



*Prize Winners Standing (L-R) Mr Nalin Sheth, Chairman Technical Committee, Mr J P Sheth, ERDA - II Prize Winner, Mrs Indra P Menon, Chairperson of Organising Committee, Mr B Saha, Indira Gandhi Centre for Atomic Research (IGCAR) - II Prize, Mr Florian Senn, Isovolt AG, Austria - one of the 2 joint winners of I Prize, Mr Michael Chapman, Vonroll Holding AG, Switzerland - the other joint winner of I Prize*

INSULEC-2009, 8th International Seminar on Electrical Insulating Materials was held on 19th & 20th February 2009 at The Lalit Ashok, Bangalore with the theme "Futuristic Insulation Technology - A Global Perspective".

Held every four years, INSULEC is a forum for sharing current trends in Electrical Insulating Materials & Systems. The objective of INSULEC-2009 was to appreciate unfolding market and technological changes enabling industry, academia and others to formulate appropriate responses.

### Organising & Technical Committees

Mrs Indra P Menon of Lakshmanan Isola Pvt Ltd was the Chairperson of the Organising Committee consisting of members Mr D N Bhave (Crompton Greaves Ltd), Mr Kedar Gokhale (ELANTAS Beck India Ltd), Mr K S Kapoor (Isovolta India Pvt Ltd), Mr IPS Khandpur (PRS Permacel Pvt Ltd), Mr Mihir Merchant (Permal Wall Wallace Pvt Ltd), Mr R Mohan (E I DuPont India Pvt Ltd), and Mr P F Parikh (Monopal Chemicals Pvt Ltd).

The Technical Committee, headed by Mr Nalin Sheth of Indotech Solutions Company comprised of Mr D N Bhave (Crompton Greaves Ltd), Mr K S Kapoor (Isovolta India Pvt Ltd), Dr P A Krishnamoorthy (ERDA), Mr Abhay Kulthe (ELANTAS Beck India Ltd), Mr R Mohan (E I DuPont India Pvt Ltd), Mr P F Parikh (Monopal Chemicals Pvt Ltd) and Mr Bhujang Shet (Permal Wall Wallace Pvt Ltd).

### Call for Papers

The Call for Papers received enthusiastic response. 40 of the 43 synopses received were short listed for full Paper. 28 of the 34 full papers received, were

selected for presentation. Selected papers consisted of 19 by Indian authors and 9 by foreign - Austria, Korea, Singapore, Sweden, Switzerland, USA - Authors. Indian Papers included 3 from Academia and 6 from Research & Testing Institutions.

### Inauguration

Welcoming the 195 participants, Mrs Indra P Menon, Chairperson of the Organising Committee, informed the audience that the response in terms of Sponsorship, Papers, Delegates, especially against the backdrop of the current economic scenario, was overwhelming. She expressed confidence that Delegates and Authors would benefit from the 2 days' deliberations.

Mr S P More, Director General, highlighted key IEEMA initiatives, including the latest addition viz. IEEMA SME Quality Award (ISQA).

IEEMA President Mr V V Paranjape took stock of the Power Sector in India with particular reference to the Transmission & Distribution Segment.

In his Key Note address, Mr Johannes Mensdorff Pouilly, Divisional Director, High Voltage, Isovolt, Austria looked at the developments and medium & long term trends in the power sector in USA, Europe and Asia and their implications for Insulation Industry.

Chief Guest Mr Sukhbir Singh, Member Electrical, Railway Board, Ministry of Railways, Government of India, in his address highlighted that the growth momentum of Indian Railways, one of the largest users of Electrical equipments and systems, was intact. Investments in on-going and new projects will not only be as budgeted but also exceed in some cases, he added. Mr Singh lamented the difficulty faced by Indian Railways from restrictions on transfer of newer technologies and the consequent time and cost over-runs.

Chairman of Technical Committee, Mr Nalin Sheth thanked Authors, Scrutineers, Session Chairmen, Organizing & Technical Committee members, Sponsors, Advertisers, Service Providers and Delegates for their participation in and contribution to INSULEC 2009.

### Life time Contribution Award

Members of IEEMA Electrical Insulation Materials Division conferred 'Life Time Contribution Award' to Mr Parmanand Parikh on the occasion of INSULEC.

### Lifetime Contribution Award presented to Mr Parmanand F Parikh

#### Citation

Born on 26th August 1924 in Ahmedabad, Mr Parmanand F Parikh graduated in Science from the University of Bombay in 1944. He went on to complete BSE Chem Engg. from USA in 1947 followed by a course in Polymer Chemistry at UDCT, Mumbai in 1951-52.

In 1952 Mr Parikh set up Indian Insulation Industries Pvt Ltd., Bombay, an Enamelled Wire Manufacturing Company - first of its kind in Western India.

Mr Parikh was the Chief Executive - Technical of Devidayal Cables Ltd., Bombay, from 1955 to 1958 and of Hindustan Transmission Products, Bombay from 1958 to 1972.

In 1972 Mr Parikh started Parikh Consultants P Ltd and was the founder Chairman & Managing Director of Monopol Chemicals Pvt Ltd started in 1978 for manufacture of Wire Enamels, Resins, Insulating Varnishes and speciality Monomers. Intec Polymers Ltd. set up by Mr Parikh was the first Indian Company to get an export order from USSR in 1990 for Polyester based Wire Enamels.

For more than 50 years Mr Parikh has been involved in Research & Development in the field of Wire Enamels, Resins, Polymers, Insulating Varnishes and various Insulation related products.



IEEMA President Mr V V Paranjape presenting the 'Lifetime Contribution Award' to Mr Parmanand F Parikh

He was instrumental in setting up a modern laboratory consisting of FTIR, GPC, DSC, HPCL, TGA and various modern instruments.

Between 2002 and 2005, as Chairman of Electrical Insulating Materials Division of IEEMA, Mr Parikh initiated number of activities for the benefit of the industry. The Electrical Insulation Technology (EIT) course, started in 2004 was one such. The objective of EIT is to impart knowledge in electrical insulation to students and practicing engineers and is the only one of its kind in the country.

During the last decade, Mr Parikh is engaged in social work at Mumbai. He is the President of Senior Citizen club of Marine Drive which undertakes community development, healthcare and other projects for the benefit of its members. An enterpreneur, guide and educationist, Mr Parikh is a paragon of dedication, perseverance and zeal.

On the occasion of 'INSULEC - 2009' the 8th International Seminar on Electrical & Electronic Insulating Materials & Systems, IEEMA is privileged to honour Mr Parmanand F Parikh for the valuable contribution made in the field of electrical insulation in particular, electrical power equipment industry in general and service to society.

The award was presented by Mr V V Paranjape, President, IEEMA flanked by Mrs. Indra P Menon, Chairperson of INSULEC 2009 Organising Committee & IEEMA EIM Division, Mr Nalin Sheth, Chairman of INSULEC 2009 Technical Committee and Mr Sunil More, Director General, IEEMA.

### Technical Sessions

The selected 28 Papers were presented under 5 topics spread over 6 sessions. (Given in table).

### Prizes

There was 1 First Prize and 2 Second Prizes for the top 3 papers. The 1st Prize of Rs. 50,000 was shared by Mr Florian Senn of Isovolta AG, Austria and Mr Michael Chapman of Von Roll, Holding AG, Switzerland for their Papers "Challenges and current approaches in enhancing insulation systems for more efficient High Voltage Rotating Machine" and "Insulation Systems for Traction Motors" respectively.

The 2 Second Prizes of Rs. 25,000 each were bagged by Mr B. Saha of Indira Gandhi Centre for Atomic Research, Kalpakkam for the Paper "Correlation of a Pulsating Sensor based method with Standard Techniques for assessing the deterioration of Mineral Insulating Oil" and Mr J P Sheth of ERDA, Vadodara for the Paper "Development of new insulating polymer for electrical wiring accessories".

<b>Session I : Insulation System for Electrical Rotating Machines</b>		
<b>Chairman: Mr R S Barve</b>		
<b>Paper No.</b>	<b>Presenter</b>	<b>Title</b>
1	M Bhakta	Comparative study to establish the effect of Diesel & lubricating oil over silicone rubber insulation system vis-à-vis polyimide mica based system
2	Florian Senn	Challenges and current approaches in enhancing insulation systems for more efficient High Voltage Rotating Machine
3	K N Das	High Voltage AC ( 50hz) Test on High Capacitance Stator Windings
4	Michael Chapman	Insulation Systems for Traction Motors
<b>Session II : Insulation System for Static Electrical Machines</b>		
<b>Chairman: Mr D R V Murthy</b>		
1	Suvarna Bhalerao	Investigation of Insulation strength of Oil- Mixtures for Power Transformers
2	Thomas Lim	Requirements of insulation materials in dry type transformers
3	R M Khadatkar	Liquid Nitrogen filled Copper Wound Transformer
4	Thomas Lim	Retrofit with Hybrid Insulation System of a failed Power Transformer
<b>Session III : New Developments in Insulating Materials</b>		
<b>Chairman: Dr M Ramamoorthy</b>		
1	K S Shah	Polypropylene clay nanocomposite for electrical insulation
2	Harindu Vyas	Development of PBT / HDPE alloy using Ionic- Graft - Compatibilizer for Switchgear application
3	J P Sheth	Development of new insulating polymer for electrical wiring accessories
4	A K Basu	Use of indigenously developed resin poor mica tapes for High Voltage Insulation
5	M A Shenoy	New reactants for electrical insulation resin composition for improved performance
<b>Session IVA : Studies &amp; Evaluation Techniques of Insulating Materials &amp; Systems</b>		
<b>Chairman: Mr P F Parikh</b>		
1	Kantha G Sharan	Comparison of the UL and IEC Fire Hazard Assessment Processes for Plastics used in Electrical Products
2	B Saha	Correlation of a Pulsating Sensor based method with Standard Techniques for assessing the deterioration of Mineral Insulating Oil
3	S Ganga	Evaluation of EPDM Silicone Composites for outdoor Insulation
4	Virendra Kumar	Salient features and critical Quality Control tests of Epoxy Resin System for Vacuum Pressure Impregnation.
5	Rajendra A Prasad	UL methods of evaluation on compatibility of insulating materials in Electrical Machines
<b>Session IV B : Studies &amp; Evaluation Techniques of Insulating Materials and Systems</b>		
<b>Chairman: Dr G R Nagabhushana</b>		
1	P F Parikh	Role of Polymers in Electrical Insulation
2	Steven SW Lee	Thermal aging principle and comparison of aramid paper, NMN and DMD
3	Arijit Basuray	Compatibility of Insulating materials in Insulating system - the physics and engineering.
4	Steven SW Lee	Motorette Test for Insulation Materials of Inverter-fed Motors
5	K K Puranik	Quality Improvement of stator bar insulation through Six Sigma approach
<b>Session V : i) Insulation of Winding Wires ii) Insulators (Ceramic &amp; Polymeric)</b>		
<b>Chairman: Dr N Vasudev</b>		
1	P S Nair	Insulation of Winding Wires - developments, application, evaluation & performance.
2	S A Filliben	Enhanced Polyimide for Traction Motors
3	Ulrich Massen	Advanced Materials for Composite Insulators
4	Subba Reddy B	A Novel Technique for Improving the Pollution Performance of High Voltage Ceramic Insulators
5	P Sridharan	Interesting solutions for insulators under polluted environments



Chief Guest Mr Sukhbir Singh lighting the lamp



Invocation



Organising & Technical Committee Chairpersons and Session Chairmen taking Delegate feedback



Session IV A in progress, chaired by Mr P F Parikh



Mr Sukhbir Singh presenting a Memento to Mr Uwe Assmuth, an overseas guest



Mr K S Kapoor welcoming Mr R S Barve, Chairman, Session I



IEEMA President Mr V V Paranjape presenting a Memento to the Chief Guest Mr Sukhbir Singh



The audience - engrossed in the proceedings