Preliminary Technical Program for IEEE CEIDP 2016

Sunday, October 16, 2016

9:00 – 13:00 Workshop on HVDC extruded cable systems

13:30 – 17:30 Workshop on High Frequency Transients in Insulation Systems

16:00 – 21:00 Registration

18:00 – 21:00 Reception (Cash Bar)

Monday, October 17, 2016

8:00 – 8:15 Welcome
ENis Tuncer, 2016 IEEE CEIDP Chair

8:15 – 9:30 Whitehead Lecture

Interface Matters in Dielectrics
K. Fukunaga, National Institute of Information and Communications Technology, Japan.

9:30 – 10:00 Break

10:00 – 12:20 Session 1 (Oral): Aging, High-field effects
Chair: Frank Hegeler
Co-chair:

1 – 1 088 - Thermal and gamma radiation aging of cable polymers – L. Fifield
1 – 2 172 - Optimal resistance of stress grading system in converter-fed rotating machines – T Nakamura
1 – 3 243 - Dark currents in humid SF6 at high uniform electric field – R Hanna
1 – 4 081 - AC breakdown strength of a natural ester transformer liquid under accelerated thermal ageing – Qiang Liu
1 – 5 445 - Simulate the effect of trapped charges and trap cross-section on aging process – H Alghamdi
1 – 6 453 - Understanding the effect of insulation properties on electric and thermal fields in HVDC cables – C R Chandupatla
1 – 7 141 - HVDC electric field control by pressboard arrangement in oil-pressboard composite electrical insulation systems – Hitoshi Okubo

12:20 – 14:00 Lunch Break

14:00 – 16:00 Session 2 (Oral) Nano-dielectrics, Charge storage and transport
Chair: Alun Vaughan
Co-chair: Yang Cao

2 – 1 039 - A Quantum Dot Model for Permittivity of Polymer Nanocomposites – T Tanaka
2 – 2 318 - Engineering of Multifunctional Nanofluids for Insulation Systems of High Voltage Apparatus – Mohammad Taghi Imani
2 – 3 045 - Role of the Shell Polymer in Dielectric Properties of Core-Shell Structured Polymer@BaTiO3 Nanoparticles Based Nanocomposites – Xingyi Huang
2 – 4 076 - Dielectric Design of LDPE Properties: With the help of double-core Si/SiO2 and Carbon Black – M Frechette
2 – 5 310 - The making of LDPE silica nanocomposite – Suvi Virtanen
Comparison of Dielectric Properties of Additively Manufactured vs. Solvent Cast Polymer Dielectrics – Leah Appelhans

16:00 – 16:30 Break

16:30 – 18:30 Session 3 (Poster)

Chair: Kai Wu
Co-chair:

Session 3A – Conduction, Polariation, Charge Storage and Transport

3A – 1 006 - Flow Electrification Characteristics of Oil-Pressboard Insulation under DC Electrical Field Use Plane Electrode – J Dai
3A – 2 097 - Study on the Dielectric Properties of a New Mineral-Vegetable Oil-paper Insulating Material – X Zhao
3A – 3 099 - Multi-scale Computational Evaluation of Hole Mobility in Amorphous Polyethylene – M Sato
3A – 4 116 - The Influence of a Surface Modification with Orthophosphoric Acid on the Charge Stability on PP Electrets – Dmitry Rychkov
3A – 5 122 - Charge-spring model for predicting the piezoelectric response of dielectric materials: Considering tetragonality extends validity to ferroelectric perovskites - Reimund Gerhard
3A – 6 124 - Gas exchange during charging enhances charging efficiency in tubular-channel fluoroethylene-propylene ferroelectrets – Xunlin Qiu
3A – 7 128 - A feedback model for dielectrics, ferroelectrics and relaxors - Andreas Leschhorn
3A – 8 130 - Surface charge measurement on epoxy spacer in HVDC GIS/GIL in SF6 - Thanh VU-CONG
3A – 9 116 - Modelling the Isothermal Charge Decay of Modified PTFE Electrets from their Thermally Stimulated Discharge – Dmitry Rychkov
3A – 10 180 - The impacts of degassing on space charge characteristics and DC conductivity in semicon-bonded XLPE for HVDC cable applications – Miao Hao
3A – 11 199 - Hot electron injection modulation in Al2O3-filled epoxy resin composite using Cr2O3 coatings – Jinliang He
3A – 12 227 - Surface Charge Behaviors of EVA/CB Nanocomposite under Mechanical Stresses – Jin Li
3A – 13 240 - A comparative study of XLPE and LDPE cable insulation material subjected to heat-treatment: SEM and polarization properties – Fahim Abid
3A – 14 247 - Influences of frequency on space charge formation in polyethylene under high voltage AC electric fields – Churui Zhou
3A – 15 261 - Measurement of Space Charge accumulated in Poly-dicyclopentadiene Film at High Temperature under High DC Stress – Taiki Ono
3A – 16 272 - Influence of sample thickness on breakdown time in Multi-layered Polymide Films - Tsuyoshi Tohmie
3A – 17 299 - Electrical and dielectric properties of Mn-doped ZnO varistors – Jinliang He
3A – 18 303 - Comparison of Electrical Insulation Properties of Hydrocarbon-based Thermosetting Resin and Epoxy Resin - Yuki Fuchi
3A – 19 397 - Electret Behavior of Electrospun PVdF-based polymers – Marco Zaccaria
3A – 20 399 - Contribution of polymer microstructure to space charge – Anthony COMBESSIS
3A – 21 448 - Effect of moisture and ionic contaminations on DC insulation – Qin Chen
3A – 22 451 - Wide-Band Model for Dielectric Response of Oil-Impregnated Paper Insulation – Feng Yang
3A – 23 452 - Space Charge Properties of PPLP insulation – Zhiqiang Xu

Session 3B Electro-hydrodynamics

3B – 1 230 - Temperature Field Simulation of Pantograph-catenary Arc Based On MHD Model – Changjin Hao
Session 3C Partial Discharge Measurements

3C – 1 023 - Research of Partial Discharge characteristics of Surface Defect in SF6 Under Oscillating Impulse Voltage – X Han
3C – 2 091 - Partial Discharge Inception Voltage Influenced by Surface Charge on Insulating Sheet – R Kubota
3C – 3 096 - Corona Inception Voltage (CIV) of a motor insulation system - Key parameter to select a variable frequency drive (VFD) rated motor – T Ghosh Dastidar
3C – 5 106 - Partial Discharges of Nonwoven Nanofibers Composite – P Prosr
3C – 6 111 - On-line Partial Discharge Detector based on GMR Sensor – Yutao Li
3C – 7 120 - Determination of transfer function of power transformer winding sections for partial discharge localization using design information - Mahdi Rahimbakhsh
3C – 8 135 - Factors that Influence Partial Discharge Acoustic Modeling - Ayman El-Hag
3C – 9 160 - PD characteristics of metallic protrusions in SF6-insulated coaxial electrode arrangements at DC stress - Philipp Arnold
3C – 10 179 - Quantitative visualization of gas temperature distribution in atmospheric DC glow corona by spectral image processing - Ryo Sasamoto
3C – 11 248 - Study on the Propagation Characteristic of EM Wave Induced by PD Considering Winding and Core – Xu Zhao
3C – 12 251 - Partial Discharge Current Pulse characteristics of Needle-plate Electrode Based on High Bandwidth – Chongxing Zhang
3C – 13 252 - Effect of Positive DC Corona Discharge Intensity on the Variation of Conductor Surface Conditions under - Xingming Bian
3C – 14 282 - An investigation on partial discharge time-behavior in epoxy resin cavities – Davide Fabiani
3C – 15 – 297 Distribution of Surfaces Charge during Partial Discharge Sequences under Low Pressure – Yan Du
3C – 16 308 - Research on The Characteristics of Electromagnetic Interferences for PD detection in substation - Antonino Imburgia
3C – 17 329 - PD measurement Technique for After-laying Test of Large-scale 110-500 kV Cable Circuit – Min Chen
3C – 18 330 - Effects of Partial Discharge on DC Breakdown Characteristics of Paper-Ice Composite Insulation System in Liquid Nitrogen - Tomohiro Kawashima
3C – 19 331 - Sensitivity Comparison of Sensors in Repetitive Partial Discharge Inception Voltage Measurement for Twisted Pair Placed in Actual Motor Core - Keigo Nakamura
3C – 20 353 - Effect of Moisture in oil and pressbord on Creepage Discharge on Oil-Pressboard Interface – Wei Wang
3C – 21 386 - The effect of Different Voltage Square Waveforms on Partial Discharge Measurements – Pietro Romano
3C – 22 443 - Partial discharge behavior at delamination in Epoxy Cast Resin equipment under high electric field - Diaa-Eldin A Mansour
3C – 23 458 - UHF Sensor for PD Detection on Wind Turbines - Francesco Guastavino
3C – 24 459 - PD Evolution of Conventional and Corona Resistant Enamels - Francesco Guastavino
3C – 25 475 - Study on SF6 Partial Discharge Decomposition Characteristic Under Needle-plate Defect With Solid – Fuping Zeng

18:30 -19:30 Dinner

19:30 – 21:30 Session 4 (Poster)

Chair: Lisheng Zhong
Co-chair:
Session 4A Measurement Techniques

4A – 1 007-Accelerated Test Method for Oil Gap Complex Capacitance under Low Frequency Mixed Excitation Based on Sine Fitting – L J Zhou
4A – 2 032 - Optimization of the curing process of epoxy resins using methods of structural analysis – P Prosr
4A – 4 069 - Statistical Evaluation and Prediction of Audible Noise of UHVDC Transmission Lines Based Linear Mixed Effect Model – Y Yi
4A – 5 079 - An investigation into improving the measurement of the water content of transformer electrical insulation – D Martin
4A – 6 112 - Study on On-line Monitoring Equipment of Transformer Bushings based on Wireless Network – Hao Yu
4A – 7 127 - The Image Study of Partial Discharge Location by Acoustic Measurement – Ao Ma
4A – 8 150 - Detection of Furfural Dissolved in Transformer Oil Based on Surface-Enhanced Raman Spectroscopy – Zhaoliang Gu
4A – 9 175 - Development of a space charge measurement method applied to HVDC GIS spacers - Phanuel séraphine MOLO NOAH
4A – 10 196 - Detection of Methane Dissolved in Transformer Oil Based on Tunable Diode Laser Absorption Spectrum – Miao Yu
4A – 11 204 - Economic application of powder resin based groundwall insulation for low voltage electric drives - Diana El Khoury
4A – 12 264 - Novel Evaluation Methods of End-Turn Stress Grading Materials for Converter-fed High Voltage Rotating - Takahiro Umemoto
4A – 13 277 - Continuous Pulsed Electro Acoustic Measurements During Electronic Irradiation – Virginie Griseri
4A – 14 345 - Electric circuit model for simulating ferroelectrets with open-tubular channels - Ruy Alberto Pisani Altafim
4A – 15 378 - The Influence of Mass Moisture Invading on Electrical Features for Oil-impregnated Paper Bushing – Quanmin Dai
4A – 16 385 - Finite Element Method based Frequency Response Simulation of Transformer High Voltage Winding with Radial Movement Fault – Xiaozhen Zhao
4A – 17 410 - Condition assessment of aged transformer oil using optical spectroscopy techniques - Diaa-Eldin A Mansour
4A – 18 422 - The Assess Method of Validity for Partial Discharge Sensor based on Multiple Criterion – Zhihai Rong
4A – 19 428 - Development of a High Voltage Steep-sided Nanosecond Pulse Generator – Chunjia Gao
4A – 20 450 - Research on the Space Electric Field Measurement in Liquid Dielectric under Lightning Impulse Voltage – Xiaolin Zhao

Session 4B Pre-breakdown and Breakdown in Solids, Liquids, Gases and Vaccum

4B – 1 033 - Influence of local field distortion by high permittivity fillers on surface electric field of permittivity graded material – H Ozaki
4B – 2 034 - Modelling Stochastic Character of Breakdown under Lightning Impulse Voltage – A Gürlek
4B – 3 058 - Impact of Pressure and Elastic Modulus on Tangential Breakdown Strength between Dielectric Surfaces – E Kantar
4B – 4 078 - DC Partial Discharge and Flashover Characteristics and Charging Activity on Solid Insulator in Air – K Takabayashi
4B – 5 082 - Firefly and Standing Still Phenomenon of Free Conducting Wire-type Particles in SF6 Under DC Voltage – H YOU
4B – 6 083 - Surface preparations on MV-sized cables for ramped DC breakdown studies – E Doedens
4B – 8 086 - Accumulative Effect Characteristics of Oil Paper Insulation under Switching Impulse Voltage – P Sun
4B – 9 089 - Electrical Breakdown Characteristics of Dielectric Elastomer under various conditions – S Ishikawa
4B – 10 101 - Comparative Study on Inhomogeneous Field Breakdown in Natural Ester Liquid and Mineral Oil – S Haegle
4B – 11 107 - Development of Thermal Conductive PMMA/BN Electric Insulating Composite Material Produced by Electrostatic Adsorption Method - Shohei Use
4B – 12 108 - Fluoronitriles / CO2 gas mixture as an eco-friendly alternative candidate to SF6 in high voltage insulation systems - Abderrahmane Beroual
4B – 13 123 - Space charge build-up in tubular channel ferroelectrets – Axel Mellinger
4B – 14 137 - The influence of oil-impregnated insulation paper’s thickness on its breakdown strength – Xudong Li
4B – 15 139 - Breakdown Characteristics of Non-uniform Electric Field in GIS Under Impulse Voltages – Junhao Li
4B – 16 148 - Photonionization Model for the Transition to Fast Mode Streamers in Dielectric Liquids - Inge Madshaven
4B – 17 155 - Thermal decomposition of cyclohexane by Kinetic Monte Carlo simulations and its relevance for streamer formation - Øystein L Hestad
4B – 18 157 - Simulation of the evolution of trapping in an insulator irradiated by a defocused electron beam in a scanning microscope: Applications to material characterization and breakdown phenomena - Gilles Damamme
4B – 19 167 - Breakdown in air along insulating solid surfaces of different natures, parallel or perpendicular to the field direction - Laure Trémas
4B – 20 213 - Observation and modelling of vapor bubble and streamer initiation in water under long duration impulses – Olivier Lesaint
4B – 21 255 - Arc discharge detection caused by short-circuit in ac power supply cord - Yukio Mizuno
4B – 22 256 - Non-Hermetic Electrical High Voltage Connection in Medium-Vacuum - Alexander Driessen
4B – 23 257 - Influence of the surface conductivity of a barrier on the withstand voltage in an air insulated rod plane arrangement - Michael Schueller
4B – 24 266 - Motion and Discharge Behavior of the Free Conducting Wire-type Particle within DC GIL – Jian Wang
4B – 25 309 - Effect of nanoparticle types on breakdown strength of transformer oil – Muhammad Rafiq
4B – 26 313 - Breakdown and Space Charge Behaviors of Oil-paper under Combined AC-DC Voltages with Conversional Frequency – Yuanwei Zhu
4B – 27 325 - Electric Field Behavior in Mass Impregnated HVDC Cable Insulation: Effect of Cavity Formation - Sridhar Alapati
4B – 28 349 - Modelling partial discharge inception in magnet wires at different altitudes – Andrea Cavallini
4B – 29 377 - Partial Discharge Properties of Resin Molded Insulation Substrate after Long Term Voltage Application – Yuya Akinaga
4B – 30 388 - Polymer Laminates for High Energy Density and Low Loss – Michael Vecchio
4B – 31 389 - The effect of curing conditions on the electrical properties of an epoxy resin - Istebreq Abdulla Hamad Saeedi
4B – 32 405 - Elongated Particles Behavior Caused by Circuit Breaker Action in GIS - Zhi-kai Pang
4B – 33 408 - DC Dielectric Properties of Thermo-plastic Polyolefin Materials – Lisheng Zhong
4B – 34 417 - High Energy Self-Clearing Polymer-Glass Laminates – Mengxue Yuan
4B – 35 430 - Analysis of Influencing Factors of Dissolved Gas in oil – Zhihai Rong
4B – 36 455 - Partial Discharge and Breakdown Characteristics of Inverter-fed Motor Winding with Micro Cellular Coating – Masahiro Kozako
4B – 37 463 - Large Area DC Dielectric Voltage Breakdown Measurement and Modeling of BOPP and PTFE Thin Films – Christopher Kerwien
4B – 38 484 - Investigation the Role of Void Sizes for Failure of High Voltage Bushing – Md Salam
Tuesday, October 18, 2016

8:00 – 10:00 Session 5 (Oral) Outer Insulation, Partial discharge measurements

Chair: Greg Stone  
Co-chair: Paul Lewin

5 – 1 373 - Research on Electric Field Distribution Characteristics of Composite Insulators Operating on AC 500kV Transposition Tower – Lishuai Liu
5 – 2 178 - On the Arc-Resistance when Tested with DC- and AC-Stress by the Example of Silicone Elastomers – S Kuehnel
5 – 3 117 - Frost/Ice Formation on Superhydrophobic-Piezoelectric Hybrid Layer – P Wang
5 – 4 327 - PD activity in void type dielectric samples for varied DC polarity – Edward Corr
5 – 5 305 - Space Charges and Partial Discharges Simultaneous measurements under DC stress – Antonino Imburgia
5 – 6 486 - The Rustle of Electrical Trees - Tadeusz Czaszejko

10:00 – 10:30 Break

10:30 – 12:30 Session 6 (Poster)

Chair: Thomas Andritsch  
Co-chair:

Session 6A Innovative Dielectric Materials

6A – 1 001- Charge Transport Characteristics in Nanodielectrics, G Li
6A – 2 005 - Effects of Nanoparticles on Trap Depth in Epoxy Resin under Different Temperature – Z Shao
6A – 3 031 - The usage of nonwoven nanofibers for improving properties of electrical insulation – R Polansky
6A – 4 037 - Fabrication and Dielectric Properties of Highly Loaded Polypropylene Micro- and Nano-Composites – H Couderc
6A – 5 043 - Thermal Properties of Mineral Oil Modified by C60 and TiO2 Nanoparticles – Z Nadolny
6A – 6 048 - A versatile model to estimate the dielectric strength of gas mixtures – C Park
6A – 7 050 - Study on Space Charge Characteristics in XLPE/SiO2 under Thermal Ageing – K Xiao
6A – 8 056 - High permittivity 11/CaCu3Ti4O12 (CCTO) nanocrystal composites for capacitors applications – T Paramanandam
6A – 9 065 - Electrical and Mechanical Properties of Nanocomposite materials Containing Electrically Dispersed MWCNTs – R Hanaoka
6A – 10 074 - Dielectric Properties of Epoxy composites containing both molecular and nanoparticulate silica – M Frechette
6A – 11 103 - Investigation of filling level and processing technology influences on dielectric behavior of PE/HNT nanocomposites – R Polansky
6A – 13 161 - Transformer oil-based nanofluids velocity measurement under DC voltage – Ming Dong
6A – 14 176 - Breakdown voltage of nanofluids under different voltage conditions - Fabrizio Negri
6A – 15 182 - Computational Analysis between Compact Distribution Lines' Spacers under Polluted Environments - José Bezerra
6A – 16 183 - Effect of Nanoparticles on Mechanical and Electrical Performance of Porcelain Insulator - Jose Contreras
6A – 18 202 - The Relationship between Surface Flashover Performance in Vacuum of Epoxy Nanocomposites and Dielectric Properties in Electrical and Terahertz Frequency Range – Shengtiao Li
6A – 19 219 - Relationship between space charge behaviors and trap level density in PP/PER nanocomposites – Jun Hu
6A – 20 228 - Space charge behavior in PP/POE/MgO nanocomposites under temperature gradient – Jinliang He
6A – 21 250 - Influence of Water Absorption on Space Charge Behavior of Epoxy Nanocomposites – Dayuan Qiang
6A – 23 283 - Open-circuit thermally stimulated currents in low-density polyethylene nanocomposite LDPE/Al2O3 – Anh Hoang
6A – 26 322 - Polymethyl methacrylate – Graphene Oxide performance for High Voltage Insulation System - MUHAMMAD ABU BAKAR SIDIK Sidik
6A – 27 333 - Electric Field Relaxation by Functionally Graded Materials (FGM) with Permittivity and Conductivity – Yoshitaka Miyaji
6A – 28 337 - Fabrication and Evaluation of Permittivity Graded Materials with SrTiO3 Particles and Localized Conductive - Yoshitaka Miyaji
6A – 29 340 - Improved lightning protection of CFRP wind turbine blades: Epoxy/Graphene Oxide nanocomposites – O Vryonis
6A – 30 341 - Characterisation of Polymer-Filler-Interactions for a Model Nanocomposite Based on Silicone Rubber - Annika-Sophie Rempe
6A – 31 347 - Influence of Nanopore Size on Particle Porosity and Permittivity of Nanoporous-silica/Epoxy Composite – Muneaki Kurimoto
6A – 32 362 - LDPE/POSS Polymeric Composites Obtained by Extrusion – Meng Guo
6A – 33 363 - Enhancing Dielectric Property of Polymer Films with Nanoclay Coatings – Yang Cao
6A – 34 380 - Modeling of Charge Transport in Nanodielectrics using a Coupled Finite Element and Monte Carlo – Yanhui Huang
6A – 35 390 - Impact of nature and preparation method of graphene on the electrical behavior of LDPE/graphene composites – Tung Tran Anh
6A – 36 391 - Change to the Permittivity and Conductivity Due to Modification of the Epoxy Network Structure Using Reactive Diluents - Istebreq Abdulla Hamad Saeedi
6A – 37 427 - Research on the Suppression of Nano-coatings for the Surface Charge Accumulation on the GIS Basin Insulators – Chunjia Gao
6A – 38 436 - Application of UV/Vis spectroscopy to assess the stability of oil-based nanofluids - Diaa-Eldin A Mansour
6A – 39 439 - Current-Density vs Electric-Field Intensity Characteristics of Polypropylene Filled with Natural Clay as Nanomaterial – Huseyn Hiziroglu
6A – 40 440 - Space Charge Properties of LDPE based Composites with three types of POSS – Zhiqiang Xu
6A – 41 468 - Experimental Study of Dielectric Properties of Fumed silica/silicone composites – Chitrál Angammana
6A – 42 480 - Electrical conduction currents of oil-based nanofluids on needle-plane configuration in the space charge - Mauricio Aljure Rey
6A – 43 Space Charge Characteristics of Epoxy-based Nanocomposites Filled with Graphene Oxide – Siyu Zhang

Session 6B High Fields and High Frequency Phenomena

6B – 1 121 - Measurement and Analysis of the Conduction and Current of the Oil Impregnated Paper under High DC Electric Field – Jierui Zhou
6B – 2 224 - Extent of the Space Charge Limited Field – Steven Boggs
6B – 3 234 - Thermal Gradient Effects on Surface Charge of HVDC Spacer in Gas Insulated System – Boya Zhang
6B – 4 244 - The Impact of Moisture Content on FDS of Oil-paper Insulation System by FEM Approach – Li Wang
6B – 5 278 - Invariant Dielectric Strength upon Addition of Low Amounts of HDPE to LDPE - Mattias Andersson
6B – 6 302 - Dielectric Response of Gel Insulated High Voltage Power Modules subjected to Unconventional Voltage - Antonino Madonia
6B – 7 304 - Numerical Simulations of Sediment Deposition on Grading Electrodes in Cooling Water Dielectric of HVDC Converter – Xuezhong Liu
6B – 8 356 - Effect of Semi-conductive Layer on the Propagation Characteristics of High Frequency Sine Signal in Cable – Qinxue Yu
6B – 9 360 - Study of BST Nanoparticles doped Silicone Rubber Composites and its Nonlinear Dielectric Properties – Xiaoran Xu
6B – 10 381 - Optimization of IGBT Insulation under the Voltages of Various Time Scales – He Du
6B – 11 469 - Characterization of solid-liquid interface for wet-mate subsea HVDC connector – Yang Cao

Session 6C Bio-dielectrics

6C – 1 040 - Effect of pulp refining on electrical properties of insulating presspaper – Y Zhou
6C – 2 072 - Study on Relaxation Polarization Theory of SD Rat Tissues at Frequency Range of 42-5MHz - L Zhong
6C – 3 226 - Treatment on Waste Activated Sludge by Combined DC Corona and Pulsed Electric Field - Yu Gao
6C – 4 253 - The Effect of Ultrasonic Electrokinetic Polarization on the Dielectric Properties of Erythrocyte Suspension – Lisheng Zhong

Wednesday, October 19

8:00 – 10:00 Session 7 (Oral) Measurement techniques, Polarization phenomena

Chair: H Okubo
Co-chair:

7 – 1 207 - Detection of shell coatings from core-shell like dielectric nanoparticles with Electrostatic Force Microscopy – Diana El Khoury
7 – 2 365 - The Effects of Rise Time on PD Inception Voltage in Inverter-fed Motor Insulation - Peng Wang
7 – 3 324 - Modular arbitrary waveform dielectric spectrometer for aging diagnostics of recessed epoxy specimens – R Faerber
7 – 4 133 - Comparison of conductivities obtained from dielectric spectroscopy and time domain measurements – ENis Tuncer
7 – 5 423 - Nonlinear behavior on dielectric properties in BST-BCT ceramics – J Gao
7 – 6 125 - Relaxor characteristics in interacting dipole systems – H Kliem

10:00 – 10:30 Break

10:30 – 12:30 Session 8 (Poster)

Chair:
Co-chair:

Session 8A Outdoor Insulation

8A – 1 020 - Characterization of Impulse Voltage Waveform and Its Application in Breakdown Voltage Prediction of Air Gaps – Z Qiu
8A – 3 028 - ESDD Prediction of Outdoor Polymer Insulators during Salt Fog Test – A El-Hag
8A – 4 052 - Effects of surface states of insulators on RTV coating before application – Z Li
8A – 5 084 - Resistance to Tracking Analysis of Epoxy Insulator Based on Electric and Thermal Coupling – J Bao
8A – 6 093 - Flashover Study of Silicone Rubber Insulator in Presence of Water Droplets under HVDC Electric Field - Mohammed El Amine ABED
8A – 7 156 - Investigation on Hydrophobicity Transfer Property of Silicone Rubber under Heavy Contamination and Special Contamination – Weian Ye
8A – 8 170 - Hydrophobicity Behavior of Silicone Rubber in Corona Discharge Environment Considering High-Speed Railway Roof Insulator – Jin Li
8A – 9 177 - Raman and Thermal Analysis of 400 kV and 220 kV Service-Aged Silicone Rubber Insulation Housing Materials in the Gulf Region - Refat Ghunem
8A – 10 190 - Effects of Temperature and Surface Roughness on the Evaluation of Hydrophobic Properties of Silicone Rubber - Tetsuro Tokoro
8A – 11 208 - Liquids Permeation into HTV Silicone Rubber under AC/DC Electric Field – Weining Bao
8A – 12 231 - Partial discharge degradation of silicone rubber - Yukio Mizuno
8A – 13 246 - Fixed LS-SVM modeling to evaluate the flashover performance of outdoor insulators - Boubakeur ZEGNINI
8A – 14 328 - Comparison of Double Insulator Strings Hot Water Washing for 500 kV Transmission Line – Yadong Fan
8A – 16 392 - A Statistical Method for Predicting Flashover of Outdoor Insulators – Longfei Cui
8A – 17 400 - Control of leakage-current and power dissipation by surface texturing of silicone rubber insulators – Maurizio Albano
8A – 18 461 - Performance of polymeric insulators aged in a salt fog chamber - RAMIRO HERNANDEZ-CORONA

Session 8B Aging

8B – 1 004 - Lifetime Assessment of VCT cables for Portable Electric Machines using Multiple Stresses – J Kim
8B – 2 013 - Chemiluminescence Characteristics of FR-EPDM and SiR Aged by Concurrently Given Heat and Radiation – R Ikeno
8B – 3 044 - Thermal Properties of a Mixture of Mineral Oil and Synthetic Ester in Terms of Its Application in the Transformer – Z Nadolny
8B – 4 051 - Investigation of the Formation of Wax-like Substances in Silicone and Ester Fluids used for Power Transformers – M Kuhnke
8B – 5 059 - Effect of Thermal Aging on Moisture Absorption of Transformer Oil – W Wang
8B – 6 100 - Aging Mechanism of Silicone Rubber by Heat and Gamma-rays – Y Ohki
8B – 7 174 - Punctured Rubber Bladders Detected by UV-vis Spectrophotometry - Issouf Fofana
8B – 8 189 - Lifetime analysis of an automotive electrical motor with hairpin wound stator - Paolo Mancinelli
8B – 9 200 - Degradation Analysis of Epoxy Resin Surfaces Exposed to Partial Discharge – Yoshiyasu Ehara
8B – 10 214 - First principles investigation of radiation damage in polyethylene – Scott Beckman
8B – 11 217 - On the Effects of Molecular Composition, Morphology and Ageing on the Electrical Properties of - Somyot Tantipattarakul
8B – 12 237 - The influence on copper corrosion with varied deformation of copper winding in mineral oil with corrosion – Yuan Yuan
8B – 13 239 - Effect of Corrosive Sulfide Deposition on Thermal Conductivity of Insulating Paper - Yuan Yuan
8B – 14 267 - Aging Behaviour of Polypropylene under Various Voltage Stresses – Weijia Zhaoi
8B – 15 269 - Thermal ageing and its impact on charge trap density and breakdown strength in polyethylene – Ziyun Li
8B – 16 270 - The effect of annealing temperature on the corrosion behaviour of copper in mineral oil with corrosion sulphur – Yuan Yuan
Session 8C Treeing and Surface Flashover

8C – 1 104 - Barrier effect on Surface Breakdown of Epoxy Solid Dielectric in SF6 at Various Pressures - Mohammed El Amine SLAMA
8C – 2 117 - Influence of barrier thickness on discharge behavior in air gap with GFRP insulator under impulse voltage stress – Yuanye Liu
8C – 3 186 - Electrical Treeing and Ageing Characteristics in Cavities of Low Density Polyethylene Dielectrics on Partial Discharge Measurements - Thanarat Tanmaneeprasert
8C – 4 187 - Electrical treeing in Silicone gel under square voltage: frequency, rise time and crosslinking influence - Paolo Mancinelli
8C – 5 193 - Spectroscopic Studies of Arc Propagation along the Surface of a Polymeric Insulator under Contaminated Conditions - Arshad
8C – 6 197 - Characteristics of Residual Surface Charge Distribution on Insulating Materials under DC Voltage – Guanjun Zhang
8C – 7 232 - Electrical Tree Initiation and Propagation of Silicone Rubber under Long-term AC Aging - Yuanxiang Zhou
8C – 8 235 - Technology and Evaluation of Repairing the Erosion Defect on the LSR Shed of the Insulation Jacket – Weian Ye
8C – 9 258 - Experimental Research on Creepage Discharge Between Oil-impregnated Pressboard Layers – Yangchun Cheng
8C – 10 265 - Experimental Research on single channel carbonized Trees in Oil-impregnated pressboard – Yangchun Cheng
8C – 11 359 - Electrical Tree Propagation in Composite Insulation for Wind Turbine Generator under Repetitive Impulse Voltage - Xuezhong Liu
8C – 12 404 - Study on the Aging Properties of Silicone Oil in GIS Cable Terminations – Ruobing Zhang
8C – 13 406 - Research on Surface Charge Characteristics of Epoxy Resin under AC and Pulse Voltage Combination – Shuai Hou
8C – 14 412 - Analysis of Electrical Tree Inhibitory Effect by Antioxidants Using Quantum Chemical Calculation - Hiroaki Uehara
8C – 15 424 - Effect of the Surface Charge on the Flashover Voltage for GIS Basin Insulator under Switching Impulse Voltage – Chunjia Gao
8C – 16 472 - Charge Accumulation Characteristics of Polymer Surface under DC Voltage after Flashover and Corona – Jing Luo
12:30 – 14:00 Lunch

14:00 – 16:00 Session 9 (Oral) Pre-breakdown and breakdown in solids, liquids, gases, and vacuum, Surface flashover

Chair:
Co-chair:

9 – 1 166 - 60 Years in the Research on Electron Energy Distribution Functions-Future Challenges – G Govinda-Raju
9 – 2 149 - Streamer inception and propagation in rod-plane gaps with dielectric barriers – H K Meyer
9 – 3 358 - Density of Bulk Trap States in Polymeric Films – Yang Cao
9 – 4 155 - Characteristics of g3 – an alternative to SF6 – Y Kieffel
9 – 5 434 - Spectroscopic study of surface flashover and laser induced breakdown on insulator – L Xu
9 – 6 241 - Evolution and Discharge Pattern of Creeping Discharge at Thermally Aged Oil/Pressboard Interface – Xin Zhou

16:00 – 16:15 Closing
ENis Tuncer