

## FACULTY PROFILE

Name of the faculty	Dr. K.N. RAVI
Designation	PROFESSOR & HOD
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## Educational Qualification

Degree	Specialization	University	Year of Passing
Ph.D	High Voltage Engineering	IISc	1995
M.Tech	High Voltage Engineering	IISc	1981
B.E	Electrical Engineering	BU	1978

## Work Experience

Teaching	Research	Industry
13	25	--

## Publications

National/International Journals	National/International Conferences	Books Authored/Edited
4	44	-

## Area of Interest

High Voltage Engineering	Insulation coordination
Pollution Performance of insulators in HVAC and HVDC	Lightening arestors
HVDC insulators	Testing of high voltage insulators
Polymeric Insulators	

# Membership in Professional Bodies/University Bodies/Organization

- IEEE Senior Member

## Publications

### National/International Journals

1. K. N. Ravi; Ashwini A V, Transfer of Hydrophobicity of Polymeric Insulators for Various Pollution Severities, IJRTE, January 2020, Volume-8 Issue-5, ISSN: 2277-3878.
2. Design of rotating wheel for dip test of polymeric insulators, International Research Journal of Engineering and Technology (IRJET), June 2020, Volume: 07 Issue: 06 , e-ISSN: 2395-0056.
3. K. N. Ravi; S. Sudalai Shunmugam; N. Vasudev; K. A. Venkatesh , “Applicability of Dimensional Analysis for the Prediction of Pollution Performance of Insulators: An Experimental Study”, IET Generation, Transmission & Distribution, 2017 volume 11 issue 5, 1751-8687;17518687.
4. K. N. Ravi; S. S. Shunmugam; N. Vasudev, K. A. Venkatesh , “Influence of Profile on the Pollution Performance of Cap-and-Pin Insulators - An Experimental Study”, IEEE Electrical Insulation Magazine, 2016 volume 32 issue 6, 0883-7554.
5. K.N. Ravi, Leela.A.M, “Thermal behaviour of metal oxide surge arrester block”, IJCTA, international science press, 2016, p57-63, 0974-5572.
6. K. N. Ravi, Vasudev.N, Nagraj.H.P “Brittle fracture of GRP rod used in polymeric insulators on experimental studies”, International journal of Electrical and Electronics Engineering, IJEEE 2278-994, Volume 7 Issue 2, February –March 2018

## National /International Conferences

1. A.K. Mujumdar, K.N.Ravi, N.Vasudev, "pollution test facilities at CPRI", 54<sup>th</sup> R&D session of CBIP, Ranchi, Bihar, pp 52-55,1988.
2. N. Vasudev, K.N. Ravi, A.K. Mujumdar, C.S. Lakshminarasimha, V.B. Ram mohan," Comparision of quick flashover method with standard test procedure for determining the pollution flashover levels using salt fog method", 6<sup>th</sup> ISH, New Orleans, USA, Vol. 1, paper No. 12-02, 1989.
3. N. Vasudev, K.N. Ravi, A.K. Mujumdar, C.S. Lakshminarasimha, V.B. Ram mohan,"Field investigation of polluted insulators", 5<sup>th</sup> NPSC held at CPRI, Bangalore, pp 41-45, 1988.
4. N. Vasudev, K.N. Ravi, A.K. Mujumdar, C.S. Lakshminarasimha, V.B. Ram mohan,"Artificial pollution testing of insulators using solid layer method in tropical countries", Middle East Power System Conference MEPCON- 1989, Cairo, EGYPT, 1989.
5. N. Vasudev, K.N. Ravi, A.K. Mujumdar, C.S. Lakshminarasimha, V.B. Ram mohan,"Breakdown characteristics of rod plane gap under polluted conditions", Second workshop and conference on EHV Technology, I.I.Sc, Bangalore. August 1989.
6. N. Vasudev, K.N. Ravi, A.K. Mujumdar, C.S. Lakshminarasimha, V.B. Ram mohan,"Evaluation of pollution performance of long rod insulators using salt fog method", Second Work shop and conference on EHV technology, II.Sc, Bangalore, Aug 1989.
7. N. Vasudev, K.N. Ravi, A.K. Mujumdar, M.C. Ratra," Break down characteristics of rod plane gap under salt fog for AC and DC voltages", CEIDP Conference, Pensylvania, USA, paper No. 11-6, pp 581-586, 1990.
8. N. Vasudev, K.N. Ravi, A.K. Mujumdar, M.C. Ratra, Channakeshava," Effect of profile on the pollution performance of line and station insulators under polluted conditions for AC voltages", 7<sup>th</sup> ISH Dresden, Germany, paper No. 44-04, 1991.
9. N. Vasudev, K.N. Ravi, A.K. Mujumdar, M.C. Ratra, Channakeshava,"DC source characteristics for testing insulators under polluted conditions",7<sup>th</sup> ISH Dresden, Germany. 1991.
10. N. Vasudev, K.N. Ravi, A.K. Mujumdar, M.C. Ratra, Channakeshava," Voltage distribution of string of insulators under DC voltages",7<sup>th</sup> ISH Dresden, Germany. Paper No. 43-02, 1991.
11. N. Vasudev, K.N. Ravi, A.K. Mujumdar, Channakeshava," Field investigation of polluted insulators", 7<sup>th</sup> NPSC- Calcutta, pp 43-46, 1992.
12. S. Bossi, G. Carrara, D. Perin, Channakeshava, K. N. Ravi, N. Vasudev, " Results of a salt fog ageing test under DC stress on Cap and pin Glass and Porcelain Insulators", 8<sup>th</sup> ISH, Yokohama, Japan, paper No. 41-04, 1993.
13. A. K. Mujumdar, K. N. Ravi, N. Vasudev, Channa keshava, " Emperical formula for maximum withstand salinity based on laboratory performance of insulators", 8<sup>th</sup> ISH, Yokohama, Japan, Paper No. 48-04, 1993.
14. N. Vasudev, A.K. Mujumdar, K.N.Ravi, Channa keshava," Pollution level measurements at various sites energised AC transmission systems", 8<sup>th</sup> ISH, Yokohama, Japan, Paper No. 48-05, 1993.
15. K.N.Ravi , N. Vasudev, A.K. Mujumdar, Channa keshava," Ageing studies of insulators under AC and DC voltages", IX National Convention of Electrical Engineers, Institute of Engineers (India), Bangalore, Nov. 1993.
16. A.K. Mujumdar, N. Vasudev, K.N.Ravi ,Channa keshava," Pollution test methods for DC voltages using Dust chamber", Paper published in the journal of Society of Power Engineers

(India).

17. A.K. Mujumdar, N.Vasudev, K.N. Ravi, Channa keshava, " Study of flashover performance of non-uniformly wet HVDC bushings using mathematical model," 3<sup>rd</sup> Workshop & Conference on EHV Technology, IISc., Bangalore. pp 188-191, 1995
18. A.K. Mujumdar, N. Vasudev, K.N. Ravi, Channakeshava," Pollution test methods of insulators under DC voltages using dust chamber", 9<sup>th</sup> International Symposium on High voltage Engineering, University of Graz, AUSTRIA, 1995.
19. K.N.Ravi, N.Vasudev, A.K.Mujumdar, Channakeshava, Design of line insulation for transmission lines, T&D conference Bombay 1996.
20. A.K. Mujumdar, N. Vasudev, K.N. Ravi, Channakeshava," Influence of under rib profile on pollution performance of insulators for DC voltages", 3<sup>rd</sup> AFRO-ASIAN conference, Kathmandu, Nepal, 4-7<sup>th</sup> March 1996.
21. N.Vasudev,.K.N.Ravi, P.V.Vasudevan Nambudiri "Performance evaluation of different RTV coated insulators under polluted conditions ", , ISH 2005,Biejing, China
22. K.N.Ravi, .N.Vasudev, P.V.Vasudevan Nambudiri, B.S Dholakia, C.D. Shah "Seasonal Pollution level measurement at 132kV Switchyard of AECO, Ahmedabad, AECO, Ahmedabad, , ISH 2005,Biejing, China
23. N.Vasudev, K.N.Ravi, P.V.Vasudevan Nambudiri, Evaluation of the profile of insulator for the pollution performance Under DC Voltages ISH 2005,Biejing, China
- 24.K.N.Ravi, N.Vasudev, P.V.Vasudevan Nambudiri , Study on Solid layer pollution testing of insulators by clean water fog wetting. ISH 2005,Biejing, China
- 25E.Muthu Kumar,N.Vasudev, K.N.Ravi, P.V.Vasudevan Nambudiri, "Performance of metal oxide surge arrester under polluted conditions" Workshop on EHV transmission system practices and challenges, 15-16 Dec 2005, UHV RL, Hyderabad.
26. K.N.Ravi , N. Vasudev, A.K. Mujumdar et al., " Performance evaluation of insulator string with defective insulators", 10<sup>th</sup> International Symposium on High Voltage Engineering, Montreal, CANADA, 1997.
- 27.N. Vasudev, K.N. Ravi, N.S. Mohan Rao, " Study of the results of Ion- migration in insulators subjected to DC voltages", Transmission and Distribution 2000, New Delhi, 1997.
28. V.Muralidhara , Dr. Murugan Mudaliar, N. Vasudev, Dr. K.N.Ravi, Dr. Channa keshava, P.Krishna Murthy " Study of ion migration in insulators subjected to DC Voltages", ISH 2003, DELFT , NETHERLANDS
- 29.Dr.N.Vasudev, Dr.K.N.Ravi, P.Krishnamurthy, Dr.Channakeshava "Performance of Polymeric insulators under accelerated ageing under AC& DC voltages", ISH 2003, DELFT, NETHERLANDS
30. N.Vasudev,.K.N.Ravi, P.V.Vasudevan Nambudiri "Performance evaluation of different RTV coated insulators under polluted conditions ", , ISH 2005,Biejing, China
- 31.K.N.Ravi, .N.Vasudev, P.V.Vasudevan Nambudiri, B.S Dholakia, C.D. Shah "Seasonal Pollution level measurement at 132kV Switchyard of AECO, Ahmedabad, AECO, Ahmedabad, , ISH 2005,Biejing, China
32. N.Vasudev, K.N.Ravi, P.V.Vasudevan Nambudiri, Evaluation of the profile of insulator for the pollution performance Under DC Voltages ISH 2005,Biejing, China
- 33.K.N.Ravi, N.Vasudev, P.V.Vasudevan Nambudiri , Study on Solid layer pollution testing of insulators by clean water fog wetting. ISH 2005,Biejing, China
- 34.Muthu Kumar,N.Vasudev, K.N.Ravi, P.V.Vasudevan Nambudiri, "Performance of metal oxide surge arrester under polluted conditions" Workshop on EHV transmission system practices and challenges, 15-16 Dec 2005, UHV RL, Hyderabad.

35. K. N. Ravi, Vasudev.N, "VOLTAGE DISTRIBUTION ACROSS A STRING INSULATOR- THEORETICAL AND PRACTICAL STUDY", International Symposium on High Voltage Engineering,, At Buenos Aires, Argentina, August 27 – September 01, 2017.
36. Leela A.m, K.N Ravi, Vasudev.N, Shivkumar aradhya, "Conference: National Conference on High Voltage Engineering & Technology (NCHVET2017), At Central Power Research Institute, Bangalore, India, 27-28 January 2017.
37. K. N. Ravi, Vasudev.N, Muralidara Venkat, "Quality Analysis of Insulators Subjected to HVDC Applications-A Review, "National Conference on High Voltage Engineering & Technology (NCHVET2017) , At Central Power Research Institute, Bangalore, India, 27-28 January 2017.
38. K. N. Ravi, Vasudev.N, Aruna, "The deterioration reaction rate in transformer solid insulation using XRD analysis techniques", National Conference on High Voltage Engineering & Technology (NCHVET2017), At Central Power Research Institute, Bangalore, India, 27-28 January 2017.
39. K. N. Ravi, Shivkumar swamy," Study on Metallized Polypropylene Film Capacitors and its Change in Dielectric Loss due to the Effect of End Connection Quality", National Conference on High Voltage Engineering & Technology (NCHVET2017), At Central Power Research Institute, Bangalore, India, 27-28 January 2017.
40. K. N. Ravi, Vasudev.N, Nagraj.H.P, "Experimental study on surface erosion and brittle fracture of FRP rod in polymeric insulators Experimental study on surface erosion and brittle fracture of FRP rod in polymeric insulators", National Conference on High Voltage Engineering & Technology (NCHVET2017), At Central Power Research Institute, Bangalore, India, 27-28 January 2017.
41. K. N. Ravi," Study on Metallized Polypropylene Film Capacitors and its Change in Dielectric Loss due to the Effect of End Connection Quality", Third International Conference on Current Trends in Engineering Science and Technology ICCTEST-2017.
42. K. N. Ravi Ashwini.A.V, "Evaluation of aging of polymeric insulators by inclined plane test", Kalasilingam University INCOS 17, March 2017.
43. K.N Ravi, Leela A.M, Vasudev.N, Shivkumar aradhya, "Study of High Frequency Characteristics Of Metal Oxide Surge Arrester", 2015 International Conference on Trends in Automation, Communications and Computing Technology (I-TACT-15), At Bangalore, India, Volume: 01, 10.1109/ITACT.2015.7492694, December 2015.
44. K. N. Ravi, S. Sudalai Shunmugam; N. Vasudev; ; K. A. Venkatesh, "Pollution performance of HVAC Insulators: an interpretation using Dimensional Analysis Technique" The 19th International Symposium on High Voltage Engineering, , August, 23 – 28, 2015, At Pilsen, Czech Republic, 10.13140/R.
45. K. N. Ravi, Sunitha.N.S, "A Study on leakage current characteristics of Polymeric Insulators for different pollution layers" Power and Advanced Control Engineering (ICPACE), 2015 International Conference on, At BNM Institute of technology, 10.1109/ICPACE.2015.7274977, August 2015
46. K.N Ravi, Leela A.M, , Vasudev.N, Shivkumar aradhya, "Study Of Characteristics Of ZnO Surge Arrester", International conference on high voltage engineering, At UHV Research lab, CPRI, Hyderabad, India, 10.13140/2.1.4067.1522, January 2015

Study on Metallized Polypropylene Film Capacitors and its Change in Dielectric Loss due to the Effect of End Connection Quality”, National Conference on High Voltage Engineering & Technology (NCHVET2017),At Central Power Research Institute, Bangalore, India, 27-28 January 2017.

38. K. N. Ravi,Vasudev.N,Nagraj.H.P, “Experimental study on surface erosion and brittle fracture of FRP rod in polymeric insulators Experimental study on surface erosion and brittle fracture of FRP rod in polymeric insulators”, National Conference on High Voltage Engineering & Technology (NCHVET2017),At Central Power Research Institute, Bangalore,

## Lectures delivered

1. Delivered a talk in PSTI on “philosophy of HV testing” on 29/8/2017.
2. Delivered a talk in NPTI/PSTI on “Generation measurement of HV” on 29/8/2017.
3. Delivered a talk in CPRI on “Insulation Coordination” on 06/4/2018.
4. Delivered a talk in Sri Sidhartha institute of technology on “HVDC POWER TRANSMISSION” on 05/2/2018-9/2/2018.
5. Delivered a talk in Dr. Ambedkar Institute of technology on “Intelligent algorithms & Application” on 17/1/2018.
6. Delivered a talk in NPTI/PSTI on “latest trends and modern practices in power sector and their inclusion in training courses” on 05/10/2018
7. Delivered a talk in NPTI/PSTI on “Measurement of HVAC , HVDC and impulse voltage” on 01/11/2018.
8. Delivered a talk in Reva university on “Corona and radio interference” on 05/03/2019
9. Invited as session chair in Reva university on “Corona and radio interference” on 25/06/2019 & 26/6/2019
10. Delivered a webinar for National University in collaboration with IEEE on “Experimental Investigation of tests on HVAC and HVDC insulation based on IEA standards on 31/5/2020