## **Curriculum Vitae**



Received B.Sc. Engg. degree in Electrical Engineering and M.Sc. Engg. Degree in Instrumentation and Control from Aligarh Muslim University, Aligarh, India, in 1992 and 1994, respectively. He received the Ph.D. degree in Instrumentation from the Indian Institute of Technology, Delhi, India, in 2005. He has been with Jamia Millia Islamia (A Central University), New Delhi, India, since 1995, where he is currently Professor in the Department of Electrical Engineering. He has published 37 papers in peer

reviewed journals and 45 papers in international and national conferences. He contributed three book chapters. His research and teaching interests include Electrical & Electronics Instrumentation, Thin Film Sensors, Dissolved gas analysis (DGA) of Transformer oil, Applications of Soft-computing techniques. He is Associate Editor, IEEE Sensors Journal.

Name:	Shakeb Ahmad Khan, PhD	
Designation:	Professor	
Office Address:	Room No. 139, First Floor, Department of Electrical Engineering, Faculty of Engg. & Tech., Jamia Millia Islamia (JMI), Jamia Nagar, New Delhi-110025, India	
Telephone :	+91-11-269831717 Ext. 2354	
Email :	skhan3@jmi.ac.in	
Webpage:	https://www.jmi.ac.in/upload/employeeresume/skhan3.pdf	
Field of Specialization:	Electrical & Electronic Instrumentation	

### (A) Experience

Job Title	Employer	From	То
Lecturer	Department of Electrical Engineering, Faculty of Engineering & Technology, AMU, Aligarh, INDIA	November 1994	January 1995
Lecturer	University Polytechnic, JMI, New Delhi, INDIA	July 1995	June 2000
Lecturer (SS)	University Polytechnic, JMI, New Delhi, INDIA	June 2000	October 2005

Reader	Department of Electrical Engineering, Faculty of Engineering & Technology, JMI, New Delhi, INDIA	October 2005	October 2008
Associate Professor	Department of Electrical Engineering, Faculty of Engineering & Technology, JMI, New Delhi, INDIA	October 2008	June 2012
Professor	Department of Electrical Engineering, Faculty of Engineering & Technology, JMI, New Delhi, INDIA	June 2012	Till date

# (B) Academic Qualifications

Examination/ Degree	Board / University	Year	Specialization/Subjects
Ph.D.	IIT, Delhi	2005	Intelligent Instrumentation
M. Sc. (Engg.)	A.M.U Aligarh	1995	Instrumentation & Control
B. Sc. (Engg.)	A.M.U Aligarh	1992	Electrical Engineering

# (C) Administrative Responsibilities

Position	Faculty/Department/Centre/Institution	From	То
Central Public Information Officer (CPIO)	JMI, New Delhi	2015	2022
Asstt. Public Information Officer (APIO)	JMI, New Delhi	2010	2015
Professor In-charge	Faculty Library, Faculty of Engg. & Tech., JMI, New Delhi	2024	Till date
Provost, MMAJ Hall of Boy's Residence	JMI, New Delhi	2024	Till date

## (D) Details of Academic work/contribution

- I. Curriculum Development
- II. Courses taught at Postgraduate and Undergraduate levels:
- III. Postgraduate Course: Instrumentation Systems
- IV. Undergraduate Course: Measurement & Instrumentation-II
- V. Projects guided at Postgraduate level: 06

## (E) Details of Major R&D Projects

Title of Project	Funding Agency	Durat	ion	Status
This of Froject	r driding Agency	From	То	Ongoing/ Completed
Fabrication and Investigation of Electrical Characteristics of Sol-Gel Thin Film Metal Oxide Surface Accoustic Wave Humidity sensor	DRDO, DRDO Bahwan, Rajaji Marg, New Delhi- 110011	2017	2020	Completed
Development of nanostructured Ceramic Sensor by Sol-gel Method.	Department of Science & Technology (DST), New Delhi, India.	2012	2015	Completed
Stabilities of Modulated Phases in Nano crystals.	King Abdul Aziz City for Science & Technology (KACST), Riyadh, KSA	2009	2011	Completed

## (F) Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award
Alka Nigam	Intelligent Oscilloscope Triggering	Supervisor	2012
Dhawal Gupta (Registered at IIT-Delhi)	Improved Algorithms For Using Radon Emission Anomalies As Reliable Precursors To Earthquakes, Using Statistical And Artificial Neural Networks	Co-Supervisor	2013
Neeraj Khera	Development of Real Time Condition Monitoring and Maintenance System	Supervisor	2015

Md. Firoz Alam Khan	Measuring the Moisture Content of Co-Supervis Transformer Oil Using Thin Film Capacitive Sensor		2016
Md. Danish Equbal	Electronic Nose Data Analysis Supervisor using Soft-computing Techniques		2019
Shufali Ashraf Wani	Transformer fault diagnosis Based on Dissolved Gas Analysis (DGA)	2020	
Md Manzer Nezami	Development and Analysis of Health Monitoring System for Oil Immersed Power Transformer		2020
Obaidur Rahman	A Study on DGA Based Incipient Fault Diagnosis with Different Types of Transformer Dielectric Fluids	Supervisor	2022
Shaheen Parveen	Condition Monitoring of Oil Immersed Transformer Based on Dissolved Gas Analysis (DGA)	Supervisor	Submitted

# (G) Invited Talks delivered

Topic	Date	Inviting Organization
A Presentation on Introduction to MATLAB® and SIMULINK® Programming.	May 2011	Northern Region Load Dispatch Centre, Qutub Institutional Area, New Delhi. Sponsored by; IEEE PES-IAS Society, Delhi Chapter
Understanding MATLAB® and SIMULINK® Programming.	December 2011	Staff Development Programme on Recent Advances in Electrical Power & Energy Systems, Deptt. Electrical Engg., JMI, New Delhi.
Basic Operation & Working of Oscilloscope	February 2012	Technical Training Program "Repair and Maintenance of Oscilloscope" Organized by; UGC & Instrumentation and Maintenance Facility (IMF) JMI
Inside the Equipment /Hardware (Oscilloscope)	February 2012	Technical Training Program "Repair and Maintenance of Oscilloscope" Organized by; UGC & Instrumentation and Maintenance Facility (IMF) JMI
Sensor Based Instrumentation Systems	January 2014	AICTE Supported Faculty Development Programme on "Real Time Application of Sensor and Instrumentation using LabVIEW and DAQ Cards"Organized by;ABES Engg. College, Ghaziabad, UP.

Data Acquisition	January 2015	Training and Certification Programs for PGCIL SCADA Control Centre Operators, held at Deptt. of Electrical Engineering, Jamia Millia Islamia, New Delhi.
LabVIEW and Its Applications	August 2015	A Two Day Workshop on "LabVIEW and Its Applications" Organized by Department of Electrical Engineering, F/O Engineering, Dayalbagh Educational Institute, Agra
Understanding MATLAB® and SIMULINK® Programming.	20 Feb-04 March, 2017	Two Week Research Methodology Workshop on "Econometric Techniques: Theory and Applications" held at Deptt. of Economics, Jamia Millia Islamia, New Delhi.
Data Acquisition	February 2018	Training and Certification Programs for PGCIL SCADA Control Centre Operators, held at Deptt. of Electrical Engineering, Jamia Millia Islamia, New Delhi.
Understanding MATLAB® and SIMULINK® Programming.	12 - 16 March, 2018	Two Week Research Methodology Workshop on "Econometric Techniques: Theory and Applications" held at Deptt. of Economics, Jamia Millia Islamia, New Delhi.
Characterization of Instrumentation Systems	16 – 30 June, 2021	"Faculty Development Program on Robotics & Automation" held at Deptt. of Mechanical Engineering, Jamia Millia Islamia, New Delhi.
Characterization of Instrumentation Systems	17 November, 2022	A One Day Workshop on "Sensor and Signal Conditioning" Organized by Deptt. of EEE, ABES Engg. College, Ghaziabad, UP.

# (H) Publications

### i. Book Chapter:

- Md Manzar Nezami, Shakeb A Khan (2022) The Role of Capacitive Sensor in Condition Monitoring of Transformer Insulation. In: Tarikul Islam, Subhas Chandra Mukhopadhyay and Boby George (eds) Systems for Printed and Flexible Sensor Technology. Fabrication and Applications, doi:10.1088/978-0-7503-3935-3ch11, IOP.
- 2. Md Rahat Mahboob, **Shakeb A Khan**, Tarikul Islam (2021) Humidity Detection in Low ppm using Printable Flexible Sensors. In: Subhas Chandra Mukhopadhyay and

- Anindya Nag (eds) Printed and Flexible Sensor Technology. Fabrication and Applications, DOI https://doi.org/10.1088/978-0-7503-3439-6, IOP.
- 3. **Khan S.A.**, Khan M.A., Wani S.A., Equbal M.D. (2020) Performance Enhancement and Extension of DGA-Based Transformer Fault Diagnosis Methods Using Soft-Computing Techniques. In: Malik H., Iqbal A., Yadav A. (eds) Soft Computing in Condition Monitoring and Diagnostics of Electrical and Mechanical Systems. Advances in Intelligent Systems and Computing, vol 1096. DOI <a href="https://doi.org/10.1007/978-981-15-1532-3\_13">https://doi.org/10.1007/978-981-15-1532-3\_13</a>, Springer, Singapore.

### ii. Research Journals:

#### 2024

- Abdul Suboor, Shakeb A. Khan, Mohd Saquib Tanweer, Afsar Ali Khan, Arif Ali, and Obaidur Rahman, "A Graphitic Carbon Nitride Film Capacitive Sensor for Selective Trace Moisture Detection in Transformer Oil", IEEE Sensors Journal, DOI:10.1109/JSEN.2024.3486614, 2024.
- Nezami, M.M., Haythem Hashem, Md Danish Equbal, Shakeb A. Khan, Hasmat Malik, Fausto Pedro García Márquez, Asyraf Afthanorha, and Mohammad Asef Hossaini: A novel fuzzy approach for winding paper insulation health monitoring of oil-immersed power transformer using non-destructive failure parameters. IET Electr. Power Appl. 1–14 (2024). <a href="https://doi.org/10.1049/elp2.12533">https://doi.org/10.1049/elp2.12533</a>
- Shaheen Parveen, Obaidur Rahman, M. Ajmal Khan, Javid Ali, Shabana Mahfuz, Tarikul Islam, and Shakeb Ahmad Khan, "Detection of insulation degradation by-products in transformer oil using ZnO coated IDC sensor", INTERNATIONAL JOURNAL ON SMART SENSING AND INTELLIGENT SYSTEMS, 2024,DOI: 10.2478/ijssis-2024-0007. (SCIe, Impact factor: 1.2)

#### 2023

Obaidur Rahman, Arif Ali, Ahmad Hussain, Shakeb Ahmad Khan, Mohd Tariq, Shabana Urooj, Lucian Mihet-Popa, Qasim khan, "Investigation of CeO2 Nanoparticles on the Performance Enhancement of Insulating Oils", HELIYON (Elsevier), 2023, doi: https://doi.org/10.1016/j.heliyon.2023.e19264. (SCIe, Impact factor: 4)

#### 2021

 Obaidur Rahman, Tarikul Islam, Neeraj Khera, and Shakeb A. Khan, "A Novel Application of the Cross-Capacitive Sensor in Real-time Condition Monitoring of Transformer Oil", IEEE Transactions on Instrumentation and Measurement, 2021, DOI 10.1109/TIM.2021.3111979.

- Obaidur Rahman, Tarikul Islam, Aqueel Ahmad, Shaheen Parveen, Neeraj Khera, and Shakeb A. Khan, "Cross Capacitance Sensor for Insulation Oil Testing", IEEE Sensors Journal, DOI 10.1109/JSEN.2021.3096463, 2021.
- Shufali Ashraf Wani, Ankur Singh Rana, Shiraz Sohail and Shakeb A. Khan "Advances In DGA Based Condition Monitoring Of Transformer: A Review" Renewable and Sustainable Energy Reviews (Elsevier) 149 (2021) 111347, https://doi.org/10.1016/j.rser.2021.111347
- MD. Manzar Nezami, Md Danish Equbal, Shakeb A. Khan, Shiraz Sohail, and Sherif S. M. Ghoneim "Classification of Cellulosic Insulation State Based on Smart Life Prediction Approach (SLPA)", Processes (MDPI), https://doi.org/10.3390/pr9060981, 2021.
- Shamim Alam, **Shakeb A. Khan**, Upendra Mittal & Tarikul Islam (2021), "Determination of the relative humidity at the parts-per-million (ppm) level in gases by a nanoporous alumina thin-film on a surface acoustic wave (SAW) resonator", Instrumentation Science & Technology (Taylor & Francis), (2021),DOI: 10.1080/10739149.2021.1967973

- SA Wani, MM Nezami, **Khan Shakeb A**, S Sohail "A Capacitive Sensor for Detecting Insulation Degradation by Sensing 2-FAL in Transformer Oil" IEEE Transactions on Dielectrics and Electrical Insulation 27 (6), 2179-2187, 2020
- Khera Neeraj, Khan Shakeb A, Obaidur Rahman "Valve Regulated Lead Acid Battery Diagnostic System Based On Infrared Thermal Imaging And Fuzzy Algorithm", Int J Syst Assur Eng Manag (Springer) 11(3): 614–624, 2020, https://doi.org/10.1007/s13198-020-00958-z.
- Khera Neeraj, **Khan Shakeb A**, "*Prognosis of Power MOSFET using Artificial Neural Network Approach*", Journal of Electrical Engineering & Technology (Springer) 15 (1): 487–499, 2020, https://doi.org/10.1007/s42835-019-00272-0.

- MD. Manzar Nezami, Shufali Ashraf Wani, Shakeb A. Khan, Neeraj Khera, and Shiraz Sohail, "A Comb Type Capacitive 2-FAL Sensor for Transformer Oil with Improved Sensitivity", IEEE Transactions on Instrumentation and Measurement DOI 10.1109/TIM.2019.2942519, 2019.
- Shufali Ashraf Wani, Dhawal Gupta, Umar Farooq, and Shakeb A. Khan, "Multiple Incipient Fault Classification Approach for Enhancing the Accuracy of Dissolved Gas Analysis (DGA)", IET Sci. Meas. Technol. Journal, doi: 10.1049/iet-smt.2018.5135, www.ietdl.org, 2019.

• Shufali Ashraf Wani, **Shakeb A. Khan**, Garima Prashal, and Dhawal Gupta, "Smart Diagnosis of Incipient Faults Using Dissolved Gas Analysis-Based Fault Interpretation Matrix (FIM)", Arabian Journal for Science and Engineering, (Springer), https://doi.org/10.1007/s13369-019-03739-4, 2019.

#### 2018

- MD. Manzar Nezami, Shufali Ashraf Wani, Shakeb A. Khan, Neeraj Khera, and Shiraz Sohail, "An MIP-Based Novel Capacitive Sensor to Detect 2-FAL Concentration in Transformer Oil", IEEE Sensors Journal, VOL. 18, NO. 19, pp. 7924-7931, OCTOBER 1, 2018.
- Khera Neeraj, **Khan Shakeb A**, "Prognosis of Aluminium Electrolytic Capacitors using Artificial Neural Network Approach", Microelectronics Reliability, (Elsevier), 81, pp. 328-336, 2018.
- Equbal Danish, **Khan Shakeb A.**, and Islam Tarikul, "*Transformer incipient fault diagnosis on the basis of energy-weighted DGA using an artificial neural network,*" Turk J Elec Eng & Comp Sci (2018), vol. 26, pp. 77-88, 2018.

#### 2017

Wani Shufali A.; Khan Shakeb A.; Gupta Dawal; Nezami Md Manzar, "Diagnosis of Incipient Dominant and Boundary Faults Using Composite DGA Method" Electrical Energy Systems, International Transactions on, (Wiley), 2017;27:e2421, https://doi.org/10.1002/etep.2421

#### 2016

 Khera Neeraj, Khan Shakeb A, Islam Tariqul, and Agarwala A.K., "An Intelligent Technique for Condition Based Self-maintenance of Aluminum Electrolytic Capacitors", International Journal of System Assurance Engineering and Management, (Springer) vol. 07, issue 1, pp. 25-34, Jan.–Mar. 2016.

- Islam, T.; **Khan, S.A.**; Khan, M.F.A.; Mukhopadhyay, S.C., "A Relaxation Oscillator-Based Transformer Ratio Arm Bridge Circuit for Capacitive Humidity Sensor" Instrumentation and Measurement, IEEE Transactions on, Pages: 3414 3422, Volume: 64, Issue: 12 Dec. 2015,
- Islam Tarikul, Mahboob Md Rahat, and Khan Shakeb A., "A Simple MOX Vapor Sensor on Polyimide Substrate for Measuring Humidity in ppm Level," IEEE Sensors Journal, vol. 15, No. 5, pp. 3004-3013, May 2015.
- **Khan Shakeb A**, Islam Tariqul, Khera Neeraj, and Agarwala A.K., "Real Time In-circuit Condition Monitoring of MOSFET in Power Converters", Sensors & Transducers Journal, vol. 186, issue 3, pp. 129-133, March 2015.
- **Khan Shakeb A.**, Equbal Danish, and Islam Tarikul, "A Comprehensive Comparative Study of DGA Based Transformer Fault Diagnosis Using Fuzzy Logic and ANFIS Models," IEEE Transaction on Dielectrics and Electrical Insulation, vol. 22, No. 1, pp. 590-596, February 2015.

- Khan Shakeb A., Islam Tarikul, Khera Neeraj, and Agarwala A.K., "On-Line Condition Monitoring and Maintenance of Power Electronics Converters," Journal of Electronics Testing, (Springer), vol. 30, No. 6, pp. 701-709, November 2014.
- Islam Tarikul, Khan Md. Firoz A., **Khan Shakeb A.**, and Saha H., "A Sensitive Digital Moisture Detector for Nanostructured Thin Film Sensor," International Journal on Smart Sensing and Intelligent Systems, vol. 07, no. 3, pp. 1059-1076, September 2014.
- Islam Tarikul, MahboobRahat Md., **Khan Shakeb A.**, and Kumar Lokesh, "A Single Chip Integrated Sol-Gel Thin Film LC Sensor for Measuring Moisture in ppm Level," IEEE Sensors Journal, vol. 14, issue 4, pp. 1148-1153, April 2014.

- Islam Tarikul, Kumar Lokesh, and **Khan Shakeb A.**, "A Novel sol-gel Thin Film Porous Alumina Based Capacitive Sensor for Measuring Trace Moisture in the Range of 2.5 to 25 ppm," Sensors and Actuators B (Elsevier), 173, pp. 377-384, 2012.
- Kumar Lokesh, SahaDebdulal, Khan Shakeb A., SenguptaKamalendu, and Islam Tarikul,
   "A Medium Range Hygrometer using Nano-porous Thin Film of γ-Al<sub>2</sub>O<sub>3</sub> with Phase Detection Electronics", IEEE Sensors Journal, vol. 12, issue 5, pp. 1625-1632, May 2012.

• **Khan Shakeb A**, Nigam Alka, Agarwala A.K., Thomas Mini S., Islam Tarikul, "Advanced Oscilloscope Triggering Based on Signal Frequency", Sensors & Transducers Journal Special Issue: Sensor Instrumentation, DAQ and Virtual Instruments., vol. 136, issue 1, pp. 105-117, January 2012.

#### 2011

• **Khan Shakeb A**, Islam Tarikul, "Precision Active Bridge Circuit for Measuring Incremental Resistance with ANN Compensation of Excitation Voltage Variation,", Journal of Sensor Technology, vol. 1, No. 3, pp. 57-64, September 2011.

#### 2010

• Khan Shakeb A, Nigam Alka, Agarwala A.K., Thomas Mini S., "Performance Evaluation and Robustness Testing of Advanced Oscilloscope Triggering Schemes", Sensors & Transducers Journal, vol. 112, issue 1, pp. 95-106, January 2010.

#### 2009

- Islam Tariq, **Khan Shakeb A**, Islam S.S., Harsh, "Sensitivity Enhancement of Wheatstone Bridge Circuit for Resistance Measurement", Sensors & Transducers Journal, Special Issue (Modern Sensing Technologies II), vol. 6, pp. 92-104, August 2009.
- Shakeb A. Khan, D.T. Shahani, Arun Agarwala, "Sensor calibration and compensation using artificial neural network" ISA Transactions Volume 2, Issue 48, Pages 147, Aug 2009.

#### 2007

• **Khan Shakeb A.**, Agarwala A.K., and Shahani D.T., "Advance Oscilloscope Triggering," IEEE Transactions on Instrumentation & Measurement, vol. 56, no. 3, pp. 944-953, June 2007.

#### 2006

• Ahmad Shahid, and **Khan Shakeb A.**, "Prediction of Stock Returns Using Classical and Intelligent Techniques: Evidence from BSE Sensex" International Journal of Applied Business and Economic Research. Vol.4, No.2, December 2006.

• Khan Shakeb A., Shahani D.T., and Agarwala A.K., "Sensor Calibration and Compensation Using Artificial Neural Network," Trans. of Instrumentation, System and Automation Society (Elsevier), vol. 42, issue 3, pp. 337-352, July 2003.

### iii. <u>Conferences/Workshops/Symposia Proceedings</u>

#### 2023

- Benish Jan; Shaheen Parveen; Khan Shakeb A., "ANN Based Multi-Stage Binary Classification Technique for Incipient Fault Diagnosis of Oil Immersed Transformer" Proceedings of IEEE International Conference on Industry 4.0 Technology 2022 (I4Tech2022) Pune, India. Sept 22-24, 2022.
- Mahammad Aamir Mahmood; Rahman Obaidur; Khan Shakeb A., "Calibration of Cross Capacitive Sensor used for Transformer Oil Testing" Proceedings of 2nd Asian Conference on Innovation in Technology (ASIANCON) Pune, India. Aug 26-28, 2022.
- Yasar Hussain; Mohammad Ariz; Parveen Shaheen; Khan Shakeb A., "Condition Monitoring Of Oil Immersed Transformer Using Thin Dielectric Film Coated Cross Capacitance Sensor" Proceedings of 2nd Asian Conference on Innovation in Technology (ASIANCON) Pune, India. Aug 26-28, 2022.

- Benish Jan; Shaheen Parveen; Khan Shakeb A., "ANN Based Multi-Stage Binary Classification Technique for Incipient Fault Diagnosis of Oil Immersed Transformer" Proceedings of IEEE International Conference on Industry 4.0 Technology 2022 (I4Tech2022) Pune, India. Sept 22-24, 2022.
- Mahammad Aamir Mahmood; Rahman Obaidur; **Khan Shakeb A.**, "Calibration of Cross Capacitive Sensor used for Transformer Oil Testing" Proceedings of 2nd Asian Conference on Innovation in Technology (ASIANCON) Pune, India. Aug 26-28, 2022.
- Yasar Hussain; Mohammad Ariz; Parveen Shaheen; Khan Shakeb A., "Detection of 2-FAL and Moisture Content in Transformer Oil using Capacitive Sensor" Proceedings of 2nd Asian Conference on Innovation in Technology (ASIANCON) Pune, India. Aug 26-28, 2022.
- Rahman Obaidur; Aalam Junaid; Parveen Shaheen; Khan Shakeb A., "Inter-digital Capacitive Sensor for Estimation of Insulation Degradation By-products in Transformer Oil" Proceedings of 2019 IEEE International Conference on Power Electronics, Control and Automation (ICPECA), JMI-New Delhi, India, November 2019.

- Rufyid-u-Nissa; **Khan Shakeb A.**, "Linear and Sensitive Detection Electronics for Capacitive Sensors" Proceedings of 2019 IEEE International Conference on Electrical, Electronics and Computer Engineering (UPCON), AMU-Aligarh, India, November 2019.
- Rahman Obaidur; Wani Shakeel A.; Parveen Shaheen; Khan Shakeb A., "Detection of Incipient Fault in Transformer using DGA Based Integrated Intelligent Method" Proceedings of 2019 IEEE International Conference on Power Electronics, Control and Automation (ICPECA), JMI-New Delhi, India, November 2019.

#### 2017

- Wani Shufali A.; Khan Shakeb A.; Vikram Yash; Bhaskar Chinmay; Parween Soma; Gupta Dawal, "An improved Dissolved Gas Analysis technique for incipient fault detection" Proceedings of 3rd IEEE International Conference on Condition Assessment Techniques (CATCON 2017), IIT-Ropar, India, 16 18, November 2017.
- Md. Manzar Nezami, Shufali A. Wani, Shakeb A. Khan, Neeraj Khera, Md Ajmal Khan, "Health Monitoring of Paper Insulation In Oil Immerged Transformer" Proceedings of 3<sup>rd</sup> IEEE International Conference on Condition Assessment Techniques (CATCON 2017), IIT-Ropar, India, 16 – 18, November 2017.

#### 2015

- Shufali A Wani, Md. Umar Farooque, Dhawal Gupts, Md. Ajmal Khan and Shakeb A. Khan, "Fault Severity Determination in Transformers Using DGA," Accepted for publication in Proceeding of 12<sup>th</sup> IEEE India International Conference (INDICON 2015), JMI, New Delhi, India, 17-20 December 2015.
- MohdNoushad, Beenish Tauheed, Md. Ajmal Khan and Shakeb A. Khan, "Wireless Monotiring of Temperature and Humidity Using Sensor Array," Accepted for publication in Proceeding of 12<sup>th</sup> IEEE India International Conference (INDICON 2015), JMI, New Delhi, India, 17-20 December 2015.
- Md Umar Farooque, Shufali A Wani, and Shakeb A. Khan, "Artificial Neural Network (ANN)
   Based Implementation of Duval Pentagon," Accepted for publication in Proceeding of 2<sup>nd</sup>
   IEEE International Conference on Condition Assessment Techniques in Electrical Systems
   (CATCON 2015), CPRI, Bengaluru, India, 12-13 December 2015.

#### 2014

Siddiqui A., Mahboob, M.R., Khan, A.U., Khan, S.A., Islam, T., and Shahani, D.T. "A
highly sensitive readout circuitry for a wide range thin film capacitive humidity

- sensors", Emerging Technology Trends in Electronics, Communication and Networking (ET2ECN), 2014 2nd International Conference on, Page(s): 1 526-27 Dec. 2014.
- Tarikul Islam, MdRahatMahboob, and Khan Shakeb A., "A Low Cost Polyimide based Metal Oxide Film RH Sensor," Proceeding of 9th IEEE International Conference on Industrial and Information Systems (ICIIS 2014), IIIT, Gwalior, India, 15-17 December 2014.
- Shakeb A. Khan, M Equbal, T Islam "ANFIS Based Identification and Location of Paper Insulation Faults of an Oil Immersed Transformer," Proceeding of 6th IEEE POWER INDIA International Conference (PIICON 2014), Delhi Technological University (DTU), Delhi, India, 05-07 December 2014.
- Tarikul Islam, MdFiroz A Khan, Shakeb A. Khan, "Artificial Neural Network Based Implementation of Oommen's Curve," Proceeding of 6th IEEE POWER INDIA International Conference (PIICON 2014), Delhi Technological University (DTU), Delhi, India, 05-07 December 2014.
- Tarikul Islam, MdFiroz A Khan, Shakeb A. Khan, and Mathew Shaji Thomas, "Moisture Measurement of Transformer Oil Using Thin Film Capacitive Sensor," Proceeding of 6th IEEE POWER INDIA International Conference (PIICON 2014), Delhi Technological University (DTU), Delhi, India, 05-07 December 2014.
- Shakeb A. Khan, N. Khera, Tarikul Islam, A.K. Agarwala, "An On-line Method for Condition Based Maintenance of Aluminum Electrolytic Capacitors," Proceeding of IEEE International Conference on Recent Advances in Engineering and Computational Sciences (RAECS 2014), Punjab University, Chandigarh 06-08 March 2014.
- N. Khera, Shakeb A. Khan, Tarikul Islam, A.K. Agarwala, "Low Cost Online Method for Condition Monitoring of Aluminum Electrolytic Capacitors," Proceeding of IEEE International Conference on Signal Processing & Integrated Networks (SPIN 2014), Amity University, NOIDA, 20-21 February 2014.
- Khan, S.A.; Khera, N.; Islam, T.; Agarwala, A.K. "An online method for condition based maintenance of aluminium electrolytic capacitors" Engineering and Computational Sciences (RAECS), 2014 Recent Advances in Pages: 1 - 5, March 2014

- Tarikul Islam, L Kumar, Shakeb A Khan, "Area Dependent Capacitive Type Moisture Sensor for Trace Moisture Detection", Proceeding of International Symposium on Processing and Fabrication of Advanced Materials (PFAM-21), IIT Guwahati, 10-13 December 2012.
- Shakeb A. Khan, Tarikul Islam, N. Khera, A.K. Agarwala, "A simple technique for monitoring ESR of Aluminium Electrolyte Capacitor at Variable Frequencies," Proceeding

- of International conference on advances in power conversion and Energy technologies (APCET-2012), Hyderabad, 2-4 August 2012.
- Tarikul Islam, Mohd Shahid, L Kumar, Shakeb A Khan, "A Sol-Gel Thin Film Integrated Inductive and Capacitive LC Sensor for Wirelessly Measuring Relative humidity", Proceedings of 9th nanomechanical sensing workshop NMC 2012, IIT Bombay, Mumbai, 6-8 June 2012.

- Kumar Lokesh, Kumar Shailesh, Khan Shakeb A., SenguptaKamalendu, and Islam Tarikul, "Electrical Characterization of γ-Al<sub>2</sub>O<sub>3</sub> Thin Film Parallel Plate Capacitive Sensor for Low Moisture Detection" Proc. of XVI International Workshop on the Physics of Semiconductor Devices, IIT-Kanpur, December 19-22, 2011.
- Islam Tarikul, **Khan Shakeb A.**, Md. Faruque, Farheen, Kumar Lokesh, "A Linear Resistance to Frequency Converter for Relaxation Oscillator Based Active Bridge Circuit" Proc. of 2<sup>nd</sup> International Conference on Advanced Nanomaterials and Nanotechnology (ICANN-2011), IIT-Gowahati, 8-10, December 2011.

#### 2010

• Khan Shakeb A., Nigam Alka, Agarwala A.K., and Thomas Mini S., "Frequency Based Oscilloscope Triggering Scheme" Proc. of IEEE International Conference on Power, Control, & Embedded Systems (ICPCES'2010), held at MNNIT, Allahabad, India, pp. 1-5, Nov. 28- Dec. 01, 2010.

#### 2009

• Khan Shakeb A., Nigam Alka, Agarwala A.K., and Thomas Mini S., "Robustness Evaluation of Software Customized IntelligentTechniques for Oscilloscopes Triggering" Proc. of IEEE 5<sup>th</sup> International Workshop on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS'2009), Italy, pp. 49-52 September 21-23, 2009.

- Islam T.I., Khan Shakeb A., Khan F.A., Islam S.S., and Harsh, "A Sensitive Detection Electronics for Resistive Sensor" Proc. 3rd International Conference on Sensing Technology (ICST 2008), Taiwan, pp. 259-264 November-December, 2008.
- Nigam Alka, Khan Shakeb A., Thomas Mini S., "Correlation Techniques Based Advance Triggering of Digital Oscilloscopes," Proc. Of National Conference on Electronics Instrumentation & Control Systems (NCEISCS-08), Apeejay College of Engineering, Gurgaon, India, September 2008 (Bagged Best Paper Award).

 Nigam Alka, Khan Shakeb A., Agarwala A.K., and Thomas Mini S., "Intelligent Triggering Technique for Oscilloscopes," Proc. International Conference on Cognition & Recognition (ICCR 2008), Karnataka, India, pp. 383-389, April 2008.

#### 2007

- Khan Shakeb A., Islam Tarikul, and Gulshan, "Artificial Neural Network Based OnlineSensor Calibration and Compensation," International Scientific Journal of Computing, vol. 6, issue 3, pp. 74-78, 2007.
- Gupta Dhawal, Shahani D.T., Khan Shakeb A., "Fast Fourier Transform based Earthquake Precursor Analysis of Radon in N-W Himalayas," Proc. of 8th International Conference on Electronics Measurement & Instruments (ICEMI'2007), Xi'An, China, pp. 3-1 to 3-4, August 2007.
- Ibraheem, Khalid Afroz, **Khan Shakeb A.**, "Medium Load Forecasting Using Multi-Layered ANN Technique", Proc. of National Conference On Advancement Of Technologies-Global Scenario, GLAITM, India.
- Khan Shakeb A., Agarwala A.K., and Shahani D.T., "Robustness Testing of Advance Triggering Technique for Digital Oscilloscope," Proc. Of National Conference on Electrical Systems and Control Technologies (ESCT 2007), NIT, Calicut, India, pp. 11-15, May 2007.

#### 2005

Khan Shakeb A., Agarwala A.K., and Shahani D.T., "Implementation of Advance Oscilloscope Triggering Scheme on FPGA," 2005 IEEE Instrumentation & Measurement Technology Conference (IMTC 2005), Ottawa, Ontario, Canada, vol. 2, pp. 407-411, May 2005.

#### 2003

 Khan Shakeb A., Agarwala A.K., and Shahani D.T., "A New Triggering Method for Oscilloscope Based on Associative Memory Technique," Proc. 2003 IEEE International Workshop on Soft Computing Techniques in Instrumentation, Measurement, and Related Applications (SCIMA 2003), Provo, Utah, USA, pp. 20-25, May 2003.

#### 2000

• Khan Shakeb A, Agarwala A.K., and Shahani D.T., "Artificial Neural Network (ANN) Based Nonlinearity Estimation of Thermistor," Proc. of 24th National Sys.Conf., ISRO Satellite Center, Bangalore, INDIA, pp. 296-302, Dec. 2000.

Ashraf, S.A.; Khan, M.R.; Khan, S.A., "Long term efficacy of Enalapiril using artificial neural network" Engineering in Medicine and Biology Society, 1995 and 14th Conference of the Biomedical Engineering Society of India. An International Meeting, Proceedings of the First Regional Conference., IEEE Pages: 4/27 - 4/28,1995.