Energy*' Organized by Centre for Energy Studies, **I.I.T. Delhi**, February 04 to 10, 2010.
23. Participated in a workshop on '*Development of self-Learning Material & Counseling Process in Distance Education*' organized by the Arjun Singh Centre for Distance & open learning, JMI, New Delhi held on 30-31st March-2011
24. Participated in a **One-Week QIP** Short Term Course on '*Building Integrated Photovoltaic Thermal Systems*' Organized by Centre for Energy Studies, **I.I.T. Delhi**, February 08-14, 2011.
25. Participated and presented a paper in an International Conference on '*Communication and Electronics Eng*' (ICCE), held on 19-20th October-2012 at KIET, Ghaziabad and also **Chair** a session.
26. Participated in a **One-Week QIP** Short Term Course on '*Application of Solar Energy and Photovoltaic*' Organized by Centre for Energy Studies, **I.I.T. Delhi**, December 12-18, 2012
27. Participated in an International Conference on '*Emerging Trends and Development in Science, Management and Technology*' and **presented** a paper titled "*Bit Error Rate (BER) Performance of Error Control codes for Wireless Sensor Networks*" held on 11-12 March-2013 at RKGIT, Ghaziabad
28. Participated in a **One-Week QIP** Short Term Course on '*Application of Renewable Energy Sources*' Organized by Centre for Energy Studies, **I.I.T. Delhi**, December 11-17, 2013
29. Participated and chairing a technical session at National Conference on Advances in Nano Technology and Renewable Energy (NCNRE– 2014), Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi, April 28 -29, 2014 and also **Chair** a session
30. –Participated in International Conference on Emerging Trends and Development in science, Management and Technology held on March 2013.
31. Participated and presented a paper titled "*Design and Analysis of Energy Efficient Wireless Sensor Networks for Environment Monitoring*, at National Conference on Advances in Nano Technology and Renewable Energy (NCNRE– 2014), Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi, April 28 -29, 2014 and also **Chair** a session.
32. Participated in a **One-Week QIP** Short Term Course on '*Solar power and space conditioning*' Organized by Centre for Energy Studies, **I.I.T. Delhi**, June 2-8,2014.
33. Organized a two days National Conference on Advances in Mechanical Engineering(AIME-2006) as an organizing member and also taken the responsibility of Reparteur of a Technical Session
34. Organized an International Conference on Comm. and Electronics Engineering (ICCE-12),held on 19-20th Oct.-2012, KIET, Ghaziabad as **Adviser** and also **Chair** a Session
35. Organizing member of the National Conference on "Nanotechnology and Renewable Energy (NCNRE) held on 28-29th April-2014 at the Department of Applied Sciences and Humanities, Faculty of Engineering & Technology, JMI, New Delhi.
36. Organized National Conference on "Advances in VLSI, Embedded and Comm." [AVEC] as Advisory Board Member at the Department of Electronics & Communication Engineering, Al-Falah School of Engineering and Tech., Faridabad Haryana on 10th August 2010.
37. Participated in First international conference on Engineering Sciences Application ICESA held on 25th December 2014 at University of Karbala Iraq.

38. Participated in a **One-Week QIP** Short Term Course on 'Solar power and space conditioning' Organized by Centre for Energy Studies, **I.I.T. Delhi**, December 09-15,2014
39. Participated in a Two **-Week** Short Term Course on Smart Sensors and Internet of Things (IoT) 'Organized by Jamia Millia Islamia New Delhi and Ministry of Human Resource Development Government of India
40. Chair person of international the conference on Energy, Economics and Environment organized by department of Electrical and Electronics Engineering, Galgotias College of Engineering and Technology, Greater Noida,28th March 2015.
41. Delivered a lecture on "Recent Scenario in Electronics development and E Waste Management" under the faculty development program on date 09/06/2015, organized by Electronics and communication department ,college of Engineering Teerthankar Mahaveer University Moradabad.09 July 2015.
42. Delivered a lecture on "Recent advanced in sensing technologies and its applications" , organized by Department of Electrical and Electronics Engineering and Department of Mechanical Engineering ,Galgotias College of engineering and technology ,Greater Noida.**21-22 August 2015.**
43. Technical session chair of the international conference ,12th IEEE INDICON 2015 during 17th – 20th December 2015 at Jamia Millia Islamia ,New Delhi , India.
44. Participated and presented a paper in "Bbylon 1st international Engineering conference" Babylon Iraq –22-23 December 2015.
45. Participated in a Faculty development Programme on Mechatronics and Robotics in manufacturing Industries organized by Department of Mechanical Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New Delhi.27-12 March 2015.
46. Participated in a **One-Week QIP** Short Term Course on 'Alternative sources of Energy organized by Centre for Energy Studies, **I.I.T. Delhi**, February 4-10, 2010.

**Research
Projects, if any**

1. Completed a Research Project entitled "*Design and Analysis of Energy Efficient Communication Methods for Wireless Sensor Networks*" under Innovative Research Activities funded by UGC (Govt. of India), New Delhi.

**Extra
Circular
activities**

1. Organized Engineering Faculty Indoors game Tournament as an organizing member in 2003,2004 & 2005
2. Organized IEEE-JMI's Student branch, ENCOMIUM as an organizing committee Member since 2002
3. Organized many subject association programs of the student in the department

Corporate

Life of University

1. Serving as *Superintendent or Assistant Superintendent* of Exam of the team in conducting the JMI B.Tech/BE Entrance Test since last 15 year
2. Worked as **Tabulator** of Examination Results for B.Tech / BE (E&C) 2002-2006, and 2009-2012,2014-2016
3. Served as *Assistant Superintendent* of Exams in the Faculty of Engineering Semester as well as Annual Examinations conducted for B.Tech and B.E.(E & C Engineering) Courses, 2009, 2010, 2011.2014-2016
4. Served as *Superintendent* of Exam of one of the centre for conducting UGC NET Entrance test-2010 and 2011
5. **Adviser:** "Subject Association", Dept. of Electronics and Communication Engg-2012-2016
6. **Coordinator:** "Placement", Dept. of Electronics and Communication Engineering, Feb-2007-2013
7. **Coordinator:** BE (Electronics & Communication Engineering), 2006-2007, 2008-2009 and 2009-2010, 2012-2013
8. **Coordinator:** "Project/Seminar", Dept. of Electronics and Communication Engineering-2012-2013
9. **Result Analyzer:** B. Tech (Electronics and Comm. Engineering), 2009
10. Member Moderation Committee, Department. of Electronics & Comm. Engineering, J M I, New Delhi, from-2002-2012
11. Member, Board of Studies, Dept. of Electronics and Comm. Engineering, JMI, since-2000
12. Member, Faculty Committee, Engineering &Technology, 2002-2005
13. Member, Departmental Research Committee (DRC), since-2009
14. Member, Departmental Purchase Committee, since 2003
15. Member, Committee to analyze results of B. Tech (E & C Engineering), 2009

Visits Abroad

Babylone University, Hilla, Iraq: To attend the International conference.

**Proficiency
in
Languages,**

Can Read, Write and understand fluently all the following three languages: 1. English 2.Hindi 3. .Urdu

**Any other
Significant
Achievements
/ Contributions**

Establishment and Maintenance of following Labs:

1. Electronic Measurement & Instrumentation Lab
2. Transducer and Sensor Lab
3. Advance Instrumentation Lab
