POSTER SESSION – Monday, May 22, 2017 from 14:30 to 16:00 in Wildwood 5

Session MO Posters: MO P1

Poster Session

Monday, May 22 14:30-16:00, Poster Room

Session Chair: Ricky Tang, Sandia National Laboratories

MO Posters-1 QUANTUM SCALE GAS BREAKDOWN
A. M. Darr, A. M. Loveless, A. L. Garner
Purdue University, West Lafayette, IN, United States

MO Posters-2 SCALING LAWS FOR AC BREAKDOWN VOLTAGE IN MICRODISCHARGES
A. M. Loveless, A. L. Garner
Nuclear Engineering, Purdue University, West Lafayette, IN, United States

MO Posters-3 INVESTIGATING THE EFFECTS OF SECONDARY ELECTRON EMISSION ON STREAMER FORMATION NEAR DIELECTRIC PARTICLES USING A PIC-DSMC CODE
A. K. Jindal, C. H. Moore, R. E. Jorgenson
Sandia National Laboratories, Albuquerque, NM, United States

MO Posters-4 KINETIC SIMULATIONS OF BREAKDOWN AND SHEATH FORMATION IN A DENSE PLASMA FOCUS DEVICE
J. R. Angus, D. P. Higginson, A. J. Link, A. E. Schmidt
Lawrence Livermore National Laboratory, Livermore, CA, United States

MO Posters-5 FIRST PLASMA CHARACTERIZATION RESULTS IN A COMPACT PERMANENT RING MAGNET BASED HELICON PLASMA SOURCE
A. Pandey[1], M. Bandyopadhyay[1,2], D. Sudhir[2], A. Chakraborty[2]
[1]*Institute for Plasma Research, Gujarat, India*
[2]*ITER-India, Gujarat, India*

MO Posters-6 STUDY OF PLASMA SERIES RESONANCE EFFECT IN DUAL FREQUENCY CAPACITIVE DISCHARGE
P. Saikia, H. Bhuyan, M. Favre, M. Escolona
Institute of Physics, Pontificia Universidad Catolica de Chile, Av. Vicuna Mackenna 4860, Santiago, Santiago, Chile

MO Posters-7 CHARACTERISTICS OF INDUCTIVELY COUPLED PLASMA IN DIFFERENT POWER AND PRESSURE
F. Lei, J. Zhang, X. T. Liu
xidian University, Xi'an, China

MO Posters-8 NONLINEAR ELECTRON CYCLOTRON OSCILLATIONS AND CROSS-FIELD TRANSPORT IN EXB DISCHARGES
S. Janhunen[1], O. Chapurin[1], O. Koshkarov[1], I. Romadanov[1], A. Smolyakov[1], D. Sydorenko[2], I. Kaganovich[3], Y. Raitses[3]
[1]*Department of Physics and Engineering Physics, University of Saskatchewan, Saskatoon, Canada*
[2]*Centennial Centre for Interdisc Science, University of Alberta, Edmonton, Canada*
[3]*Theory, Princeton Plasma Physics Lab, Princeton, USA*

MO Posters-9 INVESTIGATION OF FILAMENTATION INSTABILITY IN QUANTUM MAGNETIZED PLASMA WITH THE PRESENCE OF HELICAL MAGNETIC FIELD
M. Alimohamadi
Department of Physics, Farhanigan University,Tehran,Iran, Tehran, Iran

MO Posters-10 RELATIVISTIC WAVE-BREAKING LIMIT OF ELECTROSTATIC WAVES IN COLD ELECTRON-POSITRON-ION PLASMAS
M. Karmakar[1], C. Maity[2], N. Chakrabarti[1], S. Sengupta[3]
[1]*Plasma Physics, Saha Institute of Nuclear Physics, Kolkata, India*
[2]*Physics, Government General Degree College Singur, Singur, India*
[3]*Plasma Physics, Institute for Plasma Research, Gandhinagar, India*

MO Posters-11 MICRODISCHARGE SPECIES EVOLUTION IN A 2-DIMENSIONAL PACKED BED REACTOR

K. W. Engeling, J. Kruszelnicki, M. J. Kushner, J. E. Foster
University of Michigan, Ann Arbor, Michigan, United States

MO Posters-12 SPECTROSCOPIC INVESTIGATIONS OF VACUUM ARCS FROM DIFFUSE MODE TO ANODE SPOT MODE
Z. Wang
Electrical Engineering, Xi'an Jiaotong University, Xi'an, Shaanxi, China

MO Posters-13 SIMULTANEOUS PARTICLE IMAGE VELOCIMETRY (PIV)-SCHLIEREN PHOTOGRAPHY OF FLUID FLOW IN LIQUID INDUCED BY PLASMA-DRIVEN INTERFACIAL FORCES
J. C. Lai, J. E. Foster
Department of Nuclear Engineering and Radiological Sciences, University of Michigan, Ann Arbor, MI, United States

MO Posters-14 PLASMA STABILIZED COMBUSTION OVER A LARGE RANGE OF THROUGHPUT WITH VARYING FUEL COMPOSITIONS
J. Pleis
Clearsign Combustion Corp., Seattle, WA, United States

Session MO Posters: MO P2

Poster Session

Monday, May 22 14:30-16:00, Poster Room

Session Chair: Juan Trelles, U Mass Lowell

MO Posters-15 THE ACCURATE COMPUTATIONAL ANALYSIS OF THE NON-LINEAR ELECTRON HEAT CONDUCTION WITH INVERSE-BREMSSTRAHLUNG ENERGY SOURCES IN HIGH-TEMPERATURE LASER FUSION PLASMAS
M. Oloumi, M. Habibi, H. Hosseinkhani
Plasma and Nuclear Fusion Research School, Nuclear Science and Technology Research Institute, AEOI,, Tehran, Iran

MO Posters-16 THREE-DIMENSIONAL WEDGE SIMULATION OF AN IONIZATION WAVE IN NITROGEN/HELIUM GAS
A. S. Fierro, C. H. Moore, M. M. Hopkins
Sandia National Laboratories, Albuquerque, NM, United States

MO Posters-17 A PARALLELIZATION METHOD FOR TIME PERIODIC STEADY STATE IN SIMULATION OF RADIO FREQUENCY SHEATH DYNAMICS
D. -C. Kwon[1], S. -S. Shin[2], D. -H. Yu[2]
[1]*National Fusion Research Institute, Gunsan, Jeonbuk, South Korea*
[2]*Kyoungwon Tech, Seongnam, Gyeonggi, South Korea*

MO Posters-18 OPTIMIZING FAST DISCHARGES FOR HIGH SPEED TIME VARYING PLASMA ANTENNTA USING PARTICLE IN CELL SIMULATIONS*
R. M. Kingsley Shadi
Electrical Engineering, University of Colorado Denver, Denver, United States

MO Posters-19 BOLTZMAN EQUATION SOLVER COUPLED TO A KINETIC GLOBAL MODEL FRAMEWORK
J. Krek[1], G. Parsey[2], J. Verboncoeur[1]
[1]*Computational Mathematics, Science and Engineering (CMSE), Michigan State University, East Lansing, MI, United States*
[2]*Department of Physics and Astronomy, Electrical and Computational Engineering, Michigan State University, East Lansing, MI, United States*

MO Posters-20 UNCERTAINTY QUANTIFICATION IN GLOBAL MODELING OF PLASMA ASSISTED COMBUSTION
G. M. Parsey[1,2], J. Verboncoeur[2,3], A. Christlieb[3]
[1]*Dept. of Physics and Astronomy, Michigan State University, East Lansing, MI, United States*
[2]*Dept. of Electrical and Computer Engineering, Michigan State University, East Lansing,MI, United States*
[3]*Dept. of Computational Mathematics, Science, and Engineering, Michigan State University, East Lansing, MI, United States*

MO Posters-21 ION-NEUTRAL ELASTIC SCATTERING CROSS SECTIONS FOR KINETIC PLASMA SIMULATIONS IN ALEPH
J. L. Pacheco, R. Hooper, J. J. Boerner, A. M. Grillet, T. P. Hughes

Sandia National Laboratories, NM, United States

Session MO Posters: MO P3

Poster Session

Monday, May 22 14:30-16:00, Poster Room

Session Chairs:

MO Posters-22 NONLINEAR PROPAGATION OF WHISTLER PULSE IN MAGNETIZED QUANTUM PLASMA
P. Kumar, S. Singh, N. Ahmad
Department of Physics, University of Lucknow, LUCKNOW, India

MO Posters-23 GENERATION AND CONTROL OF REACTIVE OXYGEN AND NITROGEN SPECIES IN COLD ATMOSPHERIC PRESSURE ARGON PLASMA JET: AN EMISSION SPECTROSCOPIC STUDY
S. Ghorui, N. Tiwari
Laser & Plasma Technology Division, Bhabha Atomic Research Centre, Mumbai, India

MO Posters-24 DUST ACOUSTIC WAVES IN Q-NONEXTENSIVE POSITIVE-NEGATIVE IONS DUSTY PLASMA
M. Alimohamadi
Department of Physics, Farhanigan University, Tehran, Iran

MO Posters-25 ION-TEMPERATURE EFFECT ON COLLISIONAL MAGNETIZED DUSTY PLASMA SHEATH
S. Bhandari
Central Department of Physics, Tribhuvan University, Kathmandu, Nepal., Kathmandu, Nepal

MO Posters-26 LUMINESCENCE FLASH AND TEMPERATURE DETERMINATION OF THE PULSED DISCHARGE INDUCED BUBBLE
L. Zhang, X. Zhu, H. Yan, Y. Huang, Z. Liu, K. Yan
Department of chemical and biological engineering Zhejiang University, Hangzhou, China, Hangzhou, None Selected

MO Posters-27 STUDY OF PLASMA CONDITIONS DURING BOW-SHOCK FORMATION IN COLLIDING JET EXPERIMENTS
G. W. Collins IV, J. C. Valenzuela, F. N. Beg
University of California San Diego, San Diego, CA, United States

MO Posters-28 VLASOV SIMULATIONS OF FAST STOCHASTIC ELECTRON HEATING NEAR THE UPPER HYBRID LAYER
D. C. Speirs[1], B. Eliasson[1], K. Ronald[1], L. K. S. Daldorff[2], A. Najmi[2]
[1]*Department of Physics, University of Strathclyde, Glasgow, Scotland, United Kingdom*
[2]*Applied Physics Laboratory, The John Hopkins University, Laurel, Maryland, U.S.A*

MO Posters-29 SPACECRAFT-CHARGING MITIGATION OF A HIGH-POWER ELECTRON BEAM EMITTED BY A MAGNETOSPHERIC SPACECRAFT
F. Lucco Castello[1], G. L. Delzanno[1], J. E. Borovsky[2], O. Leon[3], G. Miars[3], B. E. Gilchrist[3]
[1]*Los Alamos National Laboratory, Los Alamos, NM, United States*
[2]*Space Science Institute, Boulder, CO, United States*
[3]*University of Michigan, Ann Arbor, MI, United States*

Session MO Posters: MO P9

Poster Session

Monday, May 22 14:30-16:00, Poster Room

Session Chair: Xin Tu, University Liverpool

MO Posters-30 CONTRASTING CHARACTERISTICS OF AQUEOUS REACTIVE SPECIES INDUCED BY CROSS-FIELD AND LINEAR-FIELD PLASMA JETS
H. Xu[1], C. Chen[1], D. Liu[1], X. Wang[1], M. G. Kong[2]

[1]*State Key Laboratory of Electrical Insulation and Power Equipment Power Equipment, Xi'an, Shaanxi, China*
[2]*Department of Electrical and Computer Engineering, Norfolk, Virginia, America*

MO Posters-31 EFFECT OF PROJECTILE CHARGE ON E-/E+ IMPACT SINGLE IONIZATION CROSS SECTION OF PLASMA RELEVANT MOLECULE TARGETS
P. Singh
Physics, Sir Padampat Singhania University, Udaipur, Rajasthan, India, India

MO Posters-32 NEW DATA FOR MODELING HYPERSONIC RE-ENTRY INTO EARTH'S ATMOSPHERE: ELECTRON-IMPACT IONIZATION OF ATOMIC NITROGEN
C. Ciccarino[1], D. W. Savin[2]
[1]*Seton Hall University, South Orange, NJ, United States*
[2]*Columbia University, New York, NY, United States*

MO Posters-33 COLLISIONAL DEACTIVATION OF N2(C3PU) AND N2+(B2S+U) BY HYDROCARBON MOLECULES IN AFTERGLOW OF THE PICOSECOND DISCHARGE
A. Starikovskiy
Princeton University, Princeton, United States

MO Posters-34 A STUDY ON THE EFFECT OF ATMOSPHERIC-PRESSURE PLASMA TREATMENT ON THE HYDROPHILICITY OF POLYAMIDE-IMIDE FABRIC MATS
H. S. Cho, K. Y. Rhee
Department of Mechanical Engineering, Kyunghee University, Yongin-si, South Korea

MO Posters-35 EFFECT OF AIR IMPURITY ON SIMILARITY LAW IN HELIUM GLOW DISCHARGE AT LOW PRESSURE
X. Zou, X. Yang, Y. Fu, H. Luo, S. Yang, X. Wang
Department of Electrical Engineering, Tsinghua University, Beijing, China

MO Posters-36 SPECIES DYNAMICS IN PROMPT CYCLICAL HYDROGEN DISCHARGES
R. E. Terry
Independent Research Professional LLC, Columbia, MD, United States

MO Posters-37 CO2 HYDROGENATION IN A TEMPERATURE CONTROLLED PLASMA-CATALYTIC REACTOR
Y. Zeng, L. Wang, A. Bryony, X. Tu
University Liverpool, Liverpool, United Kingdom

MO Posters-38 PLASMA-CATALYST COUPLING FOR ENHANCED OXIDATION OF ETHYL ACETATE OVER V2O5/TIO2 NANOFIBER CATALYST
X. Zhu[1], X. Gao[1], X. Tu[2]
[1]*State Key Laboratory of Clean Energy Utilization, Zhejiang University, Hangzhou, China*
[2]*Department of Electrical Engineering and Electronics, University Liverpool, Liverpool, United Kingdom*

MO Posters-39 CHARACTERISTICS OF A HIGH-PRESSURE PULSED ARC DISCHARGE ENVIRONMENT
R. Tang, E. Barnat, A. Fierro, M. Hopkins
Sandia National Laboratories, Albuquerque, United States

Session MO Posters: MO P6

Poster Session

Monday, May 22 14:30-16:00, Poster Room

Session Chair: Ming Xu, Xi'an University of Technology

MO Posters-40 INFLUENCE OF MAGNETIC ARC BLOW ON CONTACT EROSION IN VACUUM INTERRUPTERS
G. Ge, M. Liao, X. Duan, G. Lu, J. Zou
school of electrical engineering, dalian university of technology, dalian, China

MO Posters-41 TRANSIENT MODELING OF FAST VACUUM ARC IN SMALL-SIZE TRIGATRON
Z. Yang, L. Wang, X. Zhang, S. Jia
Xi'an Jiaotong University, Xi'an,Shaanxi, China

MO Posters-42 OUPUT CHARACTERISTICS OF HIGH-POWER GAAS PHOTOCONDUCTIVE SEMICONDUCTOR SWITCHES UNDER THE CAPACITIVE AND TRANSMISSION LINE ENERGY STORAGE MODES

C. Ma, Y. Ji, H. Liu, W. Shi, M. Xu, L. Hou
Xi'an University of Technology, Xi'an, Shaanxi

MO Posters-43 FAST RISING EDGE BILATERAL SYMMETRY OUTPUT USING GAAS PHOTOCONDUCTIVE SWITCH
L. Hong, W. M. Lin, G. H. Meng, L. Z. Wu, T. J. Hong, S. Wei, M. Cheng, X. Ming, H. Lei
Applied Physics Department, Xi'an Uniecersity of Technology, Xi'an Shaanxi, China

MO Posters-44 KINETIC SIMULATION OF BREAKDOWN TIME VARIATION FOR GAPS FILLED WITH DIELECTRIC PARTICLES
C. H. Moore, A. S. Fierro, R. E. Jorgenson, H. P. Hjalmarson, A. K. Jindal, M. M. Hopkins, P. G. Clem, L. B. Biedermann
Sandia National Labs, Albuquerque, NM, United States

MO Posters-45 RESEARCH ON THE MATCHING PRINCIPLE OF PSEDUOSPARK SWITCH AND MAGNETIC SWITCH
J. Yan, S. Shen, R. Han, L. Cheng, Y. Wang, K. Qian, W. Ding
State Key Laboratory of Electrical Insulation and Power Equipment, Xi'an Jiaotong University, Xi'an, Shannxi, China*

MO Posters-46 INVESTIGATION OF THE EFFECT ON THE BLOCKING POTENTIAL ELECTRODE IN A PSEUDOSPARK SWITCH
J. Yan, S. Shen, L. Cheng, Y. Wang, R. Han, K. Qian, W. Ding
State Key Laboratory of Electrical Insulation and Power Equipment, Xi'an Jiaotong University, Xi'an, Shannxi, China*

Session MO Posters: MO P5

Poster Session

Monday, May 22 14:30-16:00, Poster Room

Session Chair: Cheng Zhang, Institute of Electrical Engineering, Chinese Academy of Sciences

MO Posters-47 OPTICAL PROPERTIES OF TIXCYOZ COMPOSITE NANOPOWDER OBTAINED BY PULSED PLASMA CHEMICAL METHOD
G. E. Kholodnaya, R. V. Sazonov, D. V. Ponomarev, F. V. Konusov
High Technology Physics Institute, Tomsk Polytechnic University, Tomsk, Russian Federation

MO Posters-48 ELEMENTARY STUDY OF THE PULSE DISCHARGE BETWEEN TWO ELECTRODES WITH AN INTERFACE BETWEEN AIR AND WATER
R. Han, J. Wu, K. Qian, H. Zhou, J. Yan, W. Ding
State Key Laboratory of Electrical Insulation and Power Equipment, Xi'an Jiaotong University, Xi'an, China

MO Posters-49 LIGHT EMISSION CHARACTERISTICS AT DIFFERENT STAGES OF WIRE EXPLOSION PROCESS IN AIR
R. Han, J. Wu, K. Qian, J. Yan, W. Ding
State Key Laboratory of Electrical Insulation and Power Equipment, Xi'an Jiaotong University, Xi'an, China

MO Posters-50 UNDERWATER SHOCK WAVE CHARACTERISTICS PRODUCED BY VAPORIZATION PROCESS OF DIFFERENT METAL WIRES
R. Han, H. Zhou, J. Wu, K. Qian, W. Ding
State Key Laboratory of Electrical Insulation and Power Equipment, Xi'an Jiaotong University, Xi'an, China

MO Posters-51 NANOSECOND BREAKDOWN IN POROUS ALUMINA CERAMICS SATURATED WITH PERFLUORINATED LIQUIDS
I. F. Punanov[1], R. V. Emlin[1], P. A. Morozov[1], S. O. Cholakh[2]
[1]*Institute of Electrophysics of the Ural Division of the Russian Academy of Sciences, Yekaterinburg, Russian Federation*
[2]*Ural Federal University, Yekaterinburg, Russian Federation*

MO Posters-52 SUPPRESSION OF SURFACE CHARGE ACCUMULATION ON EPOXY RESIN BY ATMOSPHERIC-PRESSURE PLASMA
C. Cui, S. Zhang, B. Hai, C. Zhang, T. Shao
Institute of Electrical Engineering, Chinese Academy of Sciences, Beijing, China

MO Posters-53 LIQUID DIELECTRIC BREAKDOWN STUDY UNDER SUB MICROSECOND PULSE CONDITIONS USING TESLA BASED PULSE GENERATOR
V. P. Gajula

Pulsed power division, Institute for Plasma Reseach, Gandhinagar, India

MO Posters-54 RESEARCH ON CALCULATION AND CHARACTERISTICS OF SURFACE CHARGE ON EPOXY COMPOSITE INSULATION UNDER DC VOLTAGE
J. -Y. Xue, H. Wang, Y. -B. Wang, G. -Q. Su, H. -B. Mu, J. -B. Deng, G. -J. Zhang
Xi'an Jiaotong University, Xi'an,Shaanxi, China

MO Posters-55 RESEARCH AND PREDICTION OF THE LIFETIME FOR HIGH VOLTAGE CERAMIC CAPACITORS UNDER REPETITIVE PULSES
J. Yan, K. Qian, L. Cheng, Y. Wang, R. Han, Z. Li, W. Ding
State Key Laboratory of Electrical Insulation and Power Equipment, Xi'an Jiaotong University, Xi'an, Shannxi, China*

MO Posters-56 THE INFLUENCE OF METAL PARTICLES ON THE INSULATING PROPERTIES OF SF6 GAS
N. Kartalovic[1], K. Stankovic[2], D. Brajovic[3]
[1]*Institute of Electrical Engineering "Nikola Tesla", Belgrade, Serbia*
[2]*Faculty of Electrical Engineering, University of Belgrade, Serbia, Belgrade, Serbia*
[3]*High School of Technical Sciences ï¿½Čačakï¿½, Čačak, Serbia*

MO Posters-57 DEGRADATION OF OIL IMPREGNATED CELLULOSE BOARD DUE TO SURFACE DISCHARGES: EXPERIMENTAL RESULTS WITH SOME THEORTICAL CONSIDERATIONS
C. Thirumurugan[1], G. B. Kumbhar[2], R. Oruganti[1]
[1]*School of Computing and Electrical Engineering, Indian Institute of Technology Mandi, Mandi, Himachal pradesh-175005, India*
[2]*Department of Electrical Engineering, Indian Institute of Technology Roorkee, Roorkee, Uttarakhand-247667, India*

MO Posters-58 DEVELOPING PROCESS OF SURFACE FLASHOVER ALONG SOLID INSULATING MATERIALS UNDER REPETITIVE NANOSECOND PULSES IN NITROGEN
J. Li, Z. Zhao, M. Zheng, H. Cao
School of Electrical Engineering, Xi'an Jiaotong University, Xi'an, China

Session MO Posters: MO P4

Poster Session

Monday, May 22 14:30-16:00, Poster Room

Session Chair: Dong Dai, South China University of technology

MO Posters-59 A NOVEL ARBITRARY BI-POLAR CURRENT SOURCE FOR HIGH DYNAMIC LOADS IN PLASMA, FUSION AND ACCELERATOR APPLICATIONS
M. Frei, R. Schneider, G. Blokesch
Ampegon, Turgi, AG, Switzerland

MO Posters-60 CONTINUOUS TRIBOLUMINESCENCE X-RAY SOURCE BY CONTACTING AND ROTATING TWO CIRCULAR DISCS
S. Furuya
Saitama Institute of Technology, Fukaya, Japan

MO Posters-61 INFLUENCE OF DUTY CYCLE ON PULSE MODULATED RF CAPACITIVELY-COUPLED ARGON DISCHARGE
L. Chang[1], X. Lu[1], S. Yang[2], X. Liu[3], W. Jiang[2]
[1]*State Key Laboratory of Advanced Electromagnetic Engineering and Technology, Huazhong University of Science and Technology, Wuhan, China*
[2]*School of Physics, Huazhong University of Science and Technology, Wuhan, China*
[3]*School of Science, Qiqihar University, Qiqihar, China*

MO Posters-62 CURRENT HANDLING CAPABILITY AND BOND DEGRADATION OF BOND WIRES UNDER PULSED CONDITIONS
R. I. Rodriguez-Molina
Center for Pulsed Power and Power Electronics, Texas Tech University, Lubbock, TX, United States

MO Posters-63 HIGH FREQUENCY 30 KV PULSED-DC GENERATOR WITH USER ADJUSTABLE PULSE WIDTH
T. Ziemba, K. E. Miller, J. Prager
Eagle Harbor Technologies, Inc., Seattle, WA, United States

Session MO Posters: MO P7

Poster Session

Monday, May 22 14:30-16:00, Poster Room

Session Chairs:

MO Posters-64 EXPERIMENTAL INVESTIGATION ON PLASMA PROPERTIES OF DISCHARGE CHANNEL FOR PULSED PLASMA THRUSTER BASED ON SPECTROSCOPIC EMISSION MEASUREMENT
X. Liu, G. Zuo, Y. Zhou, Z. Wu, K. Xie, N. Wang
School of Aerospace Engineering, Beijing Institute of Technology, Beijing, China

MO Posters-65 MEASUREMENTS OF GAS TEMPERATURE IN MICROWAVE PLASMA AT ATMOSPHERIC PRESSURE BY MOLECULAR EMISSION SPECTROMETRY
L. Deng, G. Zhang, C. Liu, H. Xie
Department of Electrical Engineering, Tsinghua University, Beijing, China

MO Posters-66 ELECTRON DENSITY MEASUREMENT IN A LASER INDUCED PLASMA FILAMENT BY RAYLEIGH MICROWAVE SCATTERING
A. Sharma[1], A. Shashurin[1], M. Slipchenko[2], K. A. Rahman[2], M. N. Schneider[3]
[1]*School of Aeronautics and Astronautics, Purdue University, West Lafayette, IN, USA*
[2]*School of Mechanical Engineering, Purdue University, West Lafayette, IN, USA*
[3]*Princeton Plasma Physics Laboratory, Princeton University, Princeton, NJ, USA*

MO Posters-67 CHARACTERIZATION OF SPARK DISCHARGES AT HIGH PRESSURE CONDITIONS BY SPECTRAL LINE BROADENING
S. Groeger, M. Hamme, E. Iglesias, P. Awakowicz
Institute of Electrical Engineering and Plasma Technology, Ruhr University Bochum, Bochum, NRW, Germany

MO Posters-68 OPERATION AND MEASUREMENT OF PENNING DISCHARGES FOR BEAM PLASMA EXPERIMENTS
K. Ronald[1], M. King[1], T. Heelis[1], D. C. Speirs[1], S. L. McConville[1], A. D. Phelps[1], C. W. Robertson[1], A. W. Cross[1], M. E. Koepke[2,1]
[1]*SUPA and Department of Physics, University of Strathclyde, Glasgow, United Kingdom*
[2]*Department of Physics, West Virginia University, Morgantown, United States*

MO Posters-69 STREAKED THOMSON SCATTERING TO MEASURE HEATING OF LABORATORY PLASMA JETS BY THE PROBE LASER
J. T. Banasek, T. Byvank, B. R. Kusse, D. A. Hammer
Cornell University, Ithaca, NY, United States

MO Posters-70 MEASUREMENT OF RESONANT AND METASTABLE DENSITIES IN A LOW PRESSURE, MICROWAVE DRIVEN, MICRO ARGON PLASMA BY OPTICAL EMISSION SPECTROSCOPY
P. Hermanns, B. Hillebrand, M. Fiebrandt, P. Awakowicz
Institute of Electrical Engineering and Plasma Technology, Ruhr University Bochum, Bochum, Germany

MO Posters-71 MICROPLASMA SOURCE OF HIGH ENERGY ELECTRONS
S. Gershman, Y. Raitses
Princeton Plasma Physics Laboratory, Princeton, NJ, USA

MO Posters-72 WHAT IS EFFECTIVE AREA OF THE FLAT PROBE DURING MEASUREMENTS?
A. Mustafaev[1], O. Murillio[1], V. Soukhomlinov[2], I. Kaganovich[3]
[1]*St.Petersburg Mining University, St. Petersburg, Russian Federation*
[2]*St. Petersburg State University, St. Petersburg, Russian Federation*
[3]*Princeton Plasma Physics Laboratory, Princeton, USA*

MO Posters-73 PLASMA PARTICLE INTERACTION IN RADIO FREQUENCY THERMAL PLASMA DEVICES
G. D. Dhamale[1], N. Tiwari[2], V. L. Mathe[1], S. V. Bhoraskar[1], S. Ghorui[2]
[1]*Department of Physics, Savitribai Phule Pune University, Pune, Maharashtra, India*
[2]*Laser and Plasma Technology Division, Bhabha Atomic Research Center, Mumbai, Maharashtra, India*

Session MO Posters: MO P8

Poster Session

Monday, May 22 14:30-16:00, Poster Room

Session Chairs:

MO Posters-74 ACCURACY ENHANCEMENT IN PROBE REGISTRATION OF ANISOTROPIC CHARGED PARTICLES DISTRIBUTION FUNCTIONS IN PLASMA: ANALYSIS OF SYSTEMATIC ERRORS
V. Soukhomlinov[1], A. Mustafaev[2], A. Strahova[2], Y. Filiasova[2], A. Grabovskiy[2]
[1]*St. Petersburg State University, St.Petersburg, Russian Federation*
[2]*St.Petersburg Mining University, St.Petersburg, Russian Federation*

MO Posters-75 DESIGN OF AN ELECTRON ENERGY ANALYZER FOR DC AND LASER ACTIVATED EMISSION FROM A CARBON FIBER CATHODE USING ELECTRON OPTICS
R. L. Miner[1], S. D. Kovaleski[1], J. A. Elle[2]
[1]*EECS, University of Missouri, Columbia, MO, United States*
[2]*RDHP, Air Force Research Labs, Albuquerque, NM, United States*

MO Posters-76 MICRO ION GAUGE FOR NSTX-U
R. Raman
Aeronautics and Astronautics, University of Washington, Seattle, WA, United States

MO Posters-77 IMPROVEMENT IN THE FLAT PROBE DIAGNOSTICS FOR ARBITRARY DEGREE OF ANISOTROPY
V. Soukhomlinov[1], A. Mustafaev[2], A. Strahova[2], I. D. Kaganovich[3]
[1]*St. Petersburg State University, St. Petersburg, Russia*
[2]*St.Petersburg Mining University, St. Petersburg, Russia*
[3]*Princeton Plasma Physics Lab, Princeton, NJ, USA*

MO Posters-78 IMPROVEMENT IN THE FLAT PROBE DIAGNOSTICS FOR ARBITRARY DEGREE OF ANISOTROPY
V. Soukhomlinov[1], A. Mustafaev[2], A. Strahova[2], I. Kaganovich[3]
[1]*St. Petersburg State University, St. Petersburg, Russian Federation*
[2]*St.Petersburg Mining University, St. Petersburg, Russian Federation*
[3]*Princeton Plasma Physics Laboratory, Princeton, USA*

MO Posters-79 EVALUATION OF ION FLUX IN AR AND SF6 ASYMMETRIC CAPACITIVE COUPLED PLASMAS THROUGH INVASIVE AND NON-INVASIVE METHODS
J. S. B. Lima[1], A. C. O. C. Doria[1], R. S. Pessoa[1], H. S. Maciel[2], G. Petraconi[2]
[1]*Laboratory of Biotechnology and Electric Plasmas, University of Vale do Paraiba, Sao Jose dos Campos, Sao Paulo*
[2]*Plasmas and Processes Laboratory, Instituto Tecnologico de Aeronautica, Sao Jose dos Campos, Sao Paulo*

MO Posters-80 PULSE ANALYSIS OF THE MERCURY INDUCTIVE VOLTAGE ADDER CELLS
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MO Posters-81 TIME-RESOLVED ELECTRON DENSITY MEASUREMENTS OF THE RISE CYCLE IN A PULSED INDUCTIVELY COUPLED PLASMA
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MO Posters-82 ANALYSIS OF STRAY CAPACITANCE ON OUTPUT VOLTAGE OF MARX GENERATOR
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