

# Dr. Syed Kamruddin Ahamed

Associate Professor in Electrical Engineering



## Educational Qualification

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- Graduation: B. Tech. in Applied Physics (Electrical Measurement and Instrumentation), Department of Applied Physics, Calcutta University
- Post Graduation: M. Tech. in Applied Physics (Electrical Measurement and Instrumentation), Department of Applied Physics, Calcutta University
- Doctoral Degree: Ph.D. in Electrical Engineering from Calcutta University, Thesis Title: "Fault Diagnosis of Three Phase Induction Motor".
- Award Received: **Gold Medalist** in Applied Physics (Electrical Engineering) in M.Tech. Examination in 1985

## Subjects Taught

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Control System  
Network and Circuit Theory  
Basic Electrical Engineering

## Research Interests

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Power System and Fault Diagnosis in Electrical Machines

## Publications

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- (I) **S . K. Ahamed**, S. Karmakar, M. Mitra and S. Sengupta, "Diagnosis of Induction Motor Faults due to Broken Rotor bar and Rotor Mass Unbalance through Discrete Wavelet Transform of Starting Current at No-Load", **J. Electrical Systems**, vol. 6, no. 3, pp. 442-456, Sept. 2010.
- (II) **S. K. Ahamed**, M. Mitra, S. Sengupta and A. Sarkar, "Identification of Mass- Unbalance in Rotor of an Induction Motor through Envelope Analysis of Motor Starting Current at No load", **Journal of Engineering Science and Technology Review**, vol. 5, no.1, pp.83-89, 2012.
- (III) **Syed Kamruddin Ahamed**, Arghya Sarkar, Madhuchhanda Mitra and Samarjit Sengupta, "Detection of Induction Motor Broken Bar Fault Through Envelope Analysis using Start-Up Current", C3IT-2012, **Procedia Technology (Elsevier)**, vol. 4, pp.646-651, 2012.
- (IV) **Syed Kamruddin Ahamed**, Arghya Sarkar, Madhuchhanda Mitra and Samarjit Sengupta, "DSP Implementation of a Novel Envelope Analysis Approach for the Diagnosis of Broken Rotor Bar in Induction Motor", **Int. J. Modeling, Identification and Control (Inderscience)**, vol. 22, no. 3, 2014.
- (V) **Syed Kamruddin Ahamed**, Arghya Sarkar, Madhuchhanda Mitra and Samarjit Sengupta, "Induction Machine Stator Inter-Turn Short Circuit Fault Detection using Discrete Wavelet Transform", **Journal Innovative Systems Design and Engineering**, ISSN 2222-1727 (Paper) ISSN 2222-2871 (Online), vol. 5, no.1, pp 75-82, 2014.

- (VI) **Syed Kamruddin Ahamed**, Arghya Sarkar, Madhuchhanda Mitra and Samarjit Sengupta, “Harmonic Extraction for Detection of Induction Motor Stator Inter-turn Short through MCSA”, **ESM-15, International Journal of Engineering Technology, Management and Applied Sciences**, volume 3, Special Issue, ISSN 2349-4476, September 2015.

#### **INTERNATIONAL CONFERENCES**

- (VII) **S. K. Ahamed**, S. Karmakar, M. Mitra and S. Sengupta, “Novel Diagnosis Technique of Mass Unbalance in Rotor of Induction Motor by the Analysis of Motor Starting Current at No Load Through Wavelet Transform”, **6<sup>th</sup> International Conference on Electrical and Computer Engineering, ICECE 2010, Dhaka, Bangladesh**, 18-20 Dec. 2010, pp. 474-477, 978-1-4244-6279-7/10©2010 IEEE, Available in IEEE Xplore.
- (VIII) **Syed Kamruddin Ahamed**, Arghya Sarkar, Madhuchhanda Mitra and Samarjit Sengupta, “Novel Approach for Detection of Inter-Turn Short Circuit of Induction Motor’s Stator Winding through Envelope Analysis”, **8th International Conference on Electrical and Computer Engineering, ICECE 2014, Dhaka, Bangladesh**, pp. 457-460, 20-22 Dec. 2014, 978-1-4799-4167-4©2014 IEEE, Available in IEEE Xplore.
- (IX) **Syed Kamruddin Ahamed**, Arghya Sarkar, Madhuchhanda Mitra and Samarjit Sengupta, “Detection of Eccentricity due to Mass-unbalance in Rotor in Induction Motor through CWT Analysis of Starting Current Transients”, **2nd International Conference on Recent Development in Science, Engineering and Technology (REDSET 2015), Gurgaon, India** pp.493-497, 30-31 October 2015, ISBN: 978-93-84869-85-4

#### **NATIONAL CONFERENCES**

- (X) **S.K. Ahamed**, M. Mitra, Arghya Sarkar and S. Sengupta, “Diagnosis of Induction Motor Broken Rotor Bar through Envelope Analysis of No- Load Steady State Current”, **IET Michael Faraday Summit (MFIIS-2012), Kolkata**, pp. 274-277, November 25, 2012.
- (XI) **S.K. Ahamed**, M. Mitra, Arghya Sarkar and S. Sengupta, “Induction Machine Stator Inter-Turn Short Circuit Fault Detection Using Wavelet Transform”, Proceedings of **National Conference on Recent Developments in Electrical, Electronics & Engineering Physics, RDE3P-2013**, MCKV Institute of Engineering, Liluah, Howrah, pp. 90 -93, 26-27 October 2013, ISBN:978-81-8424-877-7.

### **Career Development Program/ Seminar/ Workshop Attended (12)**

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1. Participated in UGC sponsored Refresher Course, May 6-25, 2002, Jadavpur University.
2. Participated in UGC sponsored 106<sup>th</sup> Orientation Programme, June 3-28, 2003 conducted by HRDC, Jadavpur University.
3. Attended in Short Term Course on Matlab and Its Applications by NITTTR, Kolkata from 5<sup>th</sup> January to 9<sup>th</sup> January 2009.
4. Participated in Pedagogy and Teaching Methodology Training Program under TEQUIP from 20<sup>th</sup> January to 2<sup>nd</sup> February 2009.