

## Papers Presented at the Technical Meetings of DEI

Titles of papers presented at the technical meetings of DEI are listed below which were held from September 1998 to September 1999.

### Theme: Electronic Equipment Insulation September 9, 1998, Tokyo Denki University

- DEI-98-44 Methods of Reliability Test for Ionic Migration in Printed Wiring Boards  
S. Yoda, S. Fujiki, T. Motoyama, H. Narusima, S. Yamada, T. Wada, M. Hanamori,  
M. Yamaguchi and K. Fujita, K. Hikasa
- DEI-98-45 An Interim Report On Joint Works of Migration Test  
H. Inoki, S. Yamamoto (TABAI ESPEC CORP.), K. Shutoh (Science Univ. of Tokyo),  
N. Yoshimura, K. Mitobe (Akita Univ.), H. Tanaka (Kusumoto, Chemicals, Ltd.), S. Fujiki  
(Toyama Industrial Technology Center),  
S. Takano and M. Osoegawa (Sumitomo Electric Industries, Ltd.)
- DEI-98-46 Investigation on Hazards of Home Electric Appliances  
K. Shuto and O. Sugawa (Science Univ. of Tokyo)
- DEI-98-47 The Subject of Reliability Evaluation for High Density Electronics Packaging  
T. Tsukui (Tokai University)
- DEI-98-48 Observation and Analysis of Deposits Generated by Ionic Migration  
T. Motoyama and K. Ichikawa (National Institute of Industrial Safety)
- DEI-98-49 Relation between Dielectric Characteristics at Low Frequency and Generation of Ionic  
Migration  
Y. Yamano (Chiba Univ.) and T. Tsukui (Toukai Univ.)
- DEI-98-50 Analysis of Discharge Current in Surface Dielectric Breakdown of Contaminated Printed  
Wiring Board under DC Magnetic Field  
Boxue Du and S. Kobayashi (Niigata College of Technology)
- DEI-98-51 Study of Copper Ionic Migration by means of Space Charge Measurement  
K. Okamoto (Fuji Electric Corp. R&D Ltd.), K. Fukunaga and T. Maeno (Communications  
Research Laboratory)

### Theme: Organic Ultra-thin Films, Organic Materials in general October 10, 1998, IEEJ Tokyo

- DEI-98-52 Nano-scale Control of Ultra-thin Organic Films by Automatic Dipping Machine with  
in-situ QCM  
S. Shiratori (Keio Univ.)
- DEI-98-53 Absorption and Attenuated Total Reflection Properties in Azobenzene LB Films  
Adsorbing Cyanine Dyes  
T. Fukami, F. Kaneko, K. Shinbo, K. Kato and S. Kobayashi (Niigata Univ.)
- DEI-98-54 Frequency Dependence of Conductivity of Carbon Black-Polyethylene Composites  
S. Nakamura, T. Tomimura and G. Sawa (Mie Univ.)
- DEI-98-55 Estimation of Electronic States in Polymers by Kelvin method -Effects of UV Irradiation  
and Heat Treatment-  
A. Kawamoto (Fukui National College of Tech.), Y. Suzuoki and T. Mizutani (Nagoya Univ.)
- DEI-98-56 Interfacial electrostatic phenomena and electric characteristics polyimide Langmuir-  
Blodgett films  
E. Itoh (Shinshu Univ.) and M. Iwamoto (Tokyo Institute of Technology)
- DEI-98-57 Doping Effects of Organic Ultrathin Films with Nanostructure  
M. Onoda (Himeji Institute of Technology)
- DEI-98-58 Operational mechanism of spectral sensitivity controllable cells using Organic dyes  
K. Shimada, M. Iizuka, S. Kuniyoshi, K. Kudo and K. Tanaka (Chiba Univ.)

- DEI-98-59 Electroluminescent Properties in Organic Light-emitting-diodes Using Oxazolidine Derivative  
H.Tsuge T.Mori and T.Mizutani(Nagoya Univ.)
- DEI-98-60 Preparation of an Inversely Stacked EL Device by Sputtering of ITO Electrode  
K.Tanaka,M.Kasahara and H.Usui(Tokyo Univ. Agricul. & Technol.)
- DEI-98-61 Improvement of Electrode-Organic Interface in Organic EL Device  
Y.Ohmori, Y.Kurosaka, T.Sawatani and K.Yoshino(Osaka Univ.)
- DEI-98-62 Characteristic Patters Observed in Freely Suspended Ferroelectric Liquid Crystal Films  
S.Uto(Osaka Institute of Technology) ,M.Ozaki and K.Yoshino (Osaka Univ.)
- DEI-98-63 Observation of Transient Diffraction Induced by Ionic Conduction in Nematic Liquid Crystal Cells  
K.Ochi and H.Naito(Osaka Prefecture Univ.)

Theme: Cable and Electric Equipment Insulation ,Space Charge and High Electric Field Phenomena  
November 17,1998, Fukuoka

- DEI-98-64 Study about Dissipation Current Waveform of Polymer Films in High-Field Region  
M.Fujii(Oshima National College of Maritime Technology), K.Tohyama (Numazu College of Technology), T.Tokoro(Gifu National College of Technology), Y.Muramoto, M.Nagao (Toyohashi Univ. of Technology) and M.Kosaki(Gifu National College of Technology)
- DEI-98-65 Characteristics of Short Time Space Charge Distribution up to Electrical Breakdown in Polymer  
K.Tanaka, S.Mitsumoto (Toyohashi Univ. of Technology), M.Fukuma (Matsue National College of Technology), M.Nagao (Toyohashi Univ. of Technology) and M. Kosaki(Gifu National College of Technology)
- DEI-98-66 DC Electrical Breakdown Characteristics and Space Charge Effect of Polar Polymer EVA film  
Y.Murakami (Matue National College of Technology),S.Mitsumoto (Toyohashi Univ. of Technology), M.Fukuma(Matsue National College of Technology), M.Nagao(Toyohashi Univ. of Technology)
- DEI-98-67 Effect of Cylindrical Function on Measurement of Space Charge Distribution in Coaxial Cable Insulator PEA Method  
K.Nagashima,Y.Tanaka,T.Takada(Musashi Institute of Technology) and Xiaokui Qin (Tongji Univ.)
- DEI-98-68 Diagnosis of Electrical Characteristics by Tap Tone Features on Generator Stator Coils  
S.Hagiwara, Y.Higashiyama, H.Kamiya and M.Onoda (Hitachi Ltd.)
- DEI-98-69 Electrification Property of Glass-fiber Reinforced Plastics by Applying DC Electric Field  
A.Fukuda,Y.Inoue,T.Inohara and M.Sakai (TOSHIBA Corporation)
- DEI-98-70 A Study on the influence of Space Charge on Electrical Breakdown  
T.Takeda,N.Hozumi, H.Suzuki, T.Okamoto(CRIEPI), K.Terashima, Kato(Electric Power Development Co.,Ltd.), T.Nakiri and T.Nakagawa (The Kansai Electric Power Company, Inc.)
- DEI-98-71 Study of the Morphology of Cross-linked Polyethylene  
H.Shintate,M.Yamaguchi,S.Wang and T.Shiono(Showa Electric Wire & Cable Co.,Ltd)
- DEI-98-72 Influence of Moisture Absorption Upon Internal Space Charge in Epoxy Resin  
T.Hosoya,H.Takai (Tokyo Denki Univ.), K.Fukunaga and T.Maeno (Communications Research Laboratory)
- DEI-98-73 A Statistical Investigation of Dielectric Breakdown of Low Density Polyethylene  
K.Asakawa, K.Mouri and Y.Sekii(Chiba Institute of Technology)
- DEI-98-74 The Effect of peroxide decomposition products and additives in XLPE Insulations on AC Tree Initiation  
K.Hirota, T.Okada, K.Maruta and Y.Sekii(Chiba Institute of Technology)
- DEI-98-75 Effects of Acetophenon on the Dielectric Property of Insulation Materials  
H.Miyata, T.Takahashi, I. Fujimoto and T. Niwa (Fujikura Ltd.)

- DEI-98-76 Degraded Detecting Performance of Insulation Diagnosis Using Low-Frequency Voltage  
H.Kamohara, Y.Kudo, I.Shinohara and A.Ito(Daiden Co.,Ltd.)
- DEI-98-77 Charge of glass substrate for LCD caused by contact with plates  
H.Kitabayashi,H.Fujii(Mitubishi Electric Corp.) and T.Ooishi (Advanced Display Inc.)
- DEI-98-78 Study of an Ultra High-resolution PEA Charge Measurement System  
T.Maeno and K.Fukunaga(Communications Research Laboratory)
- DEI-98-79 Measurement of Space Charge Distribution Using the Pulsed Electroacoustic Method in Water Treed Sheet Samples  
C.Takeya(Tatsuta Electric Wire and Cable Co.,Ltd.), Y.Tanaka(Musashi Institute of Technology) and Y.Ohki(Waseda Univ.)
- DEI-98-80 Study on the Applicability of New Insulating using Rapeseed Ester Oil for Transformer  
Y.Nakagami, K.Kawanishi, M.Miyamoto(Fuji Electric Corporate R&D Ltd.), R.Miya, H.Kobayashi,M. Kousaka and M.Wada(Fuji Electric co.,Ltd.)
- DEI-98-81 Harmonic AC Loss Current of 22kV XLPE Cables  
H.Okamura, T.Genji(The Kansai Electric Power Co.,Inc), S.Harada, T.Awaji, K.Hirotsu (Sumitomo Electric Industries, Ltd)
- DEI-98-82 Effect of Plasma Treatment on the Charge Distribution in Some Polymers  
F.Massines, G.Gouda (Univ. Paul Sabatier, France), T.Toyoda, Y.Ohki (Waseda Univ.), K.Fukunaga and T.Maeno(CRL)

Theme: Cable and Electric Equipment Insulation

November 17, 1998, Fukuoka

- DEI-98-83 An Effect of DC Ore-stressing to AC Field Distortion in XLPE Cable  
T.Tanaka, T.Itaya(Tokyo Electric Power Co.,Inc.), S.Maruyama, H.Tanaka (The Furukawa Electric Co.,Ltd)
- DEI-98-84 The Investigation of The Diagnostics of Water-tree Degraded XLPE Cable By Residual Method  
T.Toda, M.Naruse(Chubu Electric Power Co.), H.Kon, M.Yoshida, K.Watanabe(Fujikura Ltd.)
- DEI-98-85 Development of new Halogen-free Flame-retardant Cables (1)  
T.Demura, Y.Ueda, K.Ashida and Y.Miyashita(Mitsubishi Cable Industries, Ltd.)
- DEI-98-86 Development of Inorganic Insulation used for Nb<sub>3</sub>Sn Superconducting Coils  
H.Hatano, F.Sawa, T.Wada,T.Shumonosono and H.Moriyama (Toshiba Corporation)
- DEI-98-87 Measuring Method of Potential Distribution Characteristics on Coil End Corona Shields of High Voltage Rotating Machines  
Y.Higashimura, Y.Kurahara and S.Hagihara(Hitachi,Ltd)

Theme: Space Charge and High Electric Field Phenomena

November 18, 1998, Fukuoka

- DEI-98-88 Space Charge Distribution of Polyimide Films in High Temperature Region  
Y.Muramoto, S.Mitsumoto, M.Nagao (Toyohashi Univ.of Technology), M.Fukuma (Matsue National College of Technology) and M.Kosaki (Gifu National College of Technology)
- DEI-98-89 Internal Structure and ER Properties in ER Suspensions of Disperse System under DC Electric Field  
R.Hanaoka, K.Hotta (Kanazawa Institute of Technology),H.Anzai, K.Sakurai (Fujikura Kasei Co.,Ltd.) and S..Kuroda(Gunma Univ.)
- DEI-98-90 Mechanisms of heat degradation of polyethylene and crosslinked Polyethylene  
J.Ikehara, T.Ikeda, T.Ashida and M.Fujii(Mitsubishi Cable Industries)
- DEI-98-91 Various Characteristics of Interfacial Space Charge in Polyethylene Laminated Insulation Structure  
T.Tanaka (CRIEPI) and M.Uchiumi (Kyushu Univ.)
- DEI-98-92 Study on Partial Discharge Measuring Technique and Characteristics of Dry-type

- Metallized Polypropylene Film Capacitor  
Y.Makino, Z.Tian, M.Hikita (Kyushu Institute of Technology) and T.Hirota (Shizuki Electric Co., Inc.)
- DEI-98-93 Frequency Dependence of Conductivity and Permittivity of Water-tree Samples  
Y. Li, M. Ogishima, T. Sumimoto, J. Kawai and J. Shinagawa (Showa Electric Wire and Cable Co.,Ltd.)
- DEI-98-94 Polarity Effect of Charge Accumulation at LDPE/EVA Interface  
T. Ito, Y. Tanaka, T. Takada (Musashi Institute of Technology) and T. Tanaka (CRIEPI)
- DEI-98-95 Effect of Acetophenone on Space Charge Formation in PE  
K. Kobayashi, T. Ohara, Y. Ohki (Waseda Univ.) and T. Maeno (Communications Research Laboratory)

Theme: Functional Organic Films in general  
November 20, 1998, Toyama

- DEI-98-96 Luminescence of Organic Films with Field Emitter Array  
Y.C.Luo, M. Kesyo, J. Isoda, S. Naka, M. Shibata H. Okada and H. Onnagawa (Toyama Univ.)
- DEI-98-97 Electrical Characteristics of compound structure of LB/Metal film  
K.Tafuchi, K. Sato, A.Kitagawa and M. Suzuki (Kanazawa Univ.)
- DEI-98-98 Self-assembly of organic-inorganic superlattice and nano-electric circuit by simultaneous deposition in vacuum  
K. Orihara, K. Hosono, Y. Yamagata, M. Kawamata and Y.Sato (Yamagata Univ.)
- DEI-98-99 Nano-scale Control of Layer-by Layer Absorbed Polyelectrolyte Films by Solution pH  
S. Shiratori (Keio Univ.) and M.F.Rubner (MIT)
- DEI-98-100 Observation of Construction and Structure of Fullerene Assembled by Liquid Phase Process  
S.Ogawa, T. Watanabe, H. Furusawa N. Yoshiyama and H. Yamamoto (Nihon Univ.)
- DEI-98-101 Synthesis of Poly(p-phenylene vinylene) Derivatives and Their Electronic and Optical Properties  
M. Onoda (Himeji institute of Technology)
- DEI-98-102 Temperature Dependence of Twist Elastic Constants in Fluorinated Liquid Crystals  
K. Ikeda, H. Okada, H. Onnagawa (Toyama Univ.) and S. Sugimori (Toyama National College of Technology)
- DEI-98-103 Characteristics of nematic liquid crystal cells with Langmuir-Blodgett monolayer  
K. Kato, A. Matsumura, Y.Majima and M.Iwamoto(Tokyo Institute of Technology)
- DEI-98-104 Evaluation of Liquid Crystal Molecules on Poly(vinyl-cinnamate) Aligning Layers using the Attenuated Total Reflection Measurement  
M.Isobe, S. Yamagata, A. Baba, F. Kaneko, K. Shinbo, K. Kato (Niigata Univ.) and T. Wakamatsu (Ibaraki National College of Technology)
- DEI-98-105 Direct Observation of Molecular Orientation States by Using a UV Curable Liquid Crystal  
S. Takahashi(Akita Univ.), S. Masuda(Advantest Laboratories, Ltd), S. Yanase(Akita Research Institute of Advanced Technology), T. Nose and S. Sato (Akita Univ.)

Theme: Electric/optic conversion and Application  
January 28, 1999, Tokyo

- DEI-99-1 Two-dimensional Lock-in Amplifier System for Optical Measurements  
T. Maeno (Communications Research Laboratory)
- DEI-99-2 Electric Fields Measurement by Using Pockels Sensor  
T. Takahashi (CRIEPI)
- DEI-99-3 Potential Difference Probe Based on Pockels Sensing Technique  
K.Hidaka, A. Kumada, S. Sakatani, E. M. Gamborg and M. Chiba (The Univ. of Tokyo)
- DEI-99-4 High Sensitive Current Measurement using an Azimuth Angle Modulation Method  
T. Hirose, M. Yonemura, T. Takada and Y. Murooka (Musashi Institute of Technology)

- DEI-99-5 Dynamic Measurement of Electric Field at the Streamer Tip of Surface Discharge  
T. Ohba, T. Ikeda, T. Takada and Y. Murooka (Musashi Institute of Technology)
- DEI-99-6 Optical High Sensitive Measurement of Shearing Stress and Principal Stress in Photoelasticities  
T. Urabe, T. Koyama, T. Otsuka, T. Takada and Y. Murooka (Musashi Institute of Technology)

Theme: Special environmental Electrical Insulation

February 9, 1999, Waseda Univ. Tokyo

- DEI-99-8 Study of Ultraviolet Laser Induced Photoluminescence of Polypropylene Film  
T. Toyoda, Y. Ohki (Waseda Univ.), K. S. Seol (Riken, Waseda Univ.) F. Massines (Paul Sabatier Univ., Waseda Univ.), Ch. Laurent (Paul Sabatier Univ.)
- DEI-99-9 Feasibility Study of Ethylene-Propylene Rubber to Apply Cryogenic DC Electrical Insulation  
A. Minoda (Matsue National College of Technology), M. Nagao (Toyohashi Univ. of Technology), M. Kosaki (Gifu National College of Technology)
- DEI-99-10 Space Charge Distribution of Polyimide Films up to Breakdown in High Temperature Region  
Y. Muramoto, M. Nagao, S. Mitsumoto (Toyohashi Univ. of Technology), M. Fukuma (Matsue National College of Technology), M. Kosaki (Gifu National college of Technology)
- DEI-99-11 Radiation Resistance of Liquid Crystal Polymer  
A. Ogata, M. Nitta, T. Tani (Yazaki Electric Wire Co., Ltd), T. Yagi, Y. Morita (JAERI-Takasaki)
- DEI-99-12 Study of Radiation and Thermal Aging for Cable Insulation Materials by Photoacoustic Method  
Y. Morita (JAERI-Takasaki), J. Ikehara (Mitsubishi Electrical Cable Industry), T. Yagi (JAERI-Takasaki)
- DEI-99-13 Temperature Dependence of Radiation and Thermal Aging for Cable Insulation Materials  
J. Ikehara (Mitsubishi Electrical Cable Industry), Y. Morita and T. Yagi (JAERI-Takasaki)
- DEI-99-14 Effect of annealing on the charge trapping property of Ta<sub>2</sub>O<sub>5</sub>/Si<sub>3</sub>N<sub>4</sub>/p-Si capacitors  
H. Kato, Y. Ohki (Waseda Univ.) and Kwang Soo Seol (The Institute of Physical and Chemical Research, Waseda Univ.)
- DEI-99-15 Creeping Partial Discharge Properties of Ceramic Insulating Materials at High Temperature  
H. Sugimoto, M. Ishida (Univ. of Tsukuba)
- DEI-99-16 Dielectric Properties of Insulator under High Temperature  
Y. Mizutani, T. Ito, T. Okamoto (CRIEPI), R. Kumazawa, M. Nakazaki, R. Aizawa (Toshiba)
- DEI-99-17 Flashover Voltage Characteristics of Electrical Insulation Break for ITER/CS model Coil  
M. Sakai, A. Fukuda, T. Fujioka (Toshiba Corp), T. Isono, T. Kato (JAERI)
- DEI-99-18 High Radiation-resistant Image Fiber for Remote Maintenance Equipment of ITER -Characteristic of Irradiated Fiber under Hydrogen Gas flow-  
Y. Morita (JAERI-Takasaki), K. Obara (JAERI-Nara)
- DEI-99-19 Structural changes induced by ultraviolet photons in H<sub>2</sub>-loaded Ge-doped SiO<sub>2</sub>  
T. Kasahara, N. Miyazaki, S. Tokuhiko, T. Katoh and Y. Ohki (Waseda Univ.), M. Fujimaki (Waseda Univ., Research Fellow of the Japan Society for the Promotion of Science)
- DEI-99-20 Photo-induced refractive index change of Ge-doped SiO<sub>2</sub> during exposure to UV lasers  
Y. Miyake, H. Nishikawa, E. Watanabe and D. Ito (Tokyo Metropolitan Univ.)
- DEI-99-21 Formation Mechanism of Defects in Ion-Implanted Si-Thermal Oxides  
H. Yabuki, H. Nishikawa, E. Watanabe, D. Ito (Tokyo Metropolitan Univ.), M. Takiyama (Nittetsu Electronics)
- DEI-99-22 Low Temperature Crystallization of SrBi<sub>2</sub>Ta<sub>2</sub>O<sub>9</sub> Ferroelectric Film by Ultraviolet Laser Irradiation

H. Hramatsu, Y. Ohki (Waseda Univ.), K. S. Seol (Riken, Waseda Univ.), D.-S. Shin, I.-H. Choi (Korea Univ.)

Theme: Reports on International Conference and Interfacial Electric Phenomena  
February 22, 1999, Tokyo

- DEI-99-23 Report on the 6<sup>th</sup> Spacecraft Charging Technology Conference  
Y. Tanka (Musashi Institute of Technology)
- DEI-99-24 Report on the 1998 Conference on Electrical Insulation and Dielectric Phenomena(CEIDP)  
T. Takada (Musashi Institute of Technology)
- DEI-99-25 Report on 1998 IEEE 6<sup>th</sup> International Conference on Conduction and Breakdown in Solid Dielectrics  
Y. Ohki (Waseda Univ.)
- DEI-99-26 Report on 1998 CIGRE Paris Meeting: SC15 (Materials for Electrotechnology)  
T. Mizutani (Nagoya Univ.), K. Goto (Toshiba) and M. Nagao (Toyohashi Univ. of Technology)
- DEI-99-27 Report on the 5<sup>th</sup> International Conference on Dielectric and Related Phenomena (DRP'98)  
S. Fujita (Hachinohe Institute of Technology)
- DEI-99-28 Report on International Conference on Electric Charge in Solid Insulators  
K. Fukunaga (Communications Research Laboratory)
- DEI-99-29 Electroluminescence in XLPE due to Impulse Voltage –Report of NRC Research Worker Abroad-  
K. Tohyama (Numazu College of Technology), S. Bamji and A. Bulinski (National Research Council Canada)
- DEI-99-30 Characteristics of Accumulation and Decay of Space Charge in LDPE/EVA Laminated  
T. Ito, Y. Tanaka, T. Takada (Musashi Institute of Technology) and T. Tanaka (CRIEPI)
- DEI-99-31 Charge Oscillation at the Interface in the Multi-layer Insulation  
N. Hozumi, T. Takaeda, H. Suzuki and T. Okamoto(CRIEPI)
- DEI-99-32 Effects of Interfacial Phenomena on Dielectric Breakdown in Filled Epoxy Resin  
M. Ezoe (Nitto Denko Corporation), M. Nakanishi (Nitto Shinko Corporation) , M. Nagao and Jia ShouGuo(Toyohashi Univ. of Technology)
- DEI-99-33 Development of Model Specimen for Evaluating Electrical Insulation Properties of Polymeric Solid-Solid Internal Interface  
N. Ka, M. Nagao, M. Muramoto (Toyohashi Univ. of Technology) and T. Tanaka (CRIEPI)
- DEI-99-34 Tree Propagation at Insulating Polymer-Polymer Interface  
E. Kobayashi (Nagoya Univ.), F. Komori (Toba National College of Technology), Y. Suzuoki, T. Mizutani (Nagoya Univ.) and T. Nagata ( Chubu Electric Power Co. Inc.)
- DEI-99-35 Dependence of Low Molecular Weight Fluid on the Formulation of Silicone Rubber  
R. Hackam (Univ. of Windsor)
- DEI-99-36 Evaluation of Outdoor Polymer Insulating Materials by Salt-fog and Inclined-plane Methods  
S. Kumagai and N. Yoshimura (Akita Univ.)
- DEI-99-37 Hydrophobicity Recovery Phenomena of Artificially Polluted Silicone Rubber for Hollow Composite Insulator  
Y. Hirano, A. Kobayashi, H. Murase, T. Inohara and K. Goto (Toshiba Corp.)
- DEI-99-38 Evaluation of Surface Degradation of Silicone Rubber Using Gas Chromatography/Mass Spectroscopy  
H. Homma, T. Kuroyagi and K. Izumi (CRIEPI)
- DEI-99-39 Effect of Surface Tension of Liquid on the Evaluation of Hydrophobicity of Silicone Rubber Insulator  
T. Tokoro (Gifu National College of Technology)
- DEI-99-40 Surface Insulation Characteristics of Silicone Rubber under Wet and Contaminated

Conditions

M. Hiraoka, M. Nagata, M. Shimada, Y. Mizuno (Nagoya Institute of Technology), K. Naito (Meijo Univ.), M. Ishiwari, H. Shinokubo, Y. Koshino and K. Kondo (NGK Insulators, Ltd)

Theme: Cable and Electric Equipment Insulation and Space Charge

June 28, 1999, IEEJ Tokyo

- DEI-99-41 Improvement in Resolution of PEA Space Charge Measurement System  
T. Miyazaki, Y. Tanaka, T. Takada (Musashi Institute of Technology) and T. Maeno (Communications Research Laboratory)
- DEI-99-42 Space Charge Measurement and Signal Processing by LIPP Method  
S. Muto, Y. Tanaka, T. Takada (Musashi Institute of Technology) and T. Maeno (Communications Research Laboratory)
- DEI-99-43 Detection of Water Tree Position in Cable Insulation Wall by using PEA method  
K. Suzuki, Y. Tanaka, T. Takada (Musashi Institute of Technology), Y. Ohki (Waseda Univ.) and C. Takeya (Tatsuta Electric Wire and Cable Co., Ltd.)
- DEI-99-44 Some Points to be Considered in Space Charge Measurement  
Y. Ohki (Waseda Univ.)
- DEI-99-45 The Influence of Anti-oxidant on the Space Charge Profiles in LDPE and XLPE  
T. Nakui, K. Itabashi, M. Nomura, Y. Sekii (Chiba Institute of Technology) and T. Maeno (Communications Research Laboratory)
- DEI-99-46 A Study of the Method for Evaluating dc Performance of Dielectric Materials using Space Charge and dc Leakage Current Measurement  
T. Takeda (CRIEPI), N. Hozumi (Toyohashi Univ. of Technology), H. Suzuki and T. Okamoto (CRIEPI)
- DEI-99-47 Time Dependent Characteristics of Electric Field Strength Distribution in an EPR/XLPE Sheet  
S. Wang, S. Miyake, A. Kuwaki, T. Shiono (Showa Electric Wire & Cable Co. Ltd.), T. Nakagawa and T. Nakiri (The Kansai Electric Power Company Inc.)
- DEI-99-48 Space Charge Formation in Low-Density Polyethylene Prepared by Metallocene Catalyst  
H. Semi, K. Kaneko, T. Mori, T. Mizutani (Nagoya Univ.) and M. Ishioka (Japan Polychem Co.)
- DEI-99-49 Partial Discharge Properties of a Void in LDPE  
K. Kondo, K. Nakao and T. Mizutani (Nagoya Univ.)
- DEI-99-50 Study on Life Cycle Management Concerning Insulation Diagnosis  
N. Hozumi, M. Kanagami, T. Takahashi, T. Takeda and T. Okamoto (CRIEPI)
- DEI-99-51 Dynamism of Interconnected Channels and Loss Current in Water Treed Polyethylene  
J. Kawai, M. Ogishima, Y. Li, J. Shinagawa, Y. Ebinuma (Showa Electric Wire & Cable Co., Ltd.), S. Nakamura and G. Sawa (Mie Univ.)
- DEI-99-52 Relationship between Electroluminescence and Aging in insulating Materials  
T. Itou, T. Nakiri (The Kansai Electric Power Co., Inc.), F. Zong-huai, T. Takahashi, J. Suzuki and H. Miyata (Fujikura Ltd.)

Theme: Treeing, Partial Discharge, Other Insulators in general

July 22, 23, 1999, Akita University

- DEI-99-53 Study on Some Physical Chemical and Electrical Properties of Sol-gel SiO<sub>2</sub> Thin Film – Water Impurity and its Electrical Effects  
Z. Shoubin and N. Yoshimura (Akita Univ.)
- DEI-99-54 Effects of Dust, UV radiation and ATH Filler Level on Leakage Current on Silicone Rubbers  
T. Kodama, S. Kumagai and N. Yoshimura (Akita Univ.)
- DEI-99-55 Dielectric Relaxation Phenomena of Electron Irradiated Polyether ether ketone  
K. Shinyama, M. Baba and S. Fujita (Hachinohe Institute of Technology)