

CURRICULUM - VITAE

1. **Name** : **Mirza Mohd. Mohsin**
2. **Father's Name** : (Late) Mr. Mohd Taqi.
3. **Home Address** : Off Street No.1, Greater Azad Enclave (West)
Near Markazi Masjid, Dhorra,
Aligarh – 202002 (U.P.), India
4. **Official Address** : Department of Electrical Engineering
Aligarh Muslim University, Aligarh – 202 002, India
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6. **Phone Numbers** : 0091-571-2720316 (Res), Mob: 9897095551
7. **Fax Number** : 0091-571-2700042
8. **Date and Place of Birth** : 12.08.1952, Lucknow, India
9. **Educational Qualifications** :
- | | | | |
|-----------------------------|------|-------|---|
| B.Sc. Engg. (Electrical) | 1977 | 72.2% | Aligarh Muslim University, Aligarh |
| M.Sc. Engg. (Systems Engg.) | 1980 | 63.5% | Aligarh Muslim University, Aligarh |
| Ph.D. *(High Voltage Engg.) | 1995 | - | Indian Institute of Science, Bangalore, India |
10. **Languages Known** : English, Urdu and Hindi
11. **Field of Interest** : High Voltage Engineering, Electrical Power System
and Electrical Machines
12. **Special Interests** : Partial Discharge Studies, Electrical Machine Design,
Testing of Electrical Machines and Equipments.

*Title of Ph.D. Thesis : *A Study of Partial Discharge Characteristics in Oil Impregnated Pressboard Insulation System.*

13. Teaching Experience : More than 36 years.

Institution	Position	Duration	Total period
AMU, Aligarh	Lecturer	01.02.1980 - 31.01.1988	8 years
AMU, Aligarh	Lecturer (Senior Scale)	01.02.1988 - 31.07.1989	1 yr 5 months
I.I.Sc., Bangalore	Research Scholar	01.08.1989 - 31.01.1993	3 yrs 6 months
AMU, Aligarh	Lecturer (Senior Scale)	01.02.1993 - 26.07.1998	5 yrs 5 months
AMU, Aligarh	Reader	27.07.1998 - 15.10.2001	3 yrs 2 months
USM, Malaysia	Lecturer (DS2)	16.10.2001 - 03.10.2004	3 yrs.
AMU, Aligarh	Reader	04.10.2004 - 31.12.2005	1 yr 2 month
AMU, Aligarh	Associate Professor	01.01.2006 - 09.11.2008	2 yrs 10 months
Uni of Garyounis (Libya)	Professor	10.11.2008 - 29.07.2010	1yr 9 months
AMU, Aligarh	Associate Professor	30.07.2010 till date	

14. Subjects taught : (A) Under Graduate Courses

- | | |
|------------------------------|-------------------------------|
| 1. Electrical Power System-I | 2. Electrical Power System-II |
| 3. Electrical Machines | 4. Electrical Machine Design |
| 5. Electro-Techniques | 6. High Voltage Techniques |
| 7. Circuit Theory | 8. Electrical Technology |

(B) Post Graduate Courses

- | | |
|-----------------------------|-------------------------------------|
| 1. High Voltage Engineering | 2. Insulation Systems |
| 3. Adv. High Voltage Eng. | 4. Lightning & Lightning Protection |

15. Research Experience and Publications:

I have accumulated more than 30 years of experience in research at A.M.U., Aligarh, Indian Institute of Science, Bangalore and University of Science, Malaysia. This effort has resulted in:

- i. Publication and/or presentation of **20 research papers** as per Appendix 'A'
- ii. Research project entitled 'Evaluation of Electrical Characteristics of Solid Insulating Materials at Cryogenic Temperature using Liquid Nitrogen' was sanctioned by A.I.C.T.E., New Delhi to the tune of INR 1.25 million in 1999, and successfully completed from Oct 2001-Oct 2003.
- iii. Successful completion of research project entitled "Effect of High Voltage Pulses on Bacteria, Fungi and Yeast Cells" funded by U.G.C. from July 2001 to Dec 2003.
- iv. Research project entitled 'High Intensity Pulse Electric Fields for Non Thermal Preservation of Foodstuffs' was investigated at University of Science, Malaysia in 2003 funded by the Government of Malaysia to the tune of INR 2.8 million.

16. **Under Graduate Projects Supervised** : 42 in the areas of Machines, Power System and High Voltage Engg.
17. **Post Graduate Projects Supervised** : 22 in above areas
18. **M.Sc. Engg / M.Tech Thesis Supervised** : 24 in above areas (Appendix-B)
19. **Ph. D. Guidance** : 01 Student (Title of the Problem: Insulation Characteristics of Modern Solid Dielectrics under Different Environmental and Field Conditions)
20. **Summer Schools/Symposia/Conferences/ Workshops attended.** : 28 as per Appendix-C
21. **Participation in Corporate University life** : Appendix-D
22. **Innovation/Contribution in Teaching and Development** : Appendix-E
23. **References** :

1. Dr. B. H. Khan, Professor

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Department of Electrical Engineering

A.M.U., Aligarh

2. Professor (Dr) Ekram Husain,

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Director General

Radha Mohan Group of Institutions

Meerut



(Mirza Mohd Mohsin)

Dated:03-02-2016

APPENDIX 'A'

Research Publications

1. "Development and Applications of Advanced Systems for Real Time Condition Monitoring of Electric Power Apparatus – An Overview", Proceedings of Second International Conference on Advances in Computing, Electronics and Electrical Technology – CEET' 14, Kuala Lumpur, Malaysia, 20-21 Dec 2014, Page 35-39, Published by The Institute of Research Engineers and Doctors, USA, ISBN: 978-1-63248-034-7
2. "Development and Applications of Advanced Systems for Real Time Condition Monitoring of Electric Power Apparatus – An Overview", **International Journal of Advancements in Electronics and Electrical Engineering (IJAEET)**, Volume 4, Issue1, April 2015, ISSN: 2319-7498, page 86-90.
3. "Inactivation of Microbes in Liquid food with the help of AC High Voltages", **International Journal of Management & Technical Research (IJMTR)**, Volume 01, Number 02, Jan-March 2014, Page 76-82, ISSN:2347-9035
4. "Environmental Effects of SF₆ Gas, and Its Use in Electrical Power Industry", National Conference on Fuel, Energy and Environment, 27-29 May 2008, Materials & Energy Research Center, Karaj, **Tehran, Iran.**
5. "Measurement of Transformer Oil Dielectric Strength", **International Technical Conference TENCON sponsored by IEEE Region 10**, 21-24 November 2004, **Chiang Mai, Thailand**, Paper ID: 0619
6. "Dielectric Behavior of Insulating Materials under Liquid Nitrogen", **IEEE Transactions** on Dielectrics & Electrical Insulation, Vol 9, Dec 2002, page 932-938.
7. "Dielectric Behavior of Insulating Materials under Liquid Nitrogen", Proceedings of **IEEE** International Conference on Electrical Insulation, Electrical Manufacturing, and Coil Winding, **USA**, 2001, page 359-364.
8. "Inactivation of Micro Organisms Suspended in Liquid Using High Voltage Pulsed Electric Field" Paper 10-5, Proceedings of **12th International Symposium on High Voltage Engineering (ISH 2001)** Bangalore, 20 – 24 August, 2001, Dept. of High Voltage Eng., Indian Institute of Science, Bangalore, India, Vol 5, p 1311 – 1315.
9. "Loss Index of Insulating Materials under LN₂" Paper 4-82, Proceedings of **12th International Symposium on High Voltage Engineering (ISH 2001)** Bangalore, 20 - 24 August, 2001, Dept. of High Voltage Eng., Indian Institute of Science, Bangalore, India, Vol 2, p 517 – 520.
10. "Transformer Insulation Monitoring Using Artificial Neural Network" Proceedings **ICSD 2001**, 7th International Conference on Solids Dielectrics, held under the auspices of **IEEE** Dielectrics and Electrical Insulation Society at **Eindhoven, the Netherlands**, June 25-29, 2001, page 295-298.
11. "SF₆ Mixture with Nitrogen – An Insulation for Future" National Workshop on G.I.S., Central Power Research Institute, Bangalore (India) December, 1998.
12. "Insulating Materials for Super Conductors, their Characteristics at Cryogenics Temperature", **1998 IEEE 6th International Conference on Conduction & Breakdown in Solid Dielectrics, Sweden**, June 22-25, 1998, page 361-364.
13. "A Study of Partial Discharge Characteristics in Oil Impregnated Pressboard Insulation", Conference Record of the 1996 **IEEE International Symposium on Electrical Insulation, Montreal, Quebec, Canada**, June 16-19, 1996, Vol 1, page 79-82.
14. "Study of Porcelain Insulators under Natural and Artificial Pollution Conditions", Proceedings, 18th National System Conference (NSC-94), Agra, India, Jan., 1995, page 188-192.
15. "On Electric Strength of Solid Insulating Materials", **IEEE 1989 Annual Report on Conference on Electrical Insulation and Dielectric Phenomena, Nov. 1989, Virginia, page 453-458. (IEEE Publication No. 89 CH 2773-0).**
16. "Electric Strength of Solid Insulating Material", Second Workshop & Conference on EHV Technology, Bangalore, Aug 7-10, 1989
17. "Breakdown Studies of Air Involving Dielectric Surface", Second Workshop & Conference on Extra High Voltage Technology, Bangalore, India, August 1989, page 113-116.
18. "OPAM Based Phase Measurement Using Block Spike Method", paper Presented at 5th All India Symposium on Instrumentation, December, 1987 held at Institute of Engg. & Tech., Lucknow, India.
19. "On Contact Resistance of Different Type of Contacts with Reference to their Shape, Material & Contact Pressure", Proceedings, National System Conference, Krukshetra, India, 1987, Page 133-136.
20. "A Study of Discharges at Low Pressures", Proceedings, National System Conference, Allahabad, India, 1986, Page 2 PS 2.1-2.6.

APPENDIX - B
Research Guidance (M. Sc. Engg / M. Tech. Dissertations Supervised)

S. No.	Topic of Dissertation	Year
1.	Breakdown of Solid Dielectrics under the Influence of Divergent Field	June 1985
2.	Correlation of Breakdown Strength with Volume Resistivity, Relative Permittivity and Dissipation Factor	Jan 1986
3.	Design and Fabrication of Circuitry for Testing of Partial Discharges	May 1986
4.	Study of Liquid Dielectrics under Various Temperatures, Pressures and Degassing	Aug 1986
5.	Study of Partial Discharges in Cable Voids	Sep 1994
6.	A Simulated Model for Partial Discharge Study in Cable Voids	Oct 1994
7.	Partial Discharge Characteristics in Multi Cavity Perspex Sheet Insulation	Aug 1995
8.	A Computer Based Study of Transmission Loss Evaluation	Aug 1996
9.	Breakdown of Air in Non –Uniform Field Conditions – An Experimental Study	Dec 1996
10.	Discharge in Simulated Cavities in Polymer Insulation	Dec 1996
11.	Partial Discharge Studies in Voids in Polyester Films	Dec 1997
12.	Effect of Size & Number of Cavities in PMMA Insulation on PD Characteristics	April 1998
13.	Insulating Materials – Past, Present and Future	May 1998
14.	Design and Development of Ground Grid System for Okhla Industrial Region, New Delhi	May 1998
15.	Insulation Health Supervision using Artificial Neural Network	May 1999
16.	Inactivation of Micro-organism Dispersed in Liquid using High Voltage Pulse Electric Field	April 1999
17.	Loss Index of Cellulosic and Non Cellulosic Solid Insulants under Cryogenic Temperature Using LN ₂	July 2001
18.	Effects of Various Non-linear Loads on Power System and Their Remedial Measures	Nov 2008
19.	Inactivation of Microbes in Liquid Food With The Help of High Voltages	May 2012
20.	Effect of Shape and Size of Electrodes on Breakdown Strength of Solid Insulating Materials	Aug 2013
21.	Grid Connection of Photovoltaic Power Plants and its Effect on Electricity Market	Jan 2014
22.	Insulation Condition Monitoring of High Voltage Equipments	June 2014
23.	Injection of Solar Power to Power System Grid and its Economical Effects	July 2014
24.	Analysis of Inrush Current in High Voltage Large Power Transformer	Aug 2015

Appendix – C

Participation in Seminars, Symposia, Workshops, Conferences & Summer/ Winter Institutes

S.No.	Seminar/ Conference/ Symposium	Sponsoring Agency	Place & Period
1.	Advanced Summer School on Computer Applications to Power Systems	Indian Society for Technical Education, Govt. of India	G.B.P. University, Patnanagar, 09 June to 05 July, 1980
2.	Short-term Course on Computerized Analysis, Operation and Control on Modern Power Systems	University Grants Commission, Govt. of India	Elect. Engg. Dept., AMU, 9-12 Dec., 1985
3.	Short-term Institute on High Voltage Engineering	University Grants Commission, Govt. of India	I.I. Sc., Bangalore, 30 Dec. 85 to 10 Jan, 86
4.	Summer School on E.H.V. AC/DC Transmission	Indian Society for Technical Education, Govt. of India	M.A.C.T, Bhopal, 15-28 June, 1987
5.	All India Seminar on Frontiers Technology in 21 st Century	Dept. of Science & Tech. Govt. of India, New Delhi	Engg. College, A.M.U, 15-17 Dec., 1987
6.	Winter School on Extra High Voltage Systems	Indian Society for Technical Education, Govt. of India.	Govt. Engg. College, Trichur, 21 Dec. 1987 to 30 Jan., 1988
7.	Second International Conference on High Voltage Engineering	I.I. Sc., Bangalore and IEEE, Bangalore Section	Bangalore 7-10 Aug., 1989
8.	Workshop on Gas Insulated systems	Central Power Research Institute, Bangalore	CPRI, Bangalore, 28 Nov., 1989
9.	Workshop on Diagnostic Monitoring of Power Apparatus in Operation	Central Power Research Institute, Bangalore	CPRI, Bangalore, 22-23 Aug., 1990
10.	5 th International Seminar on Electrical and Electronic Insulating Materials & Systems	Indian Electrical & Electronics Manufacturers Association, Mumbai	Hotel Taj Residency, Bangalore, 27-28 Nov., 1997
11.	Fourth Workshop and Conference on E.H.V. Technology	I.I.Sc., Bangalore and IEEE, Bangalore section	I.I.Sc. Bangalore, 15-16 July, 1998
12.	Short term course on H.V. Engg. and Insulation Systems as Applied to Electrical, Electronics and Computer Engg.	Dept. of Electrical Engg. AMU, Aligarh	Dept. of Electrical Engg., 07-29 Dec., 2000
13.	7 th International Conference on Solid Dielectrics	IEEE Dielectrics & Elec. Insulation Society	Hotel Crown, Eindhoven, The Netherlands 24-29 June., 2001
14.	12 th International Symposium on high voltage Engg.	Dept. of High Voltage Engineering, Indian Institute of Science,	Indian Institute of Science, Bangalore, 20-24 August, 2001

		Bangalore	
15.	International Conference on Robotics, Vision, Information and Signal Processing	University of Science, Malaysia, IEEE Malaysia	Hotel Gurney, Penang, Malaysia, 22-24 Jan, 2003
16.	IEEE International Conference TENCON 2004	IEEE Thailand Section (Region 10)	Chiang Mai University, Chiang Mai, Thailand, 21-24 Nov. 2004.
17.	Training Programme on Recent Trends in Renewable Energy and Management (RTREM)	Dept. of Electrical Engineering, AMU, Aligarh	Dept. of Electrical Engineering, AMU, Aligarh 16-21 March, 2006.
18.	Fuel, Energy and Environment National Congress	Ministry of Higher Education, Islamic Republic of Iran	Material & Energy Research Centre, Karaj, Tehran, Iran, 27-29 May. 2007.
19.	Short term course on Modeling and Simulation of High Performance AC Drive	Dept. of Electrical Engineering, AMU, Aligarh	Dept. of Electrical Engineering, AMU, Aligarh 07-12 Jan, 2008.
20.	Interactive Workshop on Diagnostic Measurements on Power Transformers	Central Board of Irrigation and Power, New Delhi	CBIP Conference Hall, New Delhi, 01-02 Feb. 2011.
21.	National Conference on Power, Instrumentation, Energy and Control	Department of Electrical Engg., AMU, Aligarh	Department of Electrical Engg., AMU, Aligarh, 12-13 Feb. 2011
22.	Short term course on Renewable Energy based Technologies	National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh.	NITTTR, Chandigarh 16-20 July 2012.
23.	Workshop on Fuel Cells	TEQIP – II Programme	Dept. of Electrical Engg., AMU, Aligarh, 22 Dec. 2012
24.	Workshop on Advances in Gas Insulated Systems	TEQIP – II Programme	Dept. of Electrical Engg., AMU, Aligarh, 28-29 January. 2013
25.	Workshop on Grid Disturbance including Protection and Control Measures	Central Board of Irrigation and Power, New Delhi	CBIP Conference Hall, New Delhi, 19-20 Feb. 2013.
26.	Workshop on Recent Trends in Measurement and Control	Department of Electrical Engg., AMU, Aligarh	Department of Electrical Engg., AMU, Aligarh, 20-21 April 2013
27.	International Conference on Contemporary Challenges in Management, Technology and Social Sciences	Society of Engg & Management Sciences and Mahatma Gandhi Institute of Management and Technology, Lucknow	Mahatma Gandhi Institute of Management and Technology, Lucknow, 05-06 April 2014
28.	2 nd International Conference on Advances in Computing, Electronics and Electrical Technology CEET'14	The Institute of Research Engineers and Doctors, New York, NY 10004, USA	Hotel G Tower, Kuala Lumpur, Malaysia 20-21 December, 2014

Appendix – D

Participation in University Corporate Life

A. University Administration:

1. Worked as **Assistant Superintendent** of Examinations at Engineering College Centre, Aligarh for continuous three academic sessions 1981-82, 1982-83 and 1983-84.
2. Introduced a few reforms in the Examination System.
3. Appointed by the University as **Care Taker Officer, 1 U.P. Engineer Coy NCC** and worked in that capacity from 01 Jan 1984 to 30 Sep 1985.
4. **Commissioned as 2nd Lieutenant (NCC)** in Oct 1985 and joined as **Coy Commander, 1 U.P Engr Coy NCC, AMU**. Promoted to rank of **Lieutenant (NCC)** in Sep 1988 and continued to serve till 31 July 1992.
5. I had gone through strenuous NCC Training and spent about 10 precious months of my life at various Army Units and Training Camps, helped AMU Cadets to remove their deficiencies and improve over-all performance during NCC Training. This helped a lot to our students as indicated by **tremendous increase in NCC enrolment from mere 45 to sanctioned strength of 200 of the NCC Unit, improving the image of University and selection of a large number of our cadets to Army, Navy and Air Force during 1986-1992.**

B. Departmental Activity:

1. Worked as **Tabulator**, both for B.Sc (Engineering)/ and M.Sc. (Engineering) (Electrical) Classes for five academic years since 1996-97.
2. Worked as **Placement Coordinator at Training & Placement Centre**, Z. H. College of Engg. & Tech., Aligarh Muslim University, Aligarh for placement of B.Tech (Electrical) students during academic sessions 1998-1999, 1999-2000 and 2000-2001.
3. Has been working as **Tabulator, M.Tech (Electrical)** class since Aug 2010.
4. Worked as **Incharge, High Voltage Engg Lab** of the Elect. Engg. Dept, July 2011-June 2014.
5. Worked as **Chief Scrutiny Officer**, Dept of Electrical. Engg from 2011-2015.

APPENDIX – E

Innovation\Contribution in Teaching & Development

1. Four new experiments had been introduced for B.Tech. (Electrical Engg.) Students and instruction sheets had been written for the same.
2. A 400 kV discharge-free coupling capacitor (Costing INR 80,000/- in market) had been developed at a meager cost of INR 8,000/- indigenously in the High Voltage Laboratory of the Department of Electrical Engineering, AMU in 1985 for use with Partial-Discharge Meter.
3. A discharge-free circuitry suitable to be used up to 400 kV had been designed and indigenously developed for detection and measurement of Partial Discharges.
4. A cubical cell was designed and developed in the High Voltage Laboratory to determine the electric strength of liquid, solid and gaseous dielectrics. Apart from determining the electric strength of solid, liquid, and gaseous dielectrics, it is also used for studying the Partial Discharge characteristics of these dielectrics.
5. Equipments worth about INR 1.25 million have been procured for High Voltage Laboratory of Electrical Engineering Department, Aligarh Muslim University, Aligarh under Research Project “Evaluation of Electrical Characteristics of Solid Insulating Materials under Liquid Nitrogen”.

Short Term Courses/Workshops Conducted:

(1) Short Term Course on High Voltage Engineering

Conducted Short Term Course entitled ‘Electrical Insulation as Applied to Electrical and Electronic Systems’ of **three weeks** duration for Engineering College Teachers in December 2000 working as Joint Co-ordinator in the Department of Electrical Engineering, AMU, Aligarh.

(2) Workshop

Conducted Workshop on Advances in Gas Insulated Systems under TEQIP II Programme in the Department of Electrical Engg, AMU, 28-29 January, 2013, working as Co-coordinator and delivered a lecture of 2 hour duration.