Curriculum Vitae

SYLWIA PTASIŃSKA

CONTACT INFORM	ATION	
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EDUCATION		
2002-2004	Leopold-Franzens University of Innsbruck (LFUI), Ion and Applied Physics Institute, Innsbruck, Austria	Graduate student in physics
2001-2002	Maria Curie Sklodowska University (UMCS), Lublin, Poland	Graduate student in physics
1996-2001	Maria Curie Sklodowska University (UMCS), Lublin, Poland	Undergraduate student in physics
ACADEMIC DEGRE		
24 May 2011	Habilitation "Controlling Bond Cleavage in DNA Analogues by Low Energy Electrons and Cold Plasmas"	Thesis in molecular physics, LFIU, Austria
23 Nov. 2004	Doctor of Natural Sciences "Low-energy electron interactions with biomolecules" under supervision of Prof. Tilmann D. Märk	Thesis in physics, LFIU, Austria
26 June 2001	Master of Science "Mass spectrometry of gaseous clusters" under supervision of Prof. Leszek Michalak	Thesis in physics, UMCS, Poland
EMPLOYMENT		
2022-present	Professor of Physics	University of Notre Dame (ND), IN, USA
2016-2022	Associate Professor	ND, USA
2015 - 2017	Concurrent Assistant/Associate Professor in First Year of Studies	ND, USA
2013 - 2016	Tom and Carolyn Marquez Assistant Professor of Biophysics	ND, USA
2010-2013	Assistant Professor	ND, USA
2010 - present	Notre Dame Radiation Laboratory Faculty Member	ND, USA
2008-2011	Guest Professor	LFUI, Innsbruck, Austria
2007-2010	Independent Post-doctoral Fellow	Open University, Milton Keynes, UK

2006	Post-doctoral Fellow	University of
		Sherbrooke, Canada
2005	Post-doctoral Fellow	LFUI, Austria
2002-2004	Research Assistant	LFUI, Austria
2002	Physics Shows	UMCS, Poland

AWARDS AND HONOROS

- Director of Graduate Admissions (Department of Physics and Astronomy) (2024-present)
- Editor board: Nature's Scientific Reports (2023-present)
- Editor in Chief of the European Physical Journal D: Atomic, Molecular, Optical and Plasma Physics: 2020-2025
- Kaneb Center Faculty Fellow (2019-2020)
- 2019 Rev. Edmund P. Joyce, C.S.C., Awards for Excellence in Undergraduate Teaching
- Editorial Board of Multidisciplinary Digital Publishing Institute (MDPI) journal: Plasma, 2017-2020
- Editorial Board of the European Physical Journal D: Atomic, Molecular, Optical and Plasma Physics: 2015-2025
- College of Science Teaching Initiative, 2014
- Faculty Research Scholarship Program (FRSP) Initiation Grant, 2014
- Tom and Carolyn Marquez Assistant Professorship, 2013-2016
- Edison Innovation Award, 2013
- US member of COST Action: Nano-IBCT (Nano-Ion Beam Cancer Therapy) 2010 2014
- SIT Travel Award for the Annual Meeting of the Radiation Research Society, 2009, 2007, 2006, 2005
- 3rd Poster Prize, 2nd Annual CMBI Meeting, Vill, Tyrol, 30 September-1 October, 2005
- Award of Dr. Maria Schaumayer Foundation for the PhD thesis (Stiftungspreise und Förderpreise zur Unterstützung von Frauenkarrieren), 2005
- Award of Polish Vacuum Society for the best master thesis, 2002.

PROFESSIONAL MEMBERSHIPS

Society of Catholic Scientists (since 2016) American Association of Physics Teachers (since 2011) American Vacuum Society (since 2011) American Physics Society (since 2010) Radiation Research Society (2006-2010) Polish Vacuum Society (since 2001)

PUBLICATION LIST

(h-index = 38 @Web of Science, = 43 @Google Scholar)

Refereed (reverse chronological order):

- 1. A. Paul, D.S. Slaughter, S. Ptasinska, D. Nandi, I. Carmichael, J.D. Gorfinkiel, D. Chakraborty *Fragmentation dynamics through geometrical distortion in low-energy electron attachment to carbon disulfide.* Physical Review A 111 (2025) 042804
- 2. J. Finley, G. Kharchilava, I. Carmichael, D. Chakraborty, S. Ptasinska *Dissociation of gasphase anisole induced by low-energy electron interactions: understanding patterns of aromatic bond cleavage.* Physica Scripta 100 (2025) 045402
- 3. J. Chen, D. Chakraborty, M. Oncak, S. Ptasinska, S. Denifl *Low-energy Electron Driven Reactions in 2-Bromo-5-Nitrothiazole*. Journal of Chemical Physics 162 (2025) 044304

- 4. C.J.G. Villavicencio, B.C. Silva, A. Matara, S. Ptasinska *Exploring pH Dynamics in Amino Acid Solutions Under Low-Temperature Plasma Exposure*. Molecules 29 (2024) 5889
- 5. A. Sebastian, F. Ducrozet, C. Sicard-Roselli, S. Ptasinska *Assessing solvated electron uptake in low-temperature plasma-exposed solutions as a pathway to quantifying plasma electrons.* Journal of Chemical Physics 161 (2024) 204301
- B.A. Chen, A.J.E. Rowberg, T.A. Pham, T. Ogitsu, P.V. Kamat, S. Ptasinska *Reactivity of Sulfur Vacancy-Rich MoS₂ to Water Dissociation*. Journal of Physical Chemistry C 128 (2024) 10379-10387
- B.A. Chen, A. Kipkorir, S. Ptasinska, P.V. Kamat. *Intercalation of quaternary ammonium cations as a key factor of electron storage in MoS₂ thin films*. Applied Physics Reviews 11 (2024) 021425
- 8. D. Chakraborty, G. Kharchilava, I. Carmichael, S. Ptasinska *Dissociative electron attachment studies of gas-phase acetic acid using a velocity map imaging technique.* Journal of Physics B: Atomic, Molecular and Optical Physics 56 (2024) 245202
- B.A. Chen, N.L. Dominique, A. Kipkorir, J.P. Camden, S. Ptasinska, P.V. Kamat From Light to Dark: Dancing with Electrons in Colloidal 2D MoS₂ Nanosheets. Journal of Physical Chemistry Letters 15 (2024) 4920-4927
- F. Ducrozet, A. Sebastian, C.J. Garcia Villavicencio, S. Ptasinska, C. Sicard-Roselli - *Quantifying Hydroxyl Radicals Generated by a Low-Temperature Plasma using Coumarin: Methodology and Precautions.* Physical Chemistry Chemical Physics 26 (2024) 8651-8657
- 11. J. Wang, T. Musall, B.A. Chen, M. Gerges, L. Riney, S. Ptasinska, X. Liu, B.A. Assaf -Evidence of indium impurity band in superconducting (Sn, In) Te thin films. Physical Review B 109 (2024) 014513
- A. Paul, I. Carmichael, D. Nandi, S. Ptasinska, D. Chakraborty Structural rearrangements and fragmentation pathways induced by a low-energy electron attachment to ethyl acetate. Physical Review A 109 (2024) 042818
- 13. D. Chakraborty, D.S. Slaughter, S. Ptasinska Dynamics of resonant low-energy electron attachment to ethanol-producing hydroxide anions. Physical Review A, 108 (2023) 052806
- J. Vujin, W. Huang, J. Ciganović, S. Ptasinska, R. Panajotović Direct Probing of Water Adsorption on Liquid-Phase Exfoliated WS₂ Films Formed by the Langmuir–Schaefer Technique. Langmuir 39 (2023) 8055
- 15. X. Zhang, B.C. Wood, A.J.E. Rowberg, T.A. Pham, T. Ogitsu, J. Kapaldo, S. Ptasinska, *Kinetically versus thermodynamically controlled factors governing elementary pathways of GaP (111) surface oxidation*. Journal of Power Sources 560 (2023) 232663
- A. Sebastian, D. Lipa, S. Ptasinska DNA Strand Breaks and Denaturation as Probes of Chemical Reactivity versus Thermal Effects of Atmospheric Pressure Plasma Jets. ACS Omega 8 (2023) 1663–1670
- S. Ptasinska, M.T.N. Varella, M.A. Khakoo, D.S. Slaughter, S. Denifl *Electron scattering* processes: fundamentals, challenges, advances, and opportunities. European Physical Journal D 76 (2022) 179
- A. Sebastian, D. Spulber, A. Lisouskaya, S. Ptasinska Revealing low-temperature plasma efficacy through a dose-rate assessment by DNA damage detection combined with machine learning models. Scientific Reports 12 (2022) 18353
- 19. E. Alizadeh, D. Chakraborty, S. Ptasińska *Low-Energy Electron Generation for Biomolecular Damage Inquiry: Instrumentation and Methods.* Biophysica 2 (2022) 475-497
- D. Danilovic, A. Milosavljevic, P. Sapkota, R. Dojcilovic, D. Tosic, N. Vukmirovic, M. Jocic, V. Djokovic, S. Ptasinska, D. Bozanic, Dusan - Electronic Properties of Silver-Bismuth Iodide Rudorffite Nanoplatelets. Journal of Physical Chemistry C 126 (2022) 13739
- B.A. Chen, S. Ptasinska, P.V. Kamat Metal Cocatalyst Dictates Electron Transfer in Ag-Decorated MoS₂ Nanosheets. Journal of Physical Chemistry C 126 (2022) 11907
- 22. S. Ptasinska A Missing Puzzle in Dissociative Electron Attachment to Biomolecules: The

Detection of Radicals. Atoms 9 (2021) 77

- H.A. Suarez-Moreno, L. Eckermann, F. Zappa, E. Arthur-Baidoo, S. Ptasinska, S. Denifl -Electron ionization of clusters containing the formamide molecule. European Physical Journal D 75 (2021) 1-11
- 24. E. Alizadeh, S. Ptasinska Recent Advances in Plasma-Based Cancer Treatments: Approaching Clinical Translation through an Intracellular View. Biophysica 1 (2021) 48-72
- 25. V. Samara, Y. Sutton, N. Braithwaite, S. Ptasinska Acoustic characterization of atmosphericpressure dielectric barrier discharge plasma jets. European Physical Journal D 74 (2020) 169
- R.D. Neal, R.A. Hughes, P. Sapkota, S. Ptasinska, S. Neretina Effect of Nanoparticle Ligands on 4-Nitrophenol Reduction: Reaction Rate, Induction Time, and Ligand Desorption. ACS Catalysis 10 (2020) 10040–10050
- 27. S. Banerjee, E. Adhikari, P. Sapkota, A. Sebastian, S. Ptasinska Atmospheric Pressure Plasma Deposition of TiO₂: A Review. Materials 13 (2020) 2931
- X. Han, J. Kapaldo, Y. Liu, M.S. Stack, E. Alizadeh, S. Ptasinska Large-Scale Image Analysis for Investigating Spatio-Temporal Changes in Nuclear DNA Damage Caused by Nitrogen Atmospheric Pressure Plasma Jets. International Journal of Molecular Sciences 21 (2020) 4127
- 29. J. Ameixa, E. Arthur-Baidoo, J. Pereira-da-Silva, M. Ryszka, I. Carmichael, L.M. Cornetta, M.T. do N. Varella, F. Ferreira da Silva, S. Ptasińska, S. Denifl - *Formation of resonances and anionic fragments upon electron attachment to benzaldehyde*. Physical Chemistry Chemical Physics 22 (2020) 8171-8181
- 30. X. Zhang, S. Ptasinska Dissociative adsorption of H₂O onto a Pt thin film in direct contact with GaN (0001): Effect of electronic communications between catalyst and a semiconducting support. Applied Surface Science 516 (2020) 146127
- X. Zhang, T.A. Pham, T. Ogitsu, B.C. Wood, S. Ptasinska Modulation of Surface Bonding Topology: Oxygen Bridges on OH-Terminated InP (001). Journal of Physical Chemistry C 124 (2020), 3196–3203
- P. Sapkota, A. Aprahamian, K. Yu Chan, B. Frentz, K.T. Macon, S. Ptasinska, D. Robertson, K. Manukyan - *Irradiation-induced reactions at the CeO₂/SiO₂/Si interface*. Journal of Chemical Physics 152, (2020) 104704
- D. Danilović, D.K. Božanić, R. Dojčilović, N. Vukmirović, P. Sapkota, I. Vukašinović, V. Djoković, J. Bozek, Ch. Nicolas, S. Ptasinska, A.R. Milosavljević Aerosol Synthesis and Gas-Phase Photoelectron Spectroscopy of Ag-Bi-I Nanosystems, Journal of Physical Chemistry C (2020)
- D. Chakraborty, L. Eckermann, I. Carmichael, S. Ptasińska Dissociative electron attachment to amide bond containing molecules: N-ethylformamide and N-ethylacetamide. Journal of Chemical Physics 153 (2020) 224306
- 35. J. Kapaldo, X. Han, S. Ptasinska Shielding-gas-controlled atmospheric pressure plasma jets: *Optical emission, reactive oxygen species, and the effect on cancer cells.* Plasma Processes and Polymers, (2019) 1800169
- Z. Li, M. Ryszka, M.M. Dawley, I. Carmichael, K.B. Bravaya, S. Ptasińska Dipole-Supported Electronic Resonances Mediate Electron-Induced Amide Bond Cleavage. Physical Review Letters 122 (2019), 073002
- 37. Y. Pang, J. Yang, T.E. Curtis, S. Luo, D. Huang, Z. Feng, J.O. Morales-Ferreiro, P. Sapkota, F. Lei, J. Zhang, Q. Zhang, E. Lee, Y. Huang, R. Guo, S. Ptasinska, R.K. Roeder, T. Luo -*Exfoliated Graphene Leads to Exceptional Mechanical Properties of Polymer Composite Films*. ACS Nano 13 (2019), 1097-1106
- 38. S.A. Pshenichnyuk, I.I. Fabrikant, A. Modelli, S. Ptasińska, A.S. Komolov *Resonance* electron interaction with five-membered heterocyclic compounds: Vibrational Feshbach resonances and hydrogen atom stripping. Physical Review A 100 (2019) 012708
- 39. X. Zhang, T. Ogitsu, B.C. Wood, T.A. Pham, S. Ptasinska Oxidation Induced Polymerization

of InP Surface and Implications for Optoelectronic Applications. Journal of Physical Chemistry C 123 (2019), 30893

- 40. E.R. Adhikari, V. Samara, S. Ptasinska *Total yield of reactive species originating from an atmospheric pressure plasma jet in real time.* Biological Chemistry 400 (2019) 93-100
- 41. X. Liu, S.K. Bac, P. Sapkota, C. Gorsak, X. Li, S. Dong, S. Lee, S. Ptasinska, J.K. Furdyna, M. Dobrowolska - *In situ annealing of III_{1-x}Mn_x V ferromagnetic semiconductors*. Journal of Vacuum Science & Technology B 36 (2018) 02D102
- 42. T.A. Pham, X. Zhang, B.C. Wood, D. Prendergast, S. Ptasinska, T. Ogitsu *Integrating ab initio simulations and X-ray photoelectron spectroscopy: towards a realistic description of oxidized solid/liquid interfaces.* Journal of Physical Chemistry Letters 9 (2018) 194-203
- 43. V. Samara, S. Ptasinska Interferometry of plasma bursts in helium atmospheric-pressure plasma jets. Journal of Vacuum Science & Technology A 36 (2018) 04F402
- A.R Milosavljevic, D. Bozanic, S. Sadh, N. Vukmirovic, R. Dojcilovic, P. Sapkota, W. Huang, J.D. Bozek, Ch. Nicolas, L. Nahon, S. Ptasinska - *Electronic Properties of Free-Standing Surfactant-Capped Lead Halide Perovskite Nanocrystals Isolated in Vacuo*. Journal of Physical Chemistry Letters 9 (2018) 3604-3011
- 45. E.R. Adhikari, V. Samara, S. Ptasinska Influence of O_2 or H_2O in a plasma jet and its environment on plasma electrical and biochemical performances. Journal of Physics D-Applied Physics 51 (2018) 185202
- 46. Z. Li, I. Carmichael, S. Ptasinska Dissociative Electron Attachment induced Ring Opening in Five-Membered Heterocyclic Compounds. Physical Chemistry Chemical Physics 20 (2018) 18271-18278
- W. Huang, S. Sadhu, P. Sapkota, S. Ptasinska In situ identification of cation-exchangeinduced reversible transformations of 3D and 2D perovskites. Chemical Communications 54 (2018) 5879-5882
- 48. X. Zhang, Y.S. Chen, P.V. Kamat, S. Ptasinska Probing interfacial electrochemistry on a Co₃O₄ water oxidation catalyst using lab-based ambient pressure X-ray photoelectron spectroscopy. Journal of Physical Chemistry C 122 (2018) 13894-13901
- 49. V. Kanzyuba, S. Dong, X. Liu, X. Li, S. Rouvimov, H. Okuno, H. Mariette, X. Zhang, S. Ptasinska, B.D. Tracy, D.J. Smith, M. Dobrowolska, J.K Furdyna *Structural evolution of dilute magnetic (Sn, Mn) Se films grown by molecular beam epitaxy*. Journal of Applied Physics 121 (2017) 075301
- 50. A. Ribar, K. Fink, Z. Li, S. Ptasińska, I. Carmichael, L. Feketeová, S. Denifl *Stripping off hydrogens in imidazole triggered by the attachment of a single electron.* Physical Chemistry Chemical Physics 19 (2017) 6406-6415
- 51. X. Zhang, Ch-G. Wang, W. Ji, S. Ptasinska *Evolution of CH*₃*NO*₂/*Si interfacial chemistry under reaction conditions: a combined experimental and theoretical study.* Chemical Communications 53 (2017) 3342-3345
- 52. L.V. Trandafilovic, D.J. Jovanovic, X. Zhang, S. Ptasinska, M.D. Dramicanin, *Enhanced photocatalytic degradation of methylene blue and methyl orange by ZnO:Eu nanoparticles*. Applied Catalysis B-environmental, 203 (2017) 740-752
- 53. Z. Li, A.R. Milosavljević, I. Carmichael, S. Ptasinska Characterization of Neutral Radicals from a Dissociative Electron Attachment Process. Physical Review Letters 119 (2017) 053402
- 54. J. Yang, Y. Pang, W. Huang, S.K. Shaw, J. Schiffbauer, M.A. Pillers, X. Mu, S. Luo, T. Zhang, Y. Huang, G. Li, S. Ptasinska, M. Lieberman, T. Luo - *Functionalized Graphene Enables Highly Efficient Solar Thermal Steam Generation*. ACS Nano 11 (2017) 5510-5518
- M. Ryszka, E. Alizadeh, Z. Li, S. Ptasińska Low-energy electron-induced dissociation in gasphase nicotine, pyridine, and methyl-pyrrolidine. Journal of Chemical Physics 147 (2017) 094303
- 56. W. Huang, S. Sadhu, S. Ptasinska *Heat-and Gas-Induced Transformation in CH₃NH₃PbI₃ Perovskites and Its Effect on the Efficiency of Solar Cells.* Chemistry of Materials 29 (2017)

8478-8485

- J.D. Gorfinkiel, S. Ptasinska Electron scattering from molecules and molecular aggregates of biological relevance. Journal of Physics B: Atomic, Molecular, Optical Physics (2017) 182001
- W. Huang, J. Manser, P.V. Kamat, S. Ptasinska Evolution of Chemo-structural Composition and Photovoltaic Efficiency of CH3NH3PbI3 Perovskite under Ambient Conditions. Chemistry of Materials 28 (2016) 303-3011
- X. Zhang, S. Ptasinska Heterogeneous Oxygen-containing Species Formed via Oxygen or Water Dissociative Adsorption onto a Gallium Phosphide Surface. Topics in Catalysis 59 (2016) 564-573
- 60. W. Huang, S. Ptasinska Functionalization of Graphene by Atmospheric Pressure Plasma Jet in Air or H₂O₂ environments. Applied Surface Science 367 (2016) 160-166
- 61. M.A. Smialek, M.A. MacDonald, S. Ptasinska, L. Zuin, N.J. Mason *Photoelectron and threshold valence spectra of Pyridine*. European Physical Journal D 70 (2016) 1-7
- 62. X. Zhang, S. Ptasinska *Electronic and chemical structure of the* H₂O/GaN(0001) interface under ambient conditions. Scientific Reports 6 (2016) 24848
- 63. X. Zhang, S. Ptasinska *High pressure Induced Pseudo-Oxidation of Copper Surface by Carbon Monoxide*. ChemCatChem 8 (2016) 1632 also appeared as a back cover
- 64. T. Jiang, X. Zhang, S. Vishwanath, X. Mu, V. Kanzyuba, D.A Sokolov, S. Ptasinska, D.B Go, H. Xing, T. Luo - Covalent Bonding Modulated Graphene-Metal Interfacial Thermal Transport. Nanoscale 8 (2016) 10993-11001
- 65. R. Panajotovic, S. Ptasinska, V. Lyamayev, K. Prince *Low-energy electron damage of DPPC molecules a NEXAFS study*. Radiation and Applications 1 (2016) 46-50
- 66. W. Huang, J.S. Manser, S. Sadhu, P.V Kamat, S. Ptasinska Direct Observation of Reversible Transformation of CH₃NH₃PbI₃ and NH₄PbI₃ Induced by Polar Gaseous Molecules. Journal of Physical Chemistry Letters 7 (2016) 7 5068-5073
- 67. Z. Li, M.M. Dawley, I. Carmichael, S. Ptasińska *Electron-Induced Fragmentation of Methylated Formamides*. International Journal of Mass Spectrometry 410 (2016) 36-46
- 68. K.P. Arjunan, A. Obrusník, B.T. Jones, L. Zajíčková, S. Ptasinska *Effect of Additive Oxygen* on the Reactive Species Profile and Microbicidal Property of a Helium Atmospheric Pressure Plasma Jet. Plasma Processes and Polymers 13 (2016) 1087-1103
- E.R. Adhikari, S Ptasinska Correlation between helium atmospheric pressure plasma jet (APPJ) variables and plasma induced DNA damage. European Physical Journal D 70 (2016) 180
- T.X.T. Sayle, F. Caddeo, X. Zhang, T. Sakthivel, S. Das, S. Seal, S. Ptasinska, D.C. Sayle -Structure–Activity Map of Ceria Nanoparticles, Nanocubes, and Mesoporous Architectures. Chemistry of Materials 28 (2016), 7287-7295
- 71. A.R. Milosavljević, W. Huang, S. Sadhu, S. Ptasinska Low-Energy Electron-Induced Transformations in Organolead Halide Perovskite. Angewandte Chemie International Edition 128 (2016) 10237-10241
- 72. X. Zhang, S. Ptasińska Evolution of surface-assisted oxidation of GaAs (100) by gas-phase N₂O, NO, and O₂ under near-ambient pressure conditions. Journal of Physical Chemistry C 119 (2015) 262-270
- 73. K.P. Arjunan, V.K. Sharma, S. Ptasinska Effects of Atmospheric Pressure Plasmas on Isolated and Cellular DNA – A Review. International Journal of Molecular Sciences 16 (2015) 2971-3016
- 74. X. Zhang, S. Ptasinska Distinct and dramatic water dissociation on GaP (111) tracked by near ambient pressure XPS. Physical Chemistry Chemical Physics 17 (2015) 3909-3918
- 75. M.A. Smialek, S. Ptasinska, J. Gow, S.V. Hoffman, N.J. Mason *Radio- and photosensitization of DNA with compounds containing platinum and bromide atoms*. European Physical Journal D 69 (2015) 121(1-6)
- 76. O. Plekan, V. Feyer, A. Cassidy, V. Lyamayev, N. Tsud, S. Ptasinska, S. Reiff, R.G. Acres,

K.C. Prince - Functionalisation and immobilisation of an Au(110) surface via uracil and 2thiouracil anchored layer. Physical Chemistry Chemical Physics 17 (2015) 15181-15192

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- 78. I. Tolbatov, P. Bartl, J. Yurkovich, P. Scheier, D.M. Chipman, S. Denifl, S. Ptasinska -Monocarbon cationic cluster yields from N2/CH4 mixtures embedded in He nanodroplets and their calculated binding energies. Journal of Chemical Physics 140 (2014) 034316(1-8)
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- 85. B. Bahnev, M.D. Bowden, A. Stypczyńska, S. Ptasinska, N.J. Mason, N.St.J. Braithwaite *A* novel method for the detection of plasma jet boundaries by exploring DNA damage. European Physical Journal D 68 (2014) 140(1-5)
- 86. X. Zhang, E. Lamere, X. Liu, J.K. Furdyna, S. Ptasinska Morphology dependence of interfacial oxidation states of gallium arsenide under near ambient conditions. Applied Physics Letters 104 (2014) 181602(1-4)
- X. Zhang, E. Lamere, X. Liu, J.K. Furdyna, S. Ptasinska Interface chemistry of H₂O on GaAs nanowires probed by near ambient pressure X-ray photoelectron spectroscopy. Chemical Physics Letters 605-606 (2014) 51-55
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- 91. S. Jheeta, A. Domaracka, S. Ptasinska, B. Sivaraman, N. Mason The Irradiation of pure CH₃OH and 1:1 Mixture of NH₃:CH₃OH Ices at 30 K using Low Energy Electrons. Chemical Physics Letters 556 (2013) 359-364
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- X. Han, M. Klas, Y. Liu, S.M. Stack, S. Ptasinska DNA damage in oral cancer cells induced by nitrogen atmospheric pressure plasma jets. Applied Physics Letters 102 (2013) 233703(1-5)
- 94. F. Ferreira da Silva, C. Matias, D. Almeida, G. García, O. Ingólfsson, H. Dögg Flosadóttir, B. Ómarsson, S. Ptasinska, B. Puschnigg, P. Scheier, P. Limão-Vieira, S. Denifl - NCO⁻, a Key Fragment Upon Dissociative Electron Attachment and Electron Transfer to Pyrimidine Bases:

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- 98. E. Alizadeh, D. Gschliesser, P. Bartl, M. Hager, A. Edtbauer, V. Vizcaino, A. Mauracher, M. Probst, T. Maerk, S. Ptasinska, N. Mason, S. Denifl, P. Scheier Bond dissociation of the dipeptide dialanine and its derivative alanine anhydride induced by low energy electrons. Journal of Chemical Physics 134 (2011) 054305(1-9)
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- 101. M. Dampc, B. Mielewska, M.R.F. Siggel-King, G.C. King, B. Sivaraman, S. Ptasińska, N. Mason, M. Zubek - *Threshold photoelectron studies of isoxazole over the energy range 9.9-*30 eV. Chemical Physics 367 (2010) 75-79
- 102. S. Ptasińska, B. Bahnev, A. Stypczynska, M.D. Bowden, N.J. Mason, N.St.J. Braithwaite DNA strand scission induced by a non-thermal atmospheric pressure plasma jet. Physical Chemistry Chemical Physics 12 (2010) 7779-7781
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- 109. M. Bazin, S. Ptasińska, A.D. Bass, L. Sanche, E. Burean and P. Swiderek Electron induced dissociation in condensed-phase nitromethane II: desorption of neutral fragments. 12th International Workshop on Desorption Induced by Electronic Transition (DIET 12), 19-23 April, (2009) Pine Mt., USA. Journal of Physics - Condensed Matter, 22 (2010) 084003(1-9)
- 110. P. Sulzer, F. Rondino, S. Ptasinska, E. Illenberger, T.D. Märk, P. Scheier ProbingtTrinitrotoluene (TNT) by low energy electrons. strong fragmentation following

attachment of electrons near 0 eV. International Journal of Mass Spectrometry 272 (2008) 149-153

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- 112. M. Probst, N. Injan, S. Denifl, F. Zappa, I. M\u00e4hr, M. Beikircher, S. Ptasińska, J. Limtrakul, T. D. M\u00e4rk, A. Mauracher, P. Scheier Calculation of Processes Relevant to Reactions Between Nucleic Acids and Free Electrons. Chemical Engineering Communications 195 (2008) 1371-1381
- 113. S. Jheeta, A. Lafosse, B. Sivaraman, S. Ptasinska, N. Mason *Irradiation of a homogeneous mixture of ammonia and carbon dioxide (NH₃, CO₂) at low temperatures. International Journal of Astrobiology 7 (2008) 72-72*
- 114. V. Bernigaud, H. Cederquist, N. Haag, A.I.S. Holm, B.A. Huber, P. Hvelplund, U. Kadhane, M.K. Larsen, B. Manil, S. Brøndsted Nielsen, S. Panja, S. Ptasińska, J. Rangama, P. Reinhed, H.T. Schmidt, A.V. Streletskii, K. Støchkel, E.S. Worm, and H. Zettergren *Electron capture induced dissociation of AK dipeptide dications: influence of ion velocity, crown-ether complexation and collision gas.* International Journal of Mass Spectrometry 276 (2008) 77-81
- 115. B. Sivaraman, S. Ptasinska, S. Jheeta, N.J. Mason *Electron irradiation of solid nitrous oxide*. Chemical Physics Letters 460 (2008) 108-111
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- 118. S. Ptasińska, A. Stypczyńska, T. Nixon, N.J. Mason, D.V. Klyachko, L. Sanche X-ray radiation induced damage in DNA monitored by XPS. Journal of Chemical Physics 129 (2008) 065102(1-6), also selected to Virtual Journal of Biological Physics Research
- 119. S. Denifl, S. Ptasińska, F. Zappa, I. Mähr, V. Grill, M. Probst, E. Illenberger, T.D. Märk, P. Scheier – Dissociative Electron Attachment to Thymine: Bond and Site Selectivity in Different Molecular Environments. Atomic and Molecular Data and Their Applications: 5th International Conference on Atomic and Molecular Data and Their Applications (ICAMDATA), AIP Conference Proceedings, 901 (2007) 137-146
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- 123. P. Sulzer, A. Mauracher, S. Denifl, F. Zappa, S. Ptasinska, M. Beikircher, A. Bacher, N. Wendt, A. Aleem, F. Rondino, S. Matejcik, M. Probst, T.D. Märk, P. Scheier *Identification of isomers of nitrotoluene via free electron attachment*. Analytical Chemistry 79 (2007) 6585-6591
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- S. Ptasińska, P. Limão-Vieira, S. Denifl, P. Scheier, T. D. Märk *Electron attachment to monomeric and dimeric forms of glycolaldehyde*. Chemical Physics Letters 401 (2005) 227-231
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- 138. S. Denifl, P. Candori, S. Ptasińska, P. Limão-Vieira, V. Grill, T. D. Märk, P. Scheier* -Positive and negative ion formation via slow electron collisions with 5-bromouridine. European Physical Journal D 35 (2005) 391-398
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- 140. S. Ptasińska, S. Denifl, B. Mróz, M. Probst, V. Grill, E. Illenberger, P. Scheier, T. D. Märk Bond selective dissociative electron attachment to thymine. Journal of Chemical Physics 123 (2005) 124302(1-8)
- 141. S. Ptasińska, S. Denifl, P. Scheier, T. D. Märk, E. Illenberger Bond and site selective loss of H atom from nucleobases by very low-energy electrons (< 3 eV). Angewandte Chemie International Edition 44 (2005) 6941-6943, also published in Angewandte Chemie (in German) Bindungs- und ortsselektive Abspaltung von H-Atomen aus Nucleobasen, induziert durch Elektronen sehr niedriger Energie (<3 eV). Angew. Chem. 117 (2005) 7101-7103</p>

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- 143. S. Denifl, S. Ptasinska, P. Scheier, T.D. Märk Electron impact ionization of 5- and 6chlorouracil: appearance energies. International Journal of Mass Spectrometry 232 (2004) 99-105
- 144. S. Denifl, S. Ptasinska, G. Hanel, B. Gstir, M. Probst, P. Scheier, T.D. Märk *Electron attachment to gas-phase uracil.* Journal of Chemical Physics 120 (2004) 6557-6565
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- 146. S. Denifl, S. Ptasinska, G. Hanel, B. Gstir, P. Scheier, M. Probst, B. Farizon, M. Farizon, S. Matejcik, E. Illenberger, T.D. Märk *Electron attachment to uracil, thymine and cytosine*, Physica Scripta T 110 (2004) 252-255
- 147. S. Denifl, S. Ptasińska, M. Probst, J. Hrusak, P. Scheier, T.D. Märk *Electron* attachment to the gas phase DNA bases cytosine and thymine. Journal of Physical Chemistry A 108 (2004) 6562-6569
- 148. S. Denifl, S. Ptasinska, M. Cingel, S. Matejcik, P. Scheier, T.D. Märk *Electron attachment to the DNA bases thymine and cytosine*. Chemical Physics Letters 377 (2003) 74-80
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- 151. S. Ptasińska, A. Bajuk, L. Michalak *Influence of potassium chloride on the MALDI detection process*. Vacuum 70 (2003) 439-445
- 152. S. Ptasińska, L. Michalak, M. Smolira Some aspects of the stability of ion current in a matrix-assisted laser desorption/ionisation source. Rapid Communications in Mass Spectrometry 17 (2003) 917-923

Non-refereed: Editorials:

- 1. C.A. Mayhew, Y. Chu, S. Ptasinska, E. Gruber, S. Denifl, P. Scheier *From student to rector: the remarkable career of professor Tilmann Märk at the university of Innsbruck, Austria.* Physica Scripta 100 (2025) 060201
- M.H.F. Bettega, S.J. Buckman, D. Marić, S. Ptasinska, R.D. White *Electron and positron interactions and their applications: a tribute to Professor Michael Brunger*. European Physical Journal D 79 (2025) 16
- A. Laricchiuta, I.E. Gordon, C. Hill, G. Colonna, S. Ptasinska Atomic and molecular data and their applications: ICAMDATA 2022. European Physical Journal D 78 (2024) 1-3 Ptasinska, Atmospheric Pressure Plasmas in Material Science. Materials 14 (2021) 1963
- 4. S. Ptasinska, M.A. Śmiałek, A.R. Milosavljević, B. Sivaraman *Low-energy interactions related to atmospheric and extreme conditions*. European Physical Journal D 71 (2017) 264

Other:

5. J. Dąbek, S. Ptasińska, L. Michalak- *The effect of carrier gas on formation of ammonia clusters*. Section AAA Physica vol. LVII (2002) 6

- S. Ptasińska Spektrometria masowa klasterów gazowych. VI National Vacuum Conference, Korbielów, Polska 2002, Prace Naukowe Politechniki Warszawskiej, Elektronika, 143 (2002) p. 65 (in Polish)
- 7. P. Scheier, S. Ptasinska, S. Denifl, P. Candori, M. Probst and T.D. Märk *Inelastic interaction of low energy electrons with biologically relevant molecules*. 22nd Summer School and International Symposium on the Physics of Ionized Gases 2004: 2, L. Hadzievski (ed.), Vinca Inst. of Nuclear Sci, Belgrade, Serbia.
- Y. Soo Park, H. Ah Noh, H. Cho, A. Dumont, S. Ptasinska, A.D. Bass, L. Sanche DNA damage by X-ray and low energy electron beam irradiation. Journal of Radiation Protection, 33 (2008) 53 (in Korean)

BOOK CHAPTERS

- 1. S. Denifl, F. Zappa, A. Mauracher, I. Mähr, S. Ptasińska, M. Probst, E. Illenberger, T.D. Märk and P. Scheier - *Free Electron Attachment to Biomolecules: from Gas Phase to Clusters and Droplets.* COST P9 book
- 2. E. Alizadeh, S. Ptasinska, L. Sanche *Transient Anions in Radiobiology and Radiotherapy: From Gaseous Biomolecules to Condensed Organic and Biomolecular Solids.* Radiation Effects in Materials (2016) InTech

GRANTS, SCHOLARSHIPS, AND FELLOWSHIPS (while at ND)

010110,001	
2010-2024	US Department of Energy, (DE-FC02-04ER15533) Radiation Chemistry and
	Photochemistry in the Condensed Phase and at Interfaces (principal investigator (PI),
	lead PI: I. Carmichael)
2019	Plasma Science and Engineering at ND and PUC: A Workshop to Launch
	Interdisciplinary Collaborations with Pontificia Universidad Católica de Chile (PUC),
	Santiago, Chile (PI: David Go, Co-PI)
2017	Luksburg Foundation Collaboration Grants, Efficacy of copper-based oxide materials
	involved in energy-related processes" with Pontificia Universidad Católica de Chile
	(PUC), Santiago, Chile, PI, Co-PI: Alejandro Cabrera
2017	Greater China Collaboration Grants "Next-generation materials for exhaust gas
	pollutant control" with University of Hong Kong, (PI: Khachatur Manukyan, Co-PI)
	International project at the SOLEIL synchrotron: "Electronic structure of isolated
2017	organolead halide perovskite nanoparticles probed by gas-phase XPS". (Lead PI,
	facility user)
2015-2017	Molecular Foundry proposal "Investigations on surface chemistry of III-V
	semiconductors using Near Ambient Pressure X-ray Photoelectron Spectroscopy" in
	collaboration with LLNL Quantum Simulation Group (Lead PI, facility user)
2016	International project at the SOLEIL synchrotron: "VUV photoelectron-photoion
	spectroscopy of organolead halide perovskite nanoparticles isolated in vacuo" (lead
	PI, facility user)
2017	ND Equipment Restoration and Renewal Program (co-PI, PI: P. Clark)
2014-2015	ND Faculty Research Scholarship Program (FRSP) Initiation Grant (PI)
	ND Edison Innovation Award for post-doctoral fellowship (PI)
2013-2014	ORAU travel grant, Oak Ridge Associated Universities
	(07/01/2012-06/30/2013)
2012-2013	National Science Foundation, Acquisition of an X-ray Photoelectron Spectroscopy
	(Senior personnel)

TALKS (CONFERENCES, SEMINARS, AND COLLOQUIA)

1LIX	(CONTERENCES, SEMINARS, AND COLLOQUIA)	
1.	"Spektrometria mas klasterow gazowych" VI Natioional Vacuum Conference, Korbielów, Polska 2002	Contributed
2.	"Mass spectrometry of gaseous clusters" Technical University of Gdansk, Poland, June 2002	Seminar
3.	"MALDI method for biomolecules" Technical University of Gdansk, Poland,	Seminar
4.	June 2002 "Dissociative electron attachment to glycine by low energy electron impact" EPIC	Contributed
5.	Network Meeting, Pruhonice near Prague, Czech Republic 2003 "Electron attachment to biological relevant molecules" 53.ÖPG-Jahrestagung,	Contributed
6.	Salzburg, Austria 2003 "Radiation damage of biomolecules" Schwerpunktseminar Ionen- Plasmaphysik,	Contributed
_	Leopold-Franzens-University, Innsbruck, Austria 2004	~ 1
7.	"Site- selective electron attachment to the partially deuterated thymine" EPIC Network Meeting, Obergurgl, Austria 2004	Contributed
8.	"Low energy electron interactions with porphine derivates" RADAM Conference 2005, Potsdam, Germany 2005	Invited
9. 10	"Free electron attachment to higher order and endohedral fullerenes" EPIC 2005/EIPAM, 25-30 June 2005, San Martino al Cimino, Viterbo, Italy	Invited Seminar
10.	"Bond- and site-selective dissociative electron attachment to pyrimidine bases." Atomic, Molecular and Optical Physics Seminars, University of Aarhus,	Invited
11.	Denmark, September 2005 "Explosives detection by low energy electrons" LEEMI IV, 6-9 October 2005,	Contributed
12.	Smolenice, Slovakia "Electron irradiation of biocomplexes" ESF-FWF Conference in Partnership with LFUI on Biomolecules: From Gas Phase Properties to Reactions relevant in	Invited
13.	Living Cells, Obergurgl, Austria, 24-29 June 2006 "Electron stimulated ion desorption from dry and hydrated single strand DNA" 15th International Symposium on Electron Molecule Collisions and Swarms & XIV International Workshop on Low Energy Positron and Positronium Physics University of Reading, UK, 1st - 4th August 2007	Invited
14.	"Dissociative electron attachment to the DNA-water complex" COST UK meeting, St. Catherine's College, Oxford, United Kingdom, 10-12 September 2007	Invited
15.	"Electron stimulated anion desorption from dry and hydrated single strand of DNA" Institut für Physikalische und Theoretische Chemie, Freie Universität Berlin, Germany, 12 October 2007	Seminar
16.	"X-ray radiation induced damage in DNA monitored by XPS" XVI Symposium on Atomic, Cluster and Surface Physics (SASP) 20-25 January 2008, Les Diablerets, Switzerland	Invited
17.	"Alteration of DNA-base molecules induced by low energy electrons: XPS study" Electron Induced Processes at Molecular Level and Low-Energy Electron Molecule Interaction. (LEEMI-EIPAM-ECCL) Roscoff, France, 7th - 11th, May 2008	Contributed
18.	"Low Energy Electron Induced Damage to DNA and its Components - XPS study" National Conference on Electronic, Atomic, Molecular and Photonic Physics (CEAMPP), 15-18 May, 2008, Zaječar, Serbia	Invited
19.	"Processes induced by Low Energy Electron-DNA Interactions" Gordon Conference: Radiation Chemistry, Radiation Driven Processes In Physics, Chemistry And Biology, July 6-11, 2008, Waterville Valley, NH	Contributed

20.	"Low Energy Electrons Induced Chemistry in dry DNA," 8 th International Conference on Pulse Investigations in Chemistry, Biology and Physics PULS	Contributed
	2008, 6-12 September 2008, Krakow, Poland & Free Radicals in Chemical Biology, Joint Working Groups Meeting CM0603	
21	"Dissociative Electron attachment to gas-phase 5 nitrouracil" Control of	Invited
21.	Molecular Processes Induced by Electrons and Photons: Experiments and	mvited
	Interpretations, A congress in Honor of Prof. Hotop, CMP 2008, 2-4 October	
	2008, Rome, Italy	
22.	Meeting of Working Group 01, Selective bond cleavage by electron induced	Contributed
	dissociation, COST Action CM0601: Electron Controlled Chemical Lithography	
	(ECCL), 01 May 2009, Harnack-Haus Berlin, Germany 2009	
23.	"Chemical processes of electrons with biomolecules inside helium droplets."	Contributed
	Meeting of Working Group 2, ESF COST Action CM0805, The Chemical	
	Cosmos, 15-17 June 2009 at University College London. United Kingdom 2009	
24.	"Fundamental low energy electron-biomolecule interactions and their	Invited
	applications" Radiation Research in 21st Century, A Visionary Meeting,	
25	University of Notre Dame, Indiana, USA, July 12th – 15th, 2009	C + 1 + 1
25.	"DNA damage induced by non-thermal atmospheric pressure plasma jet" XVII th	Contributed
	Symposium on Atomic, Cluster and Surface Physics 2010 (SASP 2010), Obergurgl Austria January 24 20, 2010	
26	Obergurgl, Austria, January 24-29, 2010 "Non-thermal atmospheric pressure plasma treatment of DNA molecules"	Contributed
20.	Collisions with Molecules and Clusters Co-organized by the Molecular Physics	Contributed
	Group and the Atomic and Molecular Interactions Group, Milton Keynes, UK,	
	April 15-16, 2010	
27.	"The influence of amino acids on the fragmentation of oligonucleotides exposed	Invited
	to low energy electrons" Radiation Research Society, Annual Meeting, Maui,	
	USA, September 25-29, 2010	
28.	"Controlling Bond Cleavage in DNA Analogues by Low Energy Electrons and	Colloquium
	Cold Plasmas", Faculty of Mathematics, Computer Science and Physics,	
• •	University of Innsbruck, Austria, May 24, 2011	
29.	"DNA damage induced by fast-flowing metastable species in a cold plasma" 14 th	Invited
	International Congress of Radiation Research, Warsaw, Poland, August 28-	
20	September 1, 2011 "The action of amino acids on electron irradiated DNA films" 14 th International	Contributed
50.	Congress of Radiation Research, Warsaw, Poland, August 28-September 1, 2011	Contributed
31	"Atmospheric Pressure Studies in Notre Dame Radiation Laboratory" Florida	Seminar
51.	Institute of Technology, Melbourne, FL, USA, March 15, 2012	Semmar
32.	"Low energy electron interactions with biomolecules" 12 th International	Invited
	Workshop on Radiation Damage to DNA, Prague, Czech Republic, June 2-6, 2012	
33.	"Dissociative electron attachment to triflates" 65th Annual Gaseous Electronics	Contributed
	Conference, Austin, TX, USA, October 22 -26, 2012.	
34.	"Cold plasma interactions with biological systems" 2 nd Nanoscale Insights into	Invited
	Ion Beam Cancer Therapy (Nano-IBCT), Sopot, Poland, May 20-24, 2013	
35.	"Surface characterization of polypeptide bilayers" 35th Annual Symposium on	Contributed
a -	Applied Surface Analysis, Urbana-Champaign, IL, June 5-7, 2013	~
36.	"Treatment of Biosystems by Atmospheric Pressure Plasma Jet" 19 th International	Contributed
27	Vacuum Congress (IVC), Paris, France, September 9-13, 2013	Contril
57.	"Physical-chemical characterization of nitrogen atmospheric pressure plasma jets" 66 th Gasague Electronic Conference (CEC), Princeton, NL September 30, October	Contributed
	66 th Gaseous Electronic Conference (GEC), Princeton, NJ, September 30-October 4, 2013	
	1, 2013	

38.	"In-situ NAP XPS studies of dissociative water adsorption on GaAs(100) surfaces" American Physics Society (APS March meeting), Denver, CO, March 3-7, 2014	Contributed
39.	"Controlling Bond Cleavage in Gas-Phase Biomolecules"" 23rd International Conference on Application of Accelerators in Research and Industry (CAARI), San Antonio, TX, May 25-30, 2014	Invited
40.	"Near Ambient Pressure X-ray Photoelectron Spectroscopy of water interaction with semiconductors" 36 th Annual Symposium on Applied Surface Analysis, Albuquerque, NM, June 2-5, 2014	Contributed
41.	"Near Ambient Pressure X-ray Photoelectron Spectroscopy of water interaction with semiconductors" Collaborative Conference on 3D & Materials Research (3DMR), Incheon, South Korea, June 23-27, 2014	Invited
42.	"Selective Bond Dissociation in Gas-Phase Molecules Induced by Low Energy Electrons" Gordon Conference: Radiation Chemistry, Radiation Driven Processes In Physics, Chemistry, Biology and Industry, Andover, NH, July 13-18, 2014	Invited
43.	"Atmospheric Pressure Plasma Jet interactions with liquids"27 th Summer School and International Symposium on the Physics of Ionized Gases (SPIG 2014), Belgrade, Serbia, August 26-29, 2014	Invited
44.	"Interfacial chemistry of water interaction with GaAs (100)" Dynamics, Interactions and Electronic Transitions at Surfaces (DIET 14), Pacific Grove, CA, October 13-17, 2014	Contributed
45.	"Interfacial Chemistry between Gas-Phase Molecules and GaAs Surfaces Probed by Near-Ambient Pressure X-ray Photoelectron Spectroscopy" 10 th Condensed Phase and Interfacial Molecular Science (CPIMS) Program, Potomac, Maryland, October 19-22, 2014	Invited
46.	"Tailoring Bond Cleavage in Gas-Phase Biomolecules by Low Energy Electrons"67 th Gaseous Electronic Conference (GEC), Raleigh, NC, November 2- 7, 2014	Invited
47.	"Morphology Dependence of Gas-Phase Molecule Interactions with GaAs Surfaces" American Vacuum Conference, 61st International Symposium & Exhibition, Baltimore, MD, November 9-14, 2014	Contributed
48.	"Interfacial chemistry of water and Ga-based semiconductor surfaces" International workshop on "Surface chemistry and near-ambient pressure photoemission; new tools and new paradigms" SOLEIL, France, December 10- 12, 2014	Contributed
49.	"Interfacial Processes between Gas-Phase Molecules and Ga-based Surfaces Probed by Near-Ambient Pressure X-ray Photoelectron Spectroscopy" Department of Physics at the Indiana University-Purdue University Indianapolis, 12 February 2015	Colloquium
50.	"Dynamic Oxidation of Gallium Phosphide Surface Tracked by Near Ambient Pressure XPS" American Physics Society (APS March meeting), San Antonio, TX, 2-6 March 2015	Contributed
51.	"Tailoring Bond Dissociation in Gas-Phase Biomolecules by Low-Energy Electrons" Department of Physics, the Oakland University, Rochester, MI, 12 March 2015	Colloquium
52.	"Dissociative electron attachment to isotopic and isomeric gas-phase molecules" 29th Miller Conference on Radiation Chemistry in Windermere, the English Lake District, the UK, 14-19 March, 2015	Invited
53.	"Atmospheric Pressure Plasma induced damage to isolated and cellular DNA" Department of Nuclear Medicine and Radiobiology at the University of Sherbrooke, Canada	Seminar

molecules" XIX International Symposium on Electron-Molecule Collisions and	Invited
"Electron impact dissociation of gas-phase heterocyclic compounds", XXIX	Invited
(ICPEAC) Toledo, Spain, 22-28 July 2015	C
molecular fragmentation in the gas phase" International Workshop on	Seminar
"Interfacial Processes at Water/Semiconductor Surfaces under Operando	Invited
Newport, RI, August 7-12, 2016	
"Stepwise Electron Spectroscopy for Neutral Fragment Detection" 24th International Conference on Application of Accelerators in Research and Industry	Invited
(CAARI), Fort Worth, TX, October 30- November 4, 2016	
Phase and Interfacial Molecular Science (CPIMS) Program, Gaithersburg, MD,	Invited
"Plasma: From Lightning to Medical Applications" as part of the Our Universe Revealed: Physics for Everyone lecture series, Notre Dame, IN, September 27,	Public talk
	Seminar
operando conditions" CORE-CM Seminar, Michigan State University, East	Semma
Lansing, MI, February 23, 2017	~ .
Conditions" Institute of Physics at the Pontificia Universidad Católica de Chile	Seminar
	Invited
Process" Telluride Science Research Center workshop on Advances in Theory of Electronic Resonances, Telluride, CO, July 17-21, 2017	
"Development of DEA instrumentation for a comprehensive understanding of	Seminar
	Invited
dissociative electron attachment" the 4th CELINA (Chemistry for ELectron-	
1 ,	Seminar
Materials for Electronics and Magnetism (IMEM - CNR) in Parma, Italy, October	Semma
3, 2017	~
	Public talk
"Spatial Distribution of Biological Effects Induced by Plasma Reactive Species"	Invited
64th American Vacuum Society International Symposium and Exhibition, Tampa,	
	Contribute 1
phase molecular fragmentation" 70th Annual Gaseous Electronics Conference	Contributed
	Swarms in Lisbon, Portugal, 17-20 July 2015 "Electron impact dissociation of gas-phase heterocyclic compounds", XXIX International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC) Toledo, Spain, 22-28 July 2015 "Development of DEA instrumentation for a comprehensive understanding of molecular fragmentation in the gas phase" International Workshop on Dissociative Electron Attachment, Mumbai, India, November 18-20, 2015 "Interfacial Processes at Water/Semiconductor Surfaces under Operando Conditions" Gordon Research Conference: Electron Donor-Acceptor Interactions Newport, RI, August 7-12, 2016 "Stepwise Electron Spectroscopy for Neutral Fragment Detection" 24th International Conference on Application of Accelerators in Research and Industry (CAARI), Fort Worth, TX, October 30- November 4, 2016 "Charge transfer processes at water/semiconductor interfaces" 10 th Condensed Phase and Interfacial Molecular Science (CPIMS) Program, Gaithersburg, MD, November 1-4, 2016 "Plasma: From Lightning to Medical Applications" as part of the Our Universe Revealed: Physics for Everyone lecture series, Notre Dame, IN, September 27, 2016 "Probing Interfacial Processes at H ₂ O/III-V Semiconductor Surfaces under operando conditions" CORE-CM Seminar, Michigan State University, East Lansing, MI, February 23, 2017 "Interfacial Processes at H ₂ O/III-V Semiconductor Surfaces under Operando Conditions" Institute of Physics at the Pontificia Universidad Católica de Chile in Santiago, Chile May 23, 2017 "Direct Observation of Neutral Radicals from a Dissociative Electron Attachment Process" Telluride Science Research Center workshop on Advances in Theory of Electronic Resonances, Telluride, CO, July 17-21, 2017 "Development of DEA instrumentation for a comprehensive understanding of molecular fragmentation in the gas phase" the Open University, Milton Keynes, UK. September 1, 2017 "Interfacial Processes at H ₂ O/III-V Semiconductor Surfaces", Institute of Materials for Electronics and Magn

70. "Dissociative electron attachment to ring-containing compounds" 3rd International Conference on Dissociative Electron Attachment (the 3rd meeting of the DEA club) Prague, Czech Republic, April 10 - 13, 2018.	Invited
 71. "Probing Interfacial Processes on Semiconductors Using Lab-Based Ambient Pressure XPS" Solar Photochemistry Research Principal Investigator Meeting, Gaithersburg, MD, June 4-7, 2018 	Invited
 72. "Plasma Radiation-Induced Processes in Biomolecular Systems" Department of Nuclear Medicine and Radiobiology, University of Sherbrooke, Canada, July 10 2018 	Seminar
 73. "Plasma Radiation-induced Chemistry in Molecular Systems" 64th Annual Meeting of the Radiation Research Society, Chicago, IL, 23-26 September, 2018 	Invited
74. "Effects of plasma reactive species on biomolecular systems" 5th International Conference "Dynamics of Systems on the Nanoscale" (DySoN 2018), Potsdam, Germany, 8 -12 October, 2018	Invited
75. "Dissociative Electron Attachment to Gas-Phase Molecules" 71st Annual Gaseous Electronics Conference (GEC 2018), Portland, OR, November 5-9, 2018	Invited
76. "Dissociative electron attachment to biomolecules" 50th Annual Meeting of the American Physics Society Division of Atomic, Molecular and Optical Physics (DAMOP), Milwaukee, WI, May 27–31, 2019	Invited
 77. "Oxidation mechanisms onto semiconductor surfaces" European Materials Research Society, Fall Meeting, Warsaw, Poland, September 16-19, 2019 	Contributed
 78. "Plasma Reactive Species Formation in Liquids" American Vacuum Society (AVS) 66th International Symposium & Exhibition, Columbus, OH, October 20- 25, 2019 	Invited
 79. "Dissociative electron attachment to ring-containing compounds" 72nd Annual Gaseous Electronics Conference (GEC 2019), College Station, TX, October 28 – November 1, 2019 	Contributed
 80. "Fundamental mechanisms of oxide evolution on semiconductor surfaces" 15th DOE Condensed Phase and Interfacial Molecular Science (CPIMS) Principal Investigators Meeting, Gaithersburg, MD, November 4-6, 2019 	Invited
81. "Toward a realistic description of oxidation at the semiconductor/liquid interfaces" U.S. Department of Energy-Basic Energy Science Solar	Lightning talk
 Photochemistry Principle Investigators' Meeting, June 2-4, 2021 (virtual) 82. "Electron-induced bond dissociation in amides" Telluride Science Research Center workshop on Advances in Theory of Electronic Resonances, Telluride, CO, July 13-17, 2021 (virtual) 	Invited
	Invited
 84. "Importance of Neutral Detection in Electron Scattering Processes" Workshop of 74th Annual Gaseous Electronics Conference (GEC 2021), Huntsville, AL, October 4-8, 2021 (virtual) 	Invited
 85. "Importance of Radiation Chemistry to Low-Temperature Plasmas" Miller Online Workshop on Radiation Chemistry, February 12, 2022 (virtual) 	Invited
 86. "Dissociative Electron Attachment to Gas-Phase Biomolecules" Gaseous Electronics Meeting (GEM) 2022 hybrid conference, University of Sydney, Australia, February 14-16, 2022 (virtual) 	Invited
 87. "Foundations of non-thermal plasmas for biochemical applications" Department of Chemical Physics, University of Adam Mickiewicz, Poznan, Poland, May 10, 2022 	Seminar

88.	"Low energy electrons-induced damage to biomolecules" Wielkopolska Center of Advanced Technologies, University of Adam Mickiewicz, Poznan, Poland, May 12, 2022	Seminar
89.	"Re-Evaluating Routes of Oxidation of III-V Semiconductor Surfaces" U.S. Department of Energy-Basic Energy Science Solar Photochemistry Principle Investigators' Meeting, June 8-10, 2022 (virtual)	Lightning talk
90.	"Photoelectron Spectroscopy of Interfacial Oxides" at the Forty-Fourth U.S. Department of Energy Solar Photochemistry Principal Investigators' Meeting in Rockville, MD, May 22-24, 2023	Lightning talk
91.	"Dissociation and dynamics of electron attachment to specific intramolecular structures" 54th Annual Meeting of the American Physics Society Division of Atomic, Molecular and Optical Physics in Spokane, Washington, USA, June 5-9, 2023	Invited
92.	"DNA damage as a probe of low-temperature plasma properties and efficacy" Canadian Association of Physicists Congress held by the University of New Brunswick, Fredericton, Canada, June 18-23, 2023	Invited
93.	"Electrons rule the world - from quantum physics to industrial and medical applications" Department of Physics, University of North Texas, Denton, TX, October 17, 2023	Colloquium
94.	"DNA damage as a probe of low-temperature plasma dose rate and chemistry" 17th Biennial Trombay Symposium on Radiation & Photochemistry. (TSRP- 2024), Anushaktinagar, Mumbai, INDIA, January 7-11, 2024	Invited
95.	"Dissociation electron attachment to molecules - a research overview at Notre Dame" International Workshop: Insights into Collisional Processes with Atoms, Molecules, and Clusters and Related Topics in honor of Ilya Fabrikant's 75th birthday, Department of Physics & Astronomy, University of Nebraska-Lincoln, February 17th, 2024 (virtual)	Invited
96.	"Advancements in product detection and dynamics of molecular dissociation: insights from low-energy electron-molecule interactions." Final General Meeting of the MD-GAS COST Action, Deutsches Elektronen-Synchrotron DESY, Hamburg, Germany April 9 -12, 2024	Invited
97.	"Exploring the Connection between Electronic States and Surface Chemistry Using Photoelectron Spectroscopy." 45th DOE Solar Photochemistry Principal Investigators Meeting, Gaithersburg, MD June 3-5, 2024	Invited
98.	"Advances in Instrumentation for Product Detection and Understanding Molecular Dissociation Dynamics Triggered by Electrons." 4th DEA Club Meeting, Potsdam, Germany June 19-21, 2024	Invited
99.	"Experimental Data-Driven Predictive Modeling of DNA Damage Induced by Low-Temperature Plasma Radiation." 5th Jagiellonian Symposium on Advances in Particle Physics and Medicine (JS:2024), Jagiellonian University, Kraków, Poland June 29 -July 7, 2024	Invited
100	•	Invited
101	· · · · · · · · · · · · · · · · · · ·	Colloquium
102		Seminar

CONFERENCE CONTRIBUTIONS (POSTERS, STUDENT'S TALK)

- S. Ptasińska, J. Dąbek, L. Michalak Some aspects of formation of ammonia microclusters. IV International Symposium Ion Implantation and other Application of ions and electrons, Kazimierz Dolny, Poland, June 10-13, 2002
- S. Ptasińska, J. Dąbek, L. Michalak Formation of water dimers in expanding air flows. IV International Symposium Ion Implantation and other Application of ions and electrons, Kazimierz Dolny, Poland, June 10-13, 2002
- S. Ptasińska, A. Bajuk, L. Michalak *Influence of potassium chloride on the MALDI detection process*. IV International Symposium Ion Implantation and other Application of ions and electrons, Kazimierz Dolny, Poland, June 10-13 2002
- 4. J. Dąbek, S. Ptasińska, L. Michalak Wytwarzanie mikroklasterów (NH₃)n i (CO₂)n w mieszaninach dwuskładnikowych" Materiały VI Krajowej Konferencji Techniki Próżni, Korbielów, 23-25 września 2002, s. 47.
- S. Denifl, S. Matejcik, S. Ptasińska, G. Hanel, B. Gstir, A. Stamatovic, P. Scheier, T.D. Märk *Electron attachment and electron impact ionization of biomolecules*. Deutsche Gesellschaft für Massenspektromtrie-meeting (DGMS 2003), Munich, Germany, 07-10.March 2003
- S. Denifl, G. Hanel, B. Gstir, S. Ptasińska, P. Scheier, M. Probst, B. Farizon, M. Farizon, S. Matejcik, E. Illenberg, T.D. Märk *Site selctive electron attachment to RNA and DNA bases*. XXIII International Conference on Photonic, Electronic, and Atomic Collisions (XXII ICPEAC), Stockholm, Sweden, 23 29 July, 2003
- E.T.M. Selim, L. Michalak, S. Ptasińska Study of manganese chloride and its reactivity in the negative ion mode using laser desorption/ionization (LDI) TOF - mass spectrometer. 16th International Mass Spectrometry Conference (IMSC-16), Edinburgh, 31 August – 5 September, 2003
- S. Ptasińska, S. Denifl, A. Abedi, P. Scheier, T.D. Märk Dissociative electron attachment to glycine by low energy electron impact. 13th International Symposium on Electron-Molecule Collisions and Swarms July (EMS 2003 Prague), Pruhonice near Prague, Czech Republic, 30 July – 2 August, 2003
- S. Denifl, G. Hanel, S. Ptasinska, B. Gstir, S. Matejcik, A. Stamatovic, P. Scheier, T.D. Märk - *Electron impact and attachment studies of biomolecules*. 13th International Symposium on Electron-Molecule Collisions and Swarms (EMS 2003 Prague), Pruhonice near Prague, Czech Republic, 30 July – 2 August 2003
- 10. S. Ptasińska, S. Denifl, A. Abedi, P. Scheier, T.D. Märk *Electron attachment to biologically relevant molecules*. 53. ÖPG-Jahrestagung, Salzburg, Austria, 1-2 October, 2003
- S. Denifl, S. Ptasinska, G. Hanel, M. Probst, P. Scheier, T.D. Märk Radiation damage in molecules of biological relevance. Austrian- Hungarian workshop on charged-particle transport through nanostructures and solids; Debrecen, Hungary, 14-16 November, 2003
- S. Ptasińska, S. Denifl, P. Candori, P. Limão-Vieira, P. Scheier and T.D. Märk *Inelastic electron interaction (attachment/ionization) with sugar molecules and amino acids* V -th International Conference Ion Implantation and Other Applications of Ions and Electrons, Kazimierz Dolny, Poland, June 14-17, 2004 (ION 2004)
- S. Ptasińska, P. Candori, S. Denifl, S. Yoon, P. Scheier and T.D. Märk *Electron interactions with nucleosides of DNA and RNA: thymidine and uridine.* RADAM Conference, Radiation Damage in Biomolecular System", Lyon, France, 24-27 June, 2004
- P.Scheier, S. Ptasinska, S. Denifl, P. Candori, M. Probst and T.D. Märk *Inelastic interaction of low energy electrons with biologically relevant molecules*. RADAM Conference, Radiation Damage in Biomolecular System", Lyon, France, 24-27 June, 2004
- 15. P. Scheier, S. Denifl, S. Ptasinska, M. Probst, S. Yoon and T.D. Märk *Dissociative electron attachment to biologically relevant molecule*. 8th European Conference on Atomic and Molecular Physics, Rennes, France, 6-10 July 2004 (ECAMP8)

- S. Ptasińska, S.P. Denifl, P. Limão-Vieira, P. Scheier and T.D. Märk Damage of DNA sugar and its moiety by electron impact. 8th European Conference on Atomic and Molecular Physics, Rennes, France, 6-10 July, 2004 (ECAMP8)
- P. Scheier, S. Ptasinska, S. Denifl, P. Candori, M. Probst and T.D. Märk *Inelastic interaction of low energy electrons with biologically relevant molecules*. International Symposium on the Physics of Ionized Gases, SPIG, National Park Tara, Serbia and Montenegro, 23-27 August, 2004
- 18. S. Ptasinska, S. Denifl, M. Probst, P. Scheier and T.D. Märk-*Interaction of low energy electrons (attachment/ionization) with molecules of biological relevance*. 332th Wilhelm and Else Heraeus Seminar Processes Driven by Low Energy Electron-Molecule Interactions, LEEMI Bad Honnef, Germany, 1-4 September, 2004
- S Ptasińska, P. Candori, S. Denifl, S. Yoon, P. Scheier and T. D. Märk Radiation damage of nucleosides by low energy electrons. 332th Wilhelm and Else Heraeus Seminar Processes Driven by Low Energy Electron-Molecule Interactions, LEEMI Bad Honnef, Germany, 1-4 September, 2004
- 20. S. Denifl, S. Ptasińska, M. Stano, F. Martinez, P. Scheier and T.D. Märk *High resolution electron ionization study of helium-clusters*. 332th Wilhelm and Else Heraeus Seminar Processes Driven by Low Energy Electron-Molecule Interactions, LEEMI Bad Honnef, Germany, 1-4 September, 2004
- S. Denifl, S. Ptasinska, M. Probst, P. Scheier and T.D. Märk- Low energy electron interaction with biomolecules. International Conference on Dynamics of Molecular System, MOLEC XV, Nunspeet, the Netherlands, 5-10 September, 2004
- 22. S. Ptasinska, S. Denifl, P. Candori, P. Limao-Vieira, P. Scheier, T.D. Märk- Damage of sugar molecules by electron impact. 1st Annual CMBI Meeting, Vill, Tyrol, 1-2 October, 2004
- 23. S. Denifl, S. Ptasinska, P. Candori, S. Yoon, P. Scheier, T.D. Märk- *Electron interactions with nucleosides: thymidine and uridine* 1st Annual CMBI Meeting, Vill, Tyrol, 1-2 October, 2004
- L. Zajickova, S. Ptasinska, M. Cingel, S. Matejcik Study of electron impact ionization and electron attachment to HMDSO – The 15th Symposium on Applications of Plasma Processes (SAPP XV) and Third EU-Japan Joint Symposium on Plasma Processing, Podbanske, Slovakia, 15-20 January, 2005
- 25. P. Scheier, S. Ptasinska, S. Denifl, P. Candori, W. Schustereder, V.G. Hasan, P. Cicman, S. Feil, B. Coupier, J. Fedor, S. Matejcik, E. Illenberger, T.D. Märk - *Dissociative Electron Attachment* to Biologically Relevant Molecules - The 15th Symposium on Applications of Plasma Processes (SAPP XV) and Third EU-Japan Joint Symposium on Plasma Processing, Podbanske, Slovakia, 15-20 January, 2005
- 26. K. Głuch, S. Matt-Leubner, S. Feil, O. Echt, S. Denifl, S. Ptasinska, B. Concina, P. Scheier, and T.D. Märk - *High Resolution Measurements of Fullerenes and Endohedrals*. Symposium on Size Selected Clusters 2005, Brand, Austria, 28 February–3 March, 2005
- S. Denifl, S. Ptasińska, F. Martinez, K. Gluch, S. Feil, P. Scheier, T. D. Märk *High resolution electron ionization study of helium-clusters*. Symposium on Size Selected Clusters 2005, Brand, Austria, 28 February–3 March, 2005
- M. Probst, B. Mroz, S. Denifl, S. Ptasinska, G. Hanel, B. Gstir, P. Scheier, B. Farizon, M. Farizon, S. Matejcik, E. Illenberger, T. D. Märk, *Bond dissociation energies of Nucleic acids*. 7th Congress of the World Association of Theoretically Oriented Chemists, 16–21 January 2005, Cape Town, South Africa WATOC 2005
- 29. S. Ptasinska, S. Denifl, E. Illenberger, T.D. Märk and P. Scheier *The use of isotope and site labeling for the identification of DEA peaks in biomolecule.* RADAM Conference 2005, Potsdam, Germany, 17-20 March, 2005
- P. Scheier, S. Ptasinska, S. Denifl, J. Fedor, S. Feil, B. Coupier, M. Winkler, M. Probst and T.D. Märk - Low energy electron interactions with biologically relevant molecules. Electron Induced Processing at the Molecular Level (EIPAM 1), 19-20 April 2005, Milton Keynes, UK

- 31. S. Ptasińska, S. Denifl, B. Mróz, A. Wisthaler, V. Grill, M. Probst, E. Illenberger, T. D. Märk and P. Scheier – *Site selective hydrogen abstraction from thymine*. International Conference of Photonic, Electronic and Atomic Collisions (XXIV ICPEAC), July 20 – 26, 2005, Rosario, Argentina
- S. Ptasińska, S. Denifl, V. Grill, E. Illenberger, P. Scheier and T. D. Märk-*Radiation damage in biomolecular systems by low energy electrons*. European Young Investigator Conference (EYIC), June 7-12, 2005, Gniezno, Poland
- 33. P. Sulzer, M. Stano, S. Feil, M. Winkler, S. Ptasinska, V. Grill, F. Zappa, T. D. Märk and P. Scheier. *Inelastic interaction of free electrons with gas phase porphyrin*. EPIC 2005/EIPAM, 25-30 June 2005, San Martino al Cimino, Viterbo, Italy
- S. Ptasińska, S. Denifl, M. Stano, P. Sulzer, F. Zappa, A. Stamatovic, O. Echt, P. Scheier and T. D. Märk *Free electron attachment to higher order and endohedral fullerenes*. EPIC 2005/EIPAM, 25-30 June 2005, San Martino al Cimino, Viterbo, Italy
- F. Zappa, P. Sulzer, B. Mielewska, A. Milosavljevic, S. Ptasinska, S. Denifl, P. Scheier and T.D. Märk - *Inelastic electron interaction with sugar molecules*. EPIC 2005/EIPAM, 25-30 June 2005, San Martino al Cimino, Viterbo, Italy
- P. Sulzer, M. Stano, S. Feil, M. Winkler, S. Ptasinska, V. Grill, F. Zappa, B. Kräutler, T. D. Märk and P. Scheier - Wechselwirkung von freien Elektronen mit Porphyrinen – 55. ÖPG-Jahrestagung, Vienna, Austria, September, 2005
- M. Winkler, F. Rondino, S. Feil, F. Zappa, S. Denifl, T. Schlthölter, S. Ptasinska, A. Stamatovic, V. Grill, T.D. Märk and P. Scheier- *Ultrakalte Uracilcluster*, 55.ÖPG-Jahrestagung, Vienna, Austria, September, 2005
- M. Beikircher, S. Ptasinska, S. Feil, M. Winkler, A. Bacher, W. Schustereder, O. Echt, T.D.Märk and P. Scheier - Unimolekularer Zerfall von Uracil und Thymin, 55.ÖPG-Jahrestagung, Vienna, Austria, September, 2005
- 39. S. Ptasinska, S. Denifl, B. Mroz, M. Probst, E. Illenberger, T.D. Märk and P. Scheier *The use of isotope and site labeling for the identification of DEA peaks in biomolecule*. International Symposium on Electron-Molecule Collisions and Swarms, 27-30 July 2005 Campinas, SP, Brazil 2005
- 40. V. Grill, S. Denifl, S. Ptasinska, B. Mróz, M. Probst, T.D. Märk, P. Scheier -Isotope and site labeling for the identification of DEA peaks in biomolecules. 2nd Annual CMBI Meeting, Vill, Tyrol, 30 September-1 October, 2005
- 41. M. Beikircher, S. Ptasinska, S. Feil, M. Winkler, A. Bacher, W. Schustereder, O.Echt, T.D. Märk, P. Scheier *Stability of uracil and thymine cations*. 2nd Annual CMBI Meeting, Vill, Tyrol, 30 September-1 October, 2005
- P. Sulzer, M. Stano, S. Feil, M. Winkler, S. Ptasinska, V. Grill, F. Zappa, B. Kräutler, T.D. Märk, P. Scheier - *Inelastic interaction of free electrons with gas phase Porphyrins*. 2nd Annual CMBI Meeting, Vill, Tyrol, 30 September-1 October, 2005
- 43. S. Ptasinska, S. Denifl, B. Mróz, M. Probst, V. Grill, T. D. Märk and P. Scheier Bond selective hydrogen abstraction from thymine. 2nd Annual CMBI Meeting, Vill, Tyrol, 30 September-1 October, 2005
- 44. S. Ptasinska, S. Denifl, V. Grill, F. Zappa, M. Probst, P. Scheier and T. D. Märk Low energy electron with complex molecules. LEEMI IV, 6-9 October 2005, Smolenice, Slovakia
- 45. I. Bald, T. Skalický, P. Sulzer, S. Ptasińska, P. Scheier and E. Illenberger *Electron induced reaction in cyclic sugar molecules*. LEEMI IV, 6-9 October 2005, Smolenice, Slovakia
- 46. S. Ptasinska, S. Denifl, V. Grill, F. Rondino, F. Zappa, E. Illenberger, T. D Märk and P. Scheier - Isotope and site labeling for the identification of resonances in dissociative electron attachment to biomolecules. 52nd Annual Meeting of the Radiation Research Society, 16-19 October, 2005, Denver, Colorado

- M. Beikircher, S. Ptasińska, S. Feil, M. Winkler, A. Bacher, W. Schustereder, O. Echt, T.D.Märk, P. Scheier – *Stability of uracil and thymine cations*. XV Symposium on Atomic, Cluster and Surface Physics, February 4th - 9th, 2006, Obergurgl, Austria
- P. Sulzer, F. Rondino, D. Kilgour, V. Grill, S. Ptasinska, P. Scheier, T. D. Märk Explosives detection by low energy electrons. XV Symposium on Atomic, Cluster and Surface Physics, February 4th - 9th, 2006, Obergurgl, Austria
- S. Ptasinska, S. Denifl, F. Zappa, V. Grill, P. Scheier, T.D. Märk- Site selectivity in dissociative free-electron attachment to gas phase nucleobases. XV Symposium on Atomic, Cluster and Surface Physics, February 4th - 9th, 2006, Obergurgl, Austria
- 50. O. Echt, S. Ptasinska, S. Denifl, M. Stano, P. Sulzer, F. Zappa, P. Scheier, T. D. Märk, J. U. Andersen, E. Bonderup, B. Concina, P. Hvelplund, B. Liu, S. Brøndsted Nielsen, J. Rangama, J. S. Forster, K. Hansen Fullerenes: Electron Attachment and Detachment. XV Symposium on Atomic, Cluster and Surface Physics, February 4th 9th, 2006, Obergurgl, Austria
- 51. P. Sulzer, F. Rondino, D. Kilgour, V. Grill, S. Ptasinska, P. Scheier and T. D. Märk *Dissociative electron attachment to gas phase explosives*. 39. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie (DGMS) gemeinsam mit dem 20. ICP-MS Anwendertreffen sowie dem 7. Symposium über Massenspektrometrische Verfahren der Elementspurenanalyse, 5-8 March, 2006, Mainz, Germany
- 52. S. Ptasinska, P. Sulzer, F. Rondino, S. Denifl, B. Mroz, M. Probst, E. Illenberger, V. Grill, T.D. Märk and P. Scheier Bond and site selective fragmentation upon dissociative electron attachment. 39. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie (DGMS) gemeinsam mit dem 20. ICP-MS Anwendertreffen sowie dem 7. Symposium über Massenspektrometrische Verfahren der Elementspurenanalyse, 5-8 March, 2006, Mainz, Germany
- 53. P. Sulzer, F. Rondino, D. Kilgour, V. Grill, S. Ptasinska, S. Denifl, P. Scheier, T. D. Märk -Explosives detection by low energy electrons. DPG-Meeting Frankfurt 13-17.March 2006
- M. Beikircher, S. Ptasińska, S. Feil, M. Winkler, A. Bacher, W. Schustereder, S. Denifl, O. Echt, T.D.Märk, P. Scheier – *Stability of uracil and thymine cations*. DPG-Meeting Frankfurt 13.3-17.3 2006
- 55. S. Ptasinska, S. Denifl, F. Zappa, V. Grill, P. Scheier, T.D. Märk- Site selectivity in dissociative free-electron attachment to gas phase nucleobases. DPG-Meeting Frankfurt 13-17.March 2006
- 56. F. Zappa, S. Denifl, S. Ptasińska, I. Mähr, M. Beikircher, P. Scheier, T.D. Märk Hidden resonances in dissociative electron attachment to thymine? RADAM conference 2006, Groningen, Netherlands, 6-9 June 2006
- E.S. Worm, J.U. Andersen, T. Chakraborty, A.I.S. Holm, P. Hvelplund, S.B. Nielsen, J.-C. Poully, S. Ptasinska, A.V. Streletskii, E. Williams - *Electron capture induced dissociation of peptide cations*. RADAM conference 2006, Groningen, Netherlands, 6-9 June 2006
- S. Ptasinska, L. Sanche *Electron irradiation of biocomplexes*. ESF-FWF Conference in Partnership with LFUI on Biomolecules: From Gas Phase Properties to Reactions relevant in Living Cells, Obergurgl, Austria, 24-29 June, 2006.
- 59. P. Sulzer, S. Ptasinska, S. Denifl, V. Grill, S. Moser, B. Kräutler, P. Scheier, T. Märk- Low energy electron interactions with labelled gas phase nucleobases. ESF-FWF Conference in Partnership with LFUI on Biomolecules: From Gas Phase Properties to Reactions relevant in Living Cells, Obergurgl, Austria, 24-29 June, 2006.
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- 78. B. Sivaraman, S. Ptasinska, S. Jheeta and N. J. Mason *Electron-induced Ozone Isotopomer* Formation in a Binary Oxygen Mixture. New Astronomical Challenges In Surface Science, Heriot-Watt University, Edinburgh, UK, 13 – 15 June, 2007
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- 106. S. Ptasińska, B. Bahnev, A. Stypczyńska, M.D. Bowden, N.St.J. Braithwaite, N.J. Mason -The effect of a cold atmospheric pressure plasma jet on DNA. XXIII International Conference

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- 108. G. Vall-llosera, S. Lacombe, R. Panajotovic, S. Ptasinska, S. Sarabipour, F Hennies, E Rachlew, M.A. Huels - *The morphology and degradation of adenine films*, 55th Annual Meeting of the Radiation Research Society; October 4-7, 2009, Savannah, USA
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- A. Stypczyńska, S. Ptasińska, T. Nixon, N. Mason *Experimental investigations of the core* level spectra of biomacromolecules. 10th European Conference on Atoms, Molecules and Photons, (ECAMP), Salamanca, Spain, July 4-9, 2010
- S. Ptasinska, Z. Li, N.J. Mason, L. Sanche *The influence of amino acids on the fragmentation of oligonucleotides exposed to low energy electrons*. Radiation Research Society, Annual Meeting, Maui, USA, September 25-29, 2010
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- 122. S. Ptasińska, A. Stypczyńska, B. Bahnev, M. Bowden, N. St. Braithwaite, N. Mason -Interaction of highly reactive species of cold plasma with DNA-protein complexes. 27th Miller Conference on radiation Chemistry, 20-25 May 2011, Tallberg, Sweden,
- 123. J. LaVerne, D.M. Chipman, I. Carmichael, D. Meisel, S. Ptasinska, *Radiation Effects in Heterogeneous Systems and at Interfaces*. 7th research Meeting of the Condensed Phase and Interfacial Molecular Science, Baltimore, MD, June 12-15, 2011
- 124. S. Ptasinska, A. Stypczynska, B. Bahnev, N.J. Mason, DNA damage induced by fast-flowing metastable species in a cold plasma. 14th International Congress of Radiation Research, 28 August-1 September 2011
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- 126. J. Brems, S. Ptasinska, *The effect of X-ray induced radiation on DNA and poly-L-arginine*. Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 4, 2012
- 127. W. Cantrell, S. Ptasinska, Construction and development of an electron radiator for DNA damage studies, Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 4, 2012
- 128. B. Coffey, S. Ptasinska, *Development and species characterization of atmospheric pressure plasma jets*, Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 4, 2012
- 129. J. Levri, S. Ptasinska, *Plasma surface cleaning*. Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 4, 2012
- 130. Y. Yurkovich, S. Ptasinska, *Treatment of SCC-25 oral cancer cells with non-thermal atmospheric pressure plasma jet.* Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 4, 2012
- 131. S. Reiff, S. Ptasinska, *Radiation damage of DNA from 10 eV electrons monitored by x-ray photoelectron spectroscopy*. 12th International Workshop on Radiation Damage to DNA, Prague, Czech Republic, June 2-6, 2012
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- 134. I. Tolbatov, D.M. Chipman, S. Ptasinska. *Towards understanding of Titan's atmosphere chemistry*. Radiation Chemistry Radiation Driven Processes in Physics, Chemistry, Biology and Industry, Andover, NH, USA, July 29 August 3 2012
- 135. X. Han, E. Escobar, M. Klas, J. Levri, J. Yurkovich, B. Coffey, S. Ptasinska, Atmospheric Pressure Plasma Jet for treatment of biological surfaces. Gordon Research Conference: Radiation Chemistry Radiation Driven Processes in Physics, Chemistry, Biology and Industry, Andover, NH, USA, July 29 - August 3 2012
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- 137. J.A. LaVerne, D.M. Bartels D.M. Chipman, S. Ptasińska. *Radiation Chemistry Underpinning Nuclear Power Generation*, 8th research Meeting of the Condensed Phase and Interfacial Molecular Science, Potomac Maryland, October 21 24, 2012

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- 140. E. Lamere, X. Zhang, X. Li, J. Furdyna, S. Ptasinska, Morphology effects in electronic properties of GaAs. Graduate Student Union Research Symposium Notre Dame, IN February 27, 2013
- 141. J. Brems, S. Ptasinska, Characterization of Polyamine/DNA Bilayers for Bio-functional Material Purposes. Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 3, 2013
- 142. W.A. Cantrell, S. Ptasinska, *Damage to DNA in DNA-Gold Nanoparticle Mixture by Atmospheric Pressure Plasma Jet.* Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 3, 2013
- 143. J. Kabuye, S. Ptasinska, *Dissociative Electron Attachment to DNA in a DNA-Glycine mixture*. Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 3, 2013
- 144. E. Kunce, S. Ptasinska, *Effects of Helium Plasma Radiation on Glycine Solution*. Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 3, 2013
- 145. R. Mumme, S. Ptasinska, Characterization of Polyelectrolytic Microcapsules by Atomic Force Microscopy. Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 3, 2013
- 146. I. Tolbatov, S. Ptasinska, D.M. Chipman, Formation of monocarbon molecular complexes from irradiated methane - nitrogen mixtures in He droplets. 45th Midwest Theoretical Chemistry Conference. Urbana-Chipping, IL, May 29–31, 2013
- 147. X. Zhang, S. Ptasinska, Growth of Amorphous Silicon Nitride Film on Silicon Wafer by Atmospheric Pressure Plasma Jet. 35th Annual Symposium on Applied Surface Analysis, Urbana-Champaign, IL, June 5-7, 2013
- 148. E. Lamere, X. Zhang, X. Liu, J. Furdyna, S. Ptasinska, Characterization of Environmental Molecules on GaAs Surfaces by Near Ambient Pressure X-ray Photoelectron Spectroscopy, 35th Annual Symposium on Applied Surface Analysis, Urbana-Champaign, IL, June 5-7, 2013
- 149. E. Lamere, X. Zhang, X. Liu, J. Furdyna, S. Ptasinska, *Size-dependent effects on the electronic properties of GaAs*. 55th Electronic Materials Conference, Notre Dame, IN, June 26-28, 2013
- 150. X. Zhang, S. Ptasinska, *Silicon surface treatment by Atmospheric Pressure Plasma Jet.* 55th Electronic Materials Conference, Notre Dame, IN, June 26-28, 2013
- I. Tolbatov, S. Ptasinska, D.M. Chipman, *Methane clusters under electron irradiation*. 246th American Chemical Society National Meeting, Indianapolis, IN, September 8–12, 2013
- 152. X. Zhang, E. Lamere, X. Liu, J. Furdyna, S. Ptasinska. In-situ X-ray photoelectron spectroscopy studies of small environmental molecules on GaAs surface. 246th American Chemical Society National Meeting, Indianapolis, IN, September 8–12, 2013
- 153. M.M. Dawley, S. Ptasinska, *Dissociative electron attachment studies using a new optimized crossed molecular beam/low–energy electron experimental chamber*. 246th American Chemical Society National Meeting, Indianapolis, IN, September 8–12, 2013
- 154. S. Reiff, J. Brems, S. Ptasinska, *Characterization of interfaces between polypeptide and DNA layers using X-ray photoelectron spectroscopy*, 19th International Vacuum Congress (IVC), Paris, France, September 9-13, 2013
- 155. X. Zhang, S. Ptasinska, Growth of Amorphous Silicon Nitride Films on Silicon Wafer by Atmospheric Pressure Plasma Jet. 66th Gaseous Electronic Conference (GEC), Princeton, NJ, September 30-October 4, 2013

- 156. X. Han, M. Klas, Y. Liu, M.S. Stack, S. Ptasinska. DNA damage in oral cancer cells induced by nitrogen atmospheric pressure plasma jets. 66th Gaseous Electronic Conference (GEC), Princeton, NJ, September 30-October 4, 2013
- 157. J. Brems, S. Ptasinska, *Characterization of Layer-by-Layer DNA/PLA Microcapsules by Atomic Force Microscopy*. College of Science – Fall Undergraduate Research Fair 2013, Notre Dame October 31, 2013, Notre Dame
- 158. E. Kunce, S. Ptasinska, *Glycine Alteration By Cold Atmospheric Plasma*. College of Science Fall Undergraduate Research Fair 2013, Notre Dame October 31, 2013
- 159. I. Tolbatov, D. Chipman, S. Ptasinska, *On the way to understanding the chemistry of Titan's atmosphere,* Graduate Student Union, Graduate Research Symposium, Notre Dame, February 27, 2014
- 160. X. Han, S. Ptasinska, Atmospheric Pressure Plasma Jet as a New Tool for Medical Application, Graduate Student Union, Graduate Research Symposium, Notre Dame, February 27, 2014
- 161. K.P. Arjunan, S. Ptasinska, *Surface Sterilization by Cold Atmospheric Pressure Plasma Jet,* Graduate Student Union, Graduate Research Symposium, Notre Dame, February 27, 2014
- 162. X. Zhang, S. Ptasinska, Near ambient pressure X-ray photoelectron spectroscopy study of N₂O, NO and O₂ interactions with GaAs (100). Graduate Student Union, Graduate Research Symposium, Notre Dame, February 27, 2014
- X. Han, Y. Liu, M.S. Stack, S. Ptasińska, Cold atmospheric plasma jet as a new tool for cancer cell treatment, Harper Cancer Research Institute Research Day, Notre Dame, IN April 14, 2014
- 164. I. Tolbatov, D.M. Chipman, S. Ptasińska, Study of clusterization processes in the irradiated ultra-cold methane - nitrogen mixtures. 3rd Annual GPS Spring Conference, Notre Dame. IN April 28, 2014
- 165. W. Cantrell, N. Brinkmann, S. Ptasinska, Computational Examination of Electron-Induced Dissociation of Hypoxanthine and Adenine Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 2, 2014
- 166. A. Jensen, S. Ptasinska, Damage to DNA with Various Flow Rates by Atmospheric Pressure Plasma Jet, Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 2, 2014
- 167. J. Kabuye, S. Ptasinska, *Dissociative Electron Attachment to DNA in a DNA-Glycine mixture*, Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 2, 2014
- 168. E. Kunce, S. Ptasinska, *Effects of Atmospheric-Pressure Helium Plasma on Cysteine Solutions*, Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 2, 2014
- 169. X. Han, W.A. Cantrell, E.E. Escobar, Y. Liu, M.S. Stack, S. Ptasinska, Damage of plasmid and cellular DNA induced by atmospheric pressure plasma jets. 13th International Workshop on Radiation Damage to DNA, MIT, Cambridge, Massachusetts USA, June 14-18, 2014
- 170. K.P. Arjunan, S. Ptasinska, *Surface Sterilization by Cold Atmospheric Pressure Plasma Jet Ignited in Helium and Helium/Oxygen Mixture*, Gordon Research Conference: Plasma Processing Science, Bryant University Smithfield, RI, July 26-27, 2014
- 171. X. Han, Y. Liu, M.S. Stack, S. Ptasinska, *DNA damage in oral cancer and healthy cells induced by nitrogen atmospheric pressure plasma jets.* Gordon Research Conference: Plasma Processing Science, Bryant University Smithfield, RI, July 26-27, 2014
- 172. X. Han, I. Janik, S. Ptasinska, *Radiation dose characterization of helium atmospheric pressure plasma jets using Fricke dosimetry for biological applications*. Gordon Research Conference: Radiation Chemistry, Radiation Driven Processes In Physics, Chemistry, Biology and Industry, Andover, NH, July 13-18, 2014
- 173. W.A. Cantrell, M.M. Dawley, N.R. Brinkmann, S. Ptasinska, *Electron Ionization of the Nucleobases Adenine and Hypoxanthine*. Gordon Research Conference: Radiation Chemistry,

Radiation Driven Processes In Physics, Chemistry, Biology and Industry, Andover, NH, July 13-18, 2014

- 174. M.M. Dawley, S. Ptasinska, *Dissociative electron attachment to gas-phase N-methylformamide*, Gordon Research Conference: Radiation Chemistry, Radiation Driven Processes In Physics, Chemistry, Biology and Industry, Andover, NH, July 13-18, 2014
- 175. C. Luck, E. Bell, S. Ptasinska, *Plasmid DNA Damage Induced by Helium and Oxygen Atmospheric Pressure Plasma Jet.* Summer Undergraduate Research Symposium, Notre Dame, IN August 1, 2014
- 176. S. Ptasinska, X. Han, DNA Strand Break Formation in Cells by Atmospheric Pressure Plasma Jet, 27th Summer School and International Symposium on the Physics of Ionized Gases (SPIG 2014), Belgrade, Serbia, August 26 -29, 2014
- 177. X. Zhang, S. Ptasinska, Dynamic H₂O/GaP (110) interfacial chemistry tracked by near ambient pressure XPS in real time. Loyola University Chicago, Chicago, IL, September 10, 2014
- 178. X. Zhang, S. Ptasinska, Evolution of surface-assisted oxidation of GaAs (100) by gas-phase N₂O, NO and O₂ probed by near ambient pressure X-ray photoelectron spectroscopy, Dynamics, Interactions and Electronic Transitions at Surfaces (DIET 14), Pacific Grove, CA, October 13-17, 2014
- 179. J.A. LaVerne, D.M. Bartels, I. Carmichael, S. Ptasinska, *Interfacial Radiation Sciences*. 10th Condensed Phase and Interfacial Molecular Science (CPIMS) Program, Potomac, Maryland, October 19-22, 2014D.M. Bartels, I. Carmichael, D.M. Chipman, I. Janik, J.A. LaVerne, S. Ptasińska, *Fundamental Advances in radiation Chemistry*, 10th Condensed Phase and Interfacial Molecular Science (CPIMS) Program, Potomac, Maryland, October 19-22, 2014
- S. Ptasinska, X. Zhang, Morphology Dependence of Gas-Phase Molecule Interactions with GaAs Surfaces, American Vacuum Conference, 61st International Symposium & Exhibition, Baltimore, MD, November 9-14, 2014
- 181. X. Zhang, S. Ptasinska, Evolution of Surface-Assisted Oxidation of GaAs by Gas-Phase N₂O, NO and O₂, American Vacuum Conference, 61st International Symposium & Exhibition, Baltimore, MD, November 9-14, 2014
- 182. X. Zhang, S. Ptasinska, Dynamic H₂O/GaP (111) interfacial chemistry monitored by nearambient pressure XPS in real time. Pacific Rim Symposium on Surfaces, Coatings and Interfaces (PacSurf 2014), Big Island of Hawaii, December 7-11, 2014
- 183. S. Ptasinska, X. Zhang, Interfacial Chemistry between gas-phase molecules and GaAs surfaces: morphology dependence. Pacific Rim Symposium on Surfaces, Coatings and Interfaces (PacSurf 2014), Big Island of Hawaii, December 7-11, 2014
- 184. S. Ptasinska, X. Zhang, Interfacial chemistry of water and Ga-based semiconductor surfaces. International workshop on "Surface chemistry and near-ambient pressure photoemission; new tools and new paradigms" SOLEIL, France, December 10-12, 2014
- 185. W. Huang, S. Ptasinska, Functionalization of Graphene by Atmospheric Pressure Plasma Jet, Gordon Research Conference: Chemical Reactions at Surfaces, Ventura, California, February 7-13, 2015
- 186. E. Adhikari, S. Ptasinska, Characterization of an Atmospheric Pressure Plasma Jet (APPJ) and its Effect on Plasmid DNA. Graduate Student Union and Office for Postdoctoral Scholars 7th Annual Research Symposium, Notre Dame, IN, April 9, 2015
- X. Han, J. Kapaldo, I. Janik, S. Ptasinska, *Plasma jet induced liquid chemistry*. Graduate Student Union and Office for Postdoctoral Scholars 7th Annual Research Symposium, Notre Dame, IN, April 9, 2015
- 188. X. Han, J. Kapaldo, Y. Liu, M.S. Stack, S. Ptasinska, Cold plasma as a novel tool for cancer treatment. 4th Annual Harper Cancer Research institute Research Day, Notre Dame, IN, April 13, 2015

- X. Zhang, S. Ptasinska, Dynamic H₂O/GaP (111) Interfacial Chemistry Monitored by Near-Ambient Pressure XPS in Real Time. GLCACS Annual Conference, Northwestern University, Evanston, IL, USA, May 2, 2015
- 190. S. Ptasinska, X. Zhang, *Interfacial processes between gas-phase molecules and Ga-based surfaces probed by near-ambient pressure XPS*. 37th Department of Energy Solar Photochemistry Research Conference, Gaithersburg, Maryland, May 31-June 3, 2015
- 191. W. Huang, S. Ptasinska, Functionalization of Graphene by Atmospheric Pressure Plasma Jet. American Vacuum Society (AVS) Prairie Chapter Symposium, Notre Dame, IN, September 10, 2015
- 192. S. Sadhu, W. Huang, S. Ptasinska, *Effects of Organic Halides and Substrates on the Perovskite Crystal Growth*. American Vacuum Society (AVS) Prairie Chapter Symposium, Notre Dame, IN, September 10, 2015
- 193. X. Zhang, S. Ptasinska, Dynamic O₂ and H₂O/GaP (111) Interfacial Chemistry Monitored by Near-Ambient Pressure X-ray Photoelectron Spectroscopy. American vacuum Society (AVS) Prairie Chapter Symposium, Notre Dame, IN, September 10, 2015
- 194. E. Adhikari, S. Ptasinska, *Characterization of an Atmospheric Pressure Plasma Jet (APPJ)* and its Effect on Plasmid DNA. 68th Annual Gaseous Electronics Conference (GEC)/9th International Conference on Reactive Plasmas/33rd Symposium on Plasma Processing, Honolulu, HI, October 12-16, 2015
- 195. X. Han, J. Kapaldo, Y. Liu, M.S. Stack, S. Ptasinska, DNA damage in oral cancer cells induced by atmospheric pressure plasma jets. 68th Annual Gaseous Electronics Conference (GEC)/9th International Conference on Reactive Plasmas/33rd Symposium on Plasma Processing, Honolulu, HI, October 12-16, 2015
- 196. J. Kapaldo, X. Han, S. Ptasinska, A characterization of atmospheric pressure plasma jets through a spatio-temporal mapping of the optical emission spectra. 68th Annual Gaseous Electronics Conference (GEC)/9th International Conference on Reactive Plasmas/33rd Symposium on Plasma Processing, Honolulu, HI, October 12-16, 2015
- 197. Z. Li, M.M. Dawley, S. Ptasinska, Gas Phase Dissociative Electron Attachment to Formamide Derivatives NMF and DMF. 68th Annual Gaseous Electronics Conference (GEC)/9th International Conference on Reactive Plasmas/33rd Symposium on Plasma Processing, Honolulu, HI, October 12-16, 2015
- 198. X. Zhang, S. Ptasinska, Formation of Heterogeneous Multiple-Oxide/Hydroxide Species on a GaP(111) Surface tracked by In-situ Near-Ambient Pressure XPS. American Vacuum Society (AVS) 62st International Symposium & Exhibition, San Jose, CA, October 18-23, 2015
- 199. E. Adhikari, S. Ptasinska, *Characterization of an Atmospheric Pressure Plasma Jet (APPJ)* and its Effect on Plasmid DNA. Annual Fall Meeting of the American Physics Society Prairie Section, South Bend, IN, November 19-21, 2015
- 200. X. Han, J. Kapaldo, Y. Liu, M.S. Stack, S. Ptasinska, Cold plasma as a novel tool for cancer treatment. Annual Fall Meeting of the American Physics Society Prairie Section, South Bend, IN, November 19-21, 2015
- 201. W. Huang, S. Ptasinska, Functionalization of Graphene by Atmospheric Pressure Plasma Jet. Annual Fall Meeting of the American Physics Society Prairie Section, South Bend, IN, November 19-21, 2015
- 202. J. Kapaldo, X. Han, S. Ptasinska, A characterization of atmospheric pressure plasma jets through a spatio-temporal mapping of the optical emission spectra. Annual Fall Meeting of the American Physics Society Prairie Section, South Bend, IN, November 19-21, 2015
- 203. S. Sadhu, W. Huang, S. Ptasinska, *Effects of Organic Halides and Substrates on the Perovskite Crystal Growth*. Annual Fall Meeting of the American Physics Society Prairie Section, South Bend, IN, November 19-21, 2015

- 204. X. Zhang, S. Ptasinska, Formation of Multiple-Oxide/Hydroxide Species on GaP(111) Surface tracked by Near-Ambient Pressure XPS. Annual Fall Meeting of the American Physics Society Prairie Section, South Bend, IN, November 19-21, 2015
- 205. W. Huang, S. Ptasinska, Evolution of Chemo-structural Composition of CH₃NH₃PbI₃ Perovskite under Ambient Conditions. 2nd Annual AP-XPS Workshop, Lawrence Berkeley National Laboratory, CA, December 7-9, 2015.
- 206. X. Zhang, S. Ptasinska, Dynamic O₂ and H₂O/GaP (111) Interfacial Chemistry Monitored by Near-Ambient Pressure X-ray Photoelectron Spectroscopy. 2nd Annual AP-XPS Workshop, Lawrence Berkeley National Laboratory, CA, December 7-9, 2015.
- 207. S. Sadhu, W. Huang, S. Ptasinska, Investigation of Water Adsorption on Oriented Rutile (001) Titania Nanorods at Ambient Conditions through In-situ X-ray Photoelectron Spectroscopy. 2nd Annual AP-XPS Workshop, Lawrence Berkeley National Laboratory, CA, December 7-9, 2015
- 208. E. Adhikari, S. Ptasinska, *Characterization of an Atmospheric Pressure Plasma Jet (APPJ)* and its Effect on Plasmid DNA. Graduate Physics Students Annual Conference, Notre Dame, IN, December 11, 2015
- 209. X. Han, J. Kapaldo, Y. Liu, M.S. Stack, S. Ptasinska, Cold plasma as a novel tool for cancer treatment. Graduate Physics Students Annual Conference, Notre Dame, IN, December 11, 2015
- 210. J. Kapaldo, X. Han, S. Ptasinska, A characterization of atmospheric pressure plasma jets through a spatio-temporal mapping of the optical emission spectra. Graduate Physics Students Annual Conference, Notre Dame, IN, December 11, 2015
- 211. Z. Li, M.M. Dawley, S. Ptasinska, Gas Phase Dissociative Electron Attachment to Formamide Derivatives NMF and DMF. Graduate Physics Students Annual Conference, Notre Dame, IN, December 11, 2015
- X. Han, J. Kapaldo, Y. Liu, M.S. Stack, S. Ptasinska, Cold plasma as a novel tool for cancer treatment. Three minute thesis (3MT) in Science division, Notre Dame, IN, February 24, 2016
- 213. X. Han, J. Kapaldo, Y. Liu, M.S. Stack, S. Ptasinska, Cold plasma as a novel tool for cancer treatment. 5th Annual Harper Cancer Research institute Research Day, Notre Dame, IN, April 4, 2016
- 214. X. Han, J. Kapaldo, Y. Liu, M.S. Stack, S. Ptasinska, Cold plasma as a novel tool for cancer treatment. 8th Annual Graduate Student Union, Notre Dame, IN, April 19, 2016
- 215. J. Kapaldo, X. Han, S. Ptasinska, A characterization of atmospheric pressure plasma jets through a spatio-temporal mapping of the optical emission spectra. 8th Annual Graduate Student Union, Notre Dame, IN, April 19, 2016
- 216. C. Ferari, S. Ptasinska, Computational Analysis of Dissociative Electron Attachment to Thymine. Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, April 29, 2016
- 217. E. Kunce, S. Ptasinska, *The Effect of Plasma Radiation on Nucleobase Solutions*. Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, April 29, 2016
- X. Zhang, S. Ptasinska, Interfacial Processes at H₂O/III-V Semiconductor Surfaces under Operando Conditions. 38th Department of Energy Solar Photochemistry Research Conference, Gaithersburg, Maryland, June 6-9, 2016
- 219. E. Adhikari, S. Ptasinska, *The role of helium atmospheric pressure plasma jet (APPJ)* parameters on plasma induced DNA damage. Gordon Research Conference/Seminar (GRC/GRS): Plasma Processing Science, Andover, NH, USA, July 24-29 2016
- 220. X. Han, J. Kapaldo, Y. Liu, M.S. Stack, S. Ptasinska, DNA damage in oral cancer cells induced by nitrogen atmospheric plasma jets. Gordon Research Conference (GRC/GRS): Plasma Processing Science, Andover, NH, USA, July 24-29 2016

- 221. J. Kapaldo, X. Han, S. Ptasinska, *High throughput imaging for studying the spatial effect of cold atmospheric plasma jets on cell cultures*. Gordon Research Conference (GRC/GRS): Plasma Processing Science, Andover, NH, USA, July 24-29 2016
- 222. V. Samara, S. Ptasinska Investigation of Atmospheric Pressure Plasma Jets by Schlieren photography and interferometry. Gordon Research Conference (GRC/GRS): Plasma Processing Science, Andover, NH, USA, July 24-29 2016
- 223. X. Han, J. Kapaldo, I. Janik, S. Ptasinska, Interactions of atmospheric pressure plasma jet with liquid surfaces. 28th Summer School and International Symposium on the Physics of Ionized Gases (SPIG 2016), Belgrade, Serbia, August 29-September 2, 2016
- 224. M. Ryszka, E. Alizadeh, S. Ptasinska, *Low Energy Electron Induced Fragmentation of Nicotine and N-Methylpyrrolidine*. 28th Summer School and International Symposium on the Physics of Ionized Gases (SPIG 2016), Belgrade, Serbia, August 29-September 2, 2016
- X. Zhang, S. Ptasińska, Interfacial processes at H₂O/III-V semiconductor surfaces under operando conditions. 38th Department of Energy Solar Photochemistry Research Conference, Gaithersburg, MD June 6-9, 2016
- 226. E.R. Adhikari, X. Han, J. Kapaldo, V. Samara, I. Janik, S. Ptasińska, Atmospheric pressure plasma jet: its characterization and equivalent dose in aqueous solutions. 1st International Conference on Ionizing Processes, Brookhaven National Laboratory, Upton, NY October 10-14, 2016
- 227. M. Ryszka, E. Alizadeh, S. Ptasińska, *Low energy electron-induced fragmentation of nicotine* and *N-methylpyrrolidine*. 1st International Conference on Ionizing Processes, Brookhaven National Laboratory, Upton, NY October 10-14, 2016
- 228. H. Schurr, E. Panken, S. Ptasińska. *Effects of plasma radiation on nucleobase and plasmid DNA solutions*. College of Science- Fall Undergraduate Research Fair, University of Notre Dame, Notre Dame, IN October 27, 2016
- 229. E. Wellman, E.R. Adhikari, S. Ptasińska. *Electrical plasmas for biomedical applications*. College of Science- Fall Undergraduate Research Fair, University of Notre Dame, Notre Dame, IN October 27, 2016
- 230. D.M. Bartels, I. Carmichael, I. Janik, J.A. LaVerne, S. Ptasińska, *Fundamental advances in radiation chemistry*.12th Condensed Phase and Interfacial Molecular Science PI Meeting, Gaithersburg, MD November 1-4, 2016
- 231. J.A. LaVerne, D.M. Bartels, I. Carmichael, S. Ptasińska. *Interfacial radiation sciences*. 12th Condensed Phase and Interfacial Molecular Science PI Meeting, Gaithersburg, MD November 1-4, 2016
- 232. S. Sadhu, W. Huang, S. Ptasinska. Exploring the Aging of MoS₂ through Ambient Pressure Xray Photoelectron Spectroscopy. Inaugural College of Science - Joint Annual Meeting (COS-JAM) for Graduate Students and Postdoctoral Fellows University of Notre Dame, Notre Dame, IN May 4, 2017
- 233. E. Wellman, E. Adhikari, S. Ptasinska. *Electrical Plasmas for Biomedical Applications*. 11th Notre Dame College of Science Joint Annual Meeting, Notre Dame, IN, May 5, 2017
- 234. V. Samara, S. Ptasinska. Interaction of Atmospheric Pressure Plasma Jet with Helium Flow. the 44th IEEE International Conference on Plasma Science (ICOPS 2017), Atlantic City, NJ May 21-25, 2017
- 235. S. Ptasinska, *Chemo-Structural Composition and Photovoltaic Efficiency of CH₃NH₃PbI₃ Perovskite affected by external factors.* 39th DOE Solar Photochemistry Research Principal Investigator Meeting, Gaithersburg, MD, June 5-8, 2017
- 236. W. Huang, S. Ptasinska, *Chemical transformations of hybrid perovskites under environmental conditions*. 21th Annual Conference of the Chinese American Chemical Society Great Lakes Chapter of CACS (GLCACS), June 10, 2017

- 237. D.M Bartels, I. Carmichael, I. Janik, J.A. LaVerne, S. Ptasińska, *Fundamental Advances in radiation Chemistry*. 13th Condensed Phase and Interfacial Molecular Science (CPIMS) Research Meeting, Gaithersburg, MD, October 15-18, 2017
- 238. E. Adhikari, V. Samara, S. Ptasinska, *Effects of Oxygen or Water in Plasma Jet Environment* and Feed Gas on DNA Damage. 64th American Vacuum Society International Symposium and Exhibition in Tampa, Florida. October 29-November 3, 2017
- 239. P. Sapkota, S. Ptasinska, *Ambient Pressure X-ray Photoelectron Spectroscopy of the III-V Semiconductor/Water Interface*. 64th American Vacuum Society International Symposium and Exhibition, Tampa, Florida. October 29-November 3, 2017
- 240. E. Adhikari, V. Samara, S. Ptasinska, *Influence of Oxygen or Water Vapor in a Plasma Jet and its Environment on DNA Damage*. Inaugural Colleges of Science & Engineering Joint Annual Meeting (COSE-JAM), Jordan Hall, Notre Dame, December 8, 2017
- 241. P. Sapkota, A. Cabrera, S. Ptasinska, In situ Monitoring Copper-based Oxide/Water Interfacial Reactions by X-ray Photoelectron Spectroscopy. American Physical Society, March Meeting 2018, Los Angeles, California, March 5-9, 2018
- 242. J. Cartelli, D. Ullery, B. Storke, S. Hernandez, F. Walz, M.S. Devadas, S. Ptasinska, R. Kolagani, *Effects of Fluorination on the Structural and Electrical Properties of Epitaxial La* 0.67Ca0.33MnO_{3-y} Thin Films. American Physical Society, March Meeting 2018, Los Angeles, California, March 5-9, 2018
- 243. E. Wellman, E. Adhikari, S. Ptasinska, *Atmospheric Pressure Plasma Jets for Biomedical Applications*, the College of Science Joint Annual Meeting (COS-JAM), University of Notre Dame, May 4, 2018
- 244. E. Adhikari, V. Samara, S. Ptasinska, *Influence of O₂ or H₂O in a Plasma Jet and Its Environment on Plasma Electrical and Biochemical Performances*, Gordon Research Conference (GRC/GRS): Plasma Processing Science, Smithfield, RI, USA, August 4-10, 2018
- 245. E. Adhikari, V. Samara, K. Jammeh, S. Ptasinska, *In situ Measurements of Total Yield of Species Originating from Plasma Jets*, 71st Annual Gaseous Electronics Conference (GEC 2018), Portland, Oregon, November 5-9, 2018
- 246. E. Adhikari, V. Samara, S. Ptasinska, *Total Yield of Reactive Species Originating from an Atmospheric Pressure Plasma Jet in Real Time*. 2nd Annual Colleges of Science and Engineering Joint Annual Meeting (COSE-JAM), Notre Dame, Indiana, December 7, 2018.
- 247. B.C. Wood, T. Ogitsu, T.A. Pham, X. Zhang, S. Ptasinska, *Integrating simulations and experiments to probe complex photoelectrochemical interfaces under realistic operating conditions*. Spring Meeting of the American Chemical Society, Orlando, Florida, March 31-April 4, 2019
- 248. D. Lipa, E. Adhikari, S. Ptasinska, *The Effect of Hydrogen Peroxide Gas from an Atmospheric Pressure Plasma Jet on Aqueous DNA*. 13th College of Science Joint Annual Meeting (COS-JAM) Notre Dame, Indiana, May 3, 2019
- 249. X. Zhang, T. Ogitsu, B.C. Wood, T.A. Pham, S. Ptasinska, *Revealing Oxidation Mechanisms onto Semiconductor Surfaces*. 41st Department of Energy Solar Photochemistry Principle Investigator Meeting in Gaithersburg, Maryland, June 3-5, 2019
- 250. Z. Li, M. Ryszka, M.M. Dawley, I. Carmichael, K.B. Bravaya, S. Ptasińska, *Electron-Induced Fragmentation of Peptide Model Molecules*. 8th POSMOL 2019: (XX International Workshop on Low-Energy Positron and Positronium Physics and XXI International Symposium on Electron-Molecule Collisions and Swarms) Belgrade, Serbia, July 18-20, 2019
- 251. A.R. Milosavljević, D.K. Božanić, D. Danilović, P. Sapkota, N. Vukmirović, S. Sadhu, R. Dojčilović, W. Huang, J. Bozek, C. Nicolas, L. Nahon, S. Ptasinska, *Investigation of the electronic structure of energy conversion nanosystems by combined surface XPS and synchrotron-based gas-phase VUV/X-ray PES*. XXXI International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC) Deauville, France, July 23-30, 2019

- 252. S.A. Pshenichnyuk, I.I. Fabrikant, A. Modelli, S. Ptasińska, A.S. Komolov, *Resonance electron interaction with heterocyclic compounds: Vibrational Feshbach resonances and hydrogen atom stripping.* XXXI International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC) Deauville, France, July 23-30, 2019
- 253. J. Ameixa, E. Arthur-Baidoo, J. Pereira-da-Silva, M. Ryszka, F. Ferreira da Silva, I. Carmichael, S. Ptasińska, S. Denifl, Low-energy electron interactions with benzaldehyde. 1st NOVA Biophysica, Lisbon, Portugal, September 4-6, 2019
- 254. A. Sebastian, S. Ptasinska, *Atmospheric Pressure Plasma: An Alternative Tool for the Synthesis of Efficient Photocatalytic Materials.*" Sustainability Expo, Notre Dame Energy Week, University of Notre Dame, Notre Dame, Indiana, September 17, 2019.
- 255. A. Sebastian, S. Ptasinska, *Predictive modeling of plasma-induced DNA damage: A machine learning approach to plasma.* 23rd International Summer School (October 5-10, 2019) and Master classes (October 10-12, 2019) on Low Temperature Plasma Physics: Basics and Applications, Bad Honnef, Germany, October 5-12, 2019
- 256. P. Sapkota, S. Ptasinska, *In-situ X-ray Photoelectron Spectroscopic Study of III-V Semiconductor/H2O Interfaces under Light Illumination*. American Vacuum Society (AVS) 66th International Symposium & Exhibition, Columbus, Ohio, October 20-25, 2019
- 257. A. Sebastian, Atmospheric Pressure Plasma: An Alternative Tool for the Synthesis of Efficient Photocatalytic Materials. American Vacuum Society (AVS) 66th International Symposium & Exhibition, Columbus, Ohio, October 20-25, 2019
- 258. D. Lipa, S. Ptasinska, *Modeling of the damage done by an atmospheric pressure plasma to aqueous DNA*. Fall Undergraduate Research Fair (FURF), University of Notre Dame, Notre Dame, Indiana, October 31, 2019
- 259. T. Tarkleson, S. Ptasinska, *New methods in cancer radiation research: thymine fragmentation, IR spectroscopy, and 3-D printing technology*. Fall Undergraduate Research Fair (FURF), University of Notre Dame, Notre Dame, Indiana, October 31, 2019
- 260. A. Sebastian, S. Ptasinska, *Predictive modeling of plasma-induced DNA damage: A machine learning approach to plasma medicine.* Graduate Physics Society Annual Conference, University of Notre Dame, Notre Dame, Indiana, November 13, 2019
- 261. A. Sebastian, S. Ptasinska, *Atmospheric Pressure Plasma: An Alternative Tool for the Synthesis of Efficient Photocatalytic Materials.* Annual Colleges of Science and Engineering Joint Annual Meeting (COSE-JAM), Notre Dame, Indiana, December 13, 2019
- 262. D. Danilović, D.K. Božanić, N. Vukmirović, P. Sapkota, R. Dojčilović, V. Đoković, L. Nahon, J. Bozek, Ch. Nicolas, S. Ptasinska, A.R. Milosavljević, *VUV/X-ray Photoelectron Spectroscopy of Nanocrystals for Solar Cells Absorbers Isolated in vacuo*. 1st annual meeting of the COST Action CA18212 "Molecular Dynamics in the GAS phase" MD-GAS, Caen, France, February 18-21, 2020
- 263. X. Zhang, T.A. Pham, B. Wood, D. Prendergast, S. Ptasinska, T. Ogitsu, *Probing electrochemical processes at surfaces and interfaces by a combination of ab-initio simulations and in-situ characterizations*. American Physical Society, March Meeting 2020, March 2-6, 2020 (virtual)
- 264. P. Kinkopf, A. Sebastian, S. Ptasinska, *Optimizing Plasma-Induced DNA Damage for Atmospheric Pressure Plasma Jets*. Fall Undergraduate Research Fair (FURF), University of Notre Dame, Notre Dame, October 8, 2020 (virtual)
- 265. D. Lipa, A. Sebastian, S. Ptasinska, *Using Machine Learning to Predict Aqueous DNA Damage Caused by an Atmospheric Pressure Plasma Jet.* "Fall Undergraduate Research Fair (FURF), University of Notre Dame, Notre Dame, October 8, 2020 (virtual)
- 266. A. Sebastian "Blending machine learning and thermal engineering for plasma diagnostics: A predictive modeling study using plasmid DNA" 73rd Gaseous Electronics Conference (GEC) 2020, October 5-9, 2020 (virtual)

- 267. D. Chakraborty, Eckermann, I. Carmichael, S. Ptasinska, *Dissociative electron attachment studies of molecules containing amide bond*. 73rd Gaseous Electronics Conference (GEC) 2020, October 5-9, 2020 (virtual)
- 268. A. Sebastian, S. Ptasinska, A novel plasma diagnosis approach via physics guided neural networks: A predictive modeling study using plasmid DNA. 3rd International Conference on Data-Driven Plasma Science (ICDDPS-3), March 29-April 2, 2021 (virtual)
- 269. D. Lipa, A. Sebastian, S. Ptasinska, *Using Machine Learning to Predict Aqueous DNA Damage Caused by an Atmospheric Pressure Plasma Jet.* "ND College of Science Joint Annual Meeting (COS-JAM), University of Notre Dame, Notre Dame, May 12, 2021 (virtual)
- L. Eckermann, D. Chakraborty, I. Carmichael, S. Ptasinska, *Dissociative electron attachment* to *N-methylacetamide*. POSMOL/EMS 2021 conference (XXII International Symposium on Electron-Molecule Collisions and Swarms), July 29-30, 2021 (virtual)
- 271. S. Ptasinska, *Re-Evaluating Routes of Oxidation of III-V Semiconductor Surfaces*. U.S. Department of Energy-Basic Energy Science Solar Photochemistry Principle Investigators' Meeting, June 8-10, 2022 (virtual)
- 272. A. Casotto, L. Sangletti, S. Ptasinska, *Probing acetone adsorption on SAM-functionalized ZnO nanowires through NAP-XPS*, Università Cattolica del Sacro Cuore, Italy, January 25, 2023 (virtual)
- 273. A. Milosavljević, C. Nicolas, G. Garcia, J. Bozek, L. Nahon, D. Bozanic, D. Radinovic, R. Dojclovic, J. Pajovic, V. Djokovic, N. Vukmirovic, P. Sapkota, W. Huang, S. Sadhu, S. Ptasinska, *Measuring of Electronic Properties of free standing lead halide perovskite nanocrystals isolated in vacuo at SOLEIL*. Workshop: Large Scale Facilities and Hybrid Perovskite, SOLEIL, Orsay, France, February 2, 2023
- 274. D. Chakrabprty, S. Ptasinska, *Dynamics of resonant low energy electron attachment to ethanol producing hydroxide anions*. POSMOL 2023, University of Notre Dame, IN, August 3-6, 2023
- 275. B. de Campos Silva, S. Ptasinska, *Exploring Plasma Radiation Effects on Solution pH for Medical Applications*. "Talk Science" seminar series, ND College of Science, October 5, 2023
- 276. D. Chakraborty, P. Anirban, S. Ptasinska, I. Carmichael, N. Dhananjay, *Dissociation dynamics of low energy electron attachment to carbon disulfide studied using velocity slice imaging technique* 76th Annual Gaseous Electronics Conference (GEC) Ann Arbor, MI, October 9 13, 2023
- 277. B. de Campos Silva, S. Ptasinska, Exploring the Effects of Plasma Radiation on the pH of Solutions for Potential Medical Applications. Fall Undergraduate Research Fair (FURF) at Notre Dame, October 26, 2023
- 278. A. Bittinger, S. Ptasinska, I. Carmichael, *Dissociative electron attachment to ethanol: resonance energies and fragmentation pathways.* Conference for Undergraduate Women in Physics (CUWiP 2024), Georgia Institute of Technology, Atlanta, GA, January 19-21, 2024
- 279. B. Campos de Silva, S. Ptasinska, *Exploring the Effects of Plasma Radiation on the pH of Solutions for Potential Medical Applications*. Conference for Undergraduate Women in Physics (CUWiP 2024), University of Michigan, Ann Arbor, MI, January 19-21, 2024
- 280. G. Kharchilava, D. Chakraborty, S. Ptasinska, J. Finley. *Resonant low energy electron capture and fragmentation pathways of anisole*. American Physical Society (APS) March Meeting, Minneapolis & Virtual, MN March 3 8, 2024
- 281. B. de Campos Silva, S. Ptasinska. Exploring the Effects of Plasma Radiation on the pH of Solutions for Potential Medical Applications. 18th annual ACC Meeting of the Minds Conference, South Bend, IN April 5-7, 2024
- 282. C. Garcia Villavicencio, B. de Campos Silva, S. Ptasinska. *Exploring pH Dynamics in Amino Acid Solutions under Low-Temperature Plasma Exposure*. Graduate Physics & Astronomy Students (GPAS) Annual Conference, University of Notre Dame, IN April 24, 2024

- 283. B-A. Chen, S. Ptasinska, P.V. Kamat. Optical Properties and Applications of Molecular-Intercalated MoS₂. Material Research Society (MRS) Spring Meeting & Exhibit, Seattle, WA April 22-26, 2024
- 284. J. Finley, G. Kharchilava, D. Chakraborty, I. Carmichael, S. Ptasinska. Dynamics and Fragmentation Channels Induced Through Dissociative Electron Attachment to Anisole. College of Science Joint Annual Meeting (COS-JAM), University of Notre Dame, Notre Dame, IN May 2, 2024
- 285. B. de Campos Silva, S. Ptasinska. *Exploring the Effects of Plasma Radiation on Solution pH* for Potential Medical Applications. College of Science Joint Annual Meeting (COS-JAM), University of Notre Dame, Notre Dame, IN May 2, 2024
- 286. D. Chakraborty, S. Ptasinska, D. Slaugther. Dynamics of resonant low energy electron attachment to dimethyl formamide. 55th Annual Meeting of the APS Division of Atomic, Molecular and Optical Physics, Fort Worth, TX June 3–7, 2024
- 287. G. Kharchilava, D. Chakraborty, J. Finley, S. Ptasinska, I. Carmichael. Low-energy electron attachment to diethyl carbonate. 4th DEA Club Meeting in Potsdam, Germany June 19-21, 2024
- 288. G. Kharchilava, D. Chakraborty, J. Finley, S. Ptasinska, I. Carmichael. *Dissociative Electron Attachment to Diethyl Carbonate*. Summer Undergraduate Research Symposium, University of Notre Dame, Notre Dame, IN July 24, 2024
- 289. D. Chakraborty, S. Ptasinska. *Development of a velocity map imaging spectrometer and its application in understanding the dynamics of low energy electron-molecule collisions.* 27th International Conference on the Application of Accelerators in Research and Industry (CAARI) and the 55th Symposium of Northeastern Accelerator Personnel (SNEAP) Fort Worth, TX July 21-26, 2024
- 290. G. Kharchilava, J. Finley, D. Chakraborty, I. Carmichael, S. Ptasinska. *Dissociative Electron Attachment to Diethyl Carbonate*.38th International Conference of Physics Students (ICPS) in Tbilisi, Georgia. August 4-11, 2024
- 291. D. Chakraborty, S. Ptasinska. *Development and application of velocity slice Imaging technique*. 4th International Conference on Ionizing Processes (ICIP), University of Notre Dame, Notre Dame, IN August 11-15, 2024
- 292. D. Chakraborty, G. Kharchilava, I. Carmichael, S. Ptasinska. *Dissociative electron attachment studies of gas phase acetic acid using velocity map imaging technique.* 4th International Conference on Ionizing Processes (ICIP), University of Notre Dame, Notre Dame, IN August 11-15, 2024
- 293. G. Kharchilava, J. Finley, D. Chakrabory, I. Carmichael, S. Ptasinska. *Dissociative electron attachment to carbonates.* 4th International Conference on Ionizing Processes (ICIP), University of Notre Dame, Notre Dame, IN August 11-15, 2024
- 294. J. Finley, G. Kharchilava, D. Chakrabory, I. Carmichael, S. Ptasinska. *Dynamics and fragmentation channels of dissociative electron attachment to aromatic rings*. Radiation Research Society 2024 Annual Meeting, Tucson, AZ September 15-18, 2024
- 295. C. Garcia Villavicencio, B. de Campos Silva, S. Ptasinska. *Exploring pH Dynamics in Amino Acid Solutions under Low-Temperature Plasma*. 77th Annual Gaseous Electronics Conference (GEC), San Diego, CA September 30–October 4, 2024
- 296. E.R. Clark, C.J. Garcia Villavicencio, S. Ptasinska. The Effect of Low-Temperature Atmospheric Pressure Plasma Jet Parameters on Hydroxyl Radical Production. 2024 Annual Meeting of the American Physical Society (APS) Four Corners Section, Northern Arizona University, Flagstaff, AZ, October 11–12, 2024
- 297. J. Finley, G. Kharchilava, D. Chakrabory, I. Carmichael, S. Ptasinska. *Dissociative Electron Attachment to Diethyl Disulfide: Low-Energy Lysis of Disulfide Bonds*. Fall Undergraduate Research Fair (FURF), University of Notre Dame, Notre Dame, IN, October 31, 2024

- 298. G. Kharchilava, J. Finley, D. Chakrabory, S. Ptasinska, I. Carmichael. *Dissociative Electron Attachment to Carbonates.* Fall Undergraduate Research Fair (FURF), University of Notre Dame, Notre Dame, IN, October 31, 2024
- 299. C. Garcia Villavicencio, S. Ptasinska. *Investigating pH Changes in Amino Acid Solutions Induced by Low Temperature Plasma*. Notre Dame Interdisciplinary Graduate Research Symposium, University of Notre Dame, Notre Dame, IN, April 28, 2025
- 300. G. Kharchilava, J. Finley, D. Chakrabory, S. Ptasinska, I. Carmichael. *Dissociative electron attachment to dimethyl and diethyl carbonate*. College of Science Joint Annual Meeting (COS-JAM) University of Notre Dame, Notre Dame, IN, May 1, 2025
- 301. J. Finley, G. Kharchilava, D. Chakrabory, I. Carmichael, S. Ptasinska. Dissociative Electron Attachment to Diethyl Disulfide: Low-Energy Cleavage of Disulfide Bonds. College of Science Joint Annual Meeting (COS-JAM) University of Notre Dame, Notre Dame, IN, May 1, 2025
- 302. A. Matara, C. Garcia Villavicencio, B. de Campos Silva, S. Ptasinska. Exploring Structural Changes in Amino Acid Solutions Under Low-Temperature Plasma Exposure. College of Science Joint Annual Meeting (COS-JAM) University of Notre Dame, Notre Dame, IN, May 1, 2025
- 303. Z. Li, C. Garcia Villavicencio. C. Pallissery, S. Ptasinska. *Effect of Low-Temperature Plasma on Neuronal Culture Media*. College of Science Joint Annual Meeting (COS-JAM) University of Notre Dame, Notre Dame, IN, May 1, 2025

MENTORING

MENTORING	
Post-doctoral Current: Hao Yu	
researchers Former: Krishna Arjunan, Soumya Banerjee, Dipayan Chakraborty, M. Mi	chele
Dawley, Surja Ghale, Matej Klas, Michal Ryszka, Subha Sadhu,	
Vladimir Samara, Denis A. Sokolov	
Graduate Current: Cecilia Garcia Villavicencio (Physics)	
students Jason King (Chemistry)	
Thejaswini B. (research assistant)	
Former: Ek Adhikari (Physics, PhD 2019)	
Andrea Casotto (dual International PhD student in Science, PhD 2	023)
Bo-An Chen (Chemistry, PhD 2024)	,
Lauren Eckermann (Chemistry, MSc 2022)	
Xu Han (Physics, PhD 2017)	
Weixin Huang (Chemistry, PhD 2017)	
James Kapaldo (Physics, PhD 2018)	
Zhou Li (Physics, PhD 2017)	
Evan Panken (non-degree program F2016)	
Pitambar Sapkota (Physics, PhD 2021)	
Amal Sebastian (Phsics, PhD 2023)	
Agnieszka Stypczynska (grad. in 2011 OU UK)	
Iogann Tolbatov (Physics, PhD 2015)	
Xueqiang Zhang (Chemistry, PhD 2016)	
Undergraduate Current: Jacob Finley (Physics, AL/SC Honors Program), Jake Kilbride (Pr	e-
students professional Studies), Anesu Matara (Physics in Medicine, AL/SC	
Honors Program), Kenton Reeh (REU student, Creighton Universi	ty)
Former: Patricia Alquiza (Environmental Sciences), Emily Bell (REU stude	ent,
Monmouth College), Aysia Bittinger (REU student, University of	North
Georgia), Elizabeth Briley (REU student, UC Long Beach), John H	Brems
(Physics in Medicine), Emily Clark (REU student, North Arizona	
University), Beatriz de Campos Silva (Physics in Medicine, AL/S0	C

		Paso), Alex Cantrell (Sc Medicine, Honors Progr Ben Coffey (Electrical E student, UC Long Beach Mattison Flakus (REU s student, U Texas at El P Giaimo (Biological Scie Physics), Neil Jairath (C Physics), Neil Jairath (C Physics), Neil Jairath (C Physics), Neil Jairath (C Physics), Justin Jones (professional), Giorgi Kh Jacob Kennard (biochem in Medicine), Tessa Kle (Honors Program, Physi Scripps College), Joe Le (Physics), Daniel Lipa (Statistics), Catie Luck (I Mallea (Mechanical eng Chemistry), Max Nguye Porrazzo (Neuroscience University of Atlántico, Emil Sundang Peters (St (Physics in Medicine), I Mathematics and Statist (Honors Program, Neuro Medicine), Wai Yeng W Wellman (Neuroscience (John) Yang (REU stude	ctoria Canseco (REU student, U Texas at El ience Business), Daniel Childers (Physics in am), Spencer Clark (Physics, Honors Program), Engineering & ROTC), Erika Escobar (REU a), Chris Ferari (Neuroscience and behavior), tudent U Rochester), Victor Garcia (REU aso), Richard Garnett (COOP student), Chris nces), Zach Imholte (Electrical Engineering, omputer Science), Kemo Jammeh (Mathematics, ry, Berea College), Andrew Jensen (Science on (Physics in Medicine), Brendan Jones pre-professional), Joanna Kabuye (Pre- archilava (Physics, AL/SC Honors Program), histry), Paul Kinkopf (Honors Program, Physics in (Physics, Honors Program), Emmy Kunce cs in Medicine), Kinsey Lee (REU student, evri (Electrical Engineering), Ziyu (Sharon) Li Applied and Computational Mathematics and RUE student, Thomas More College), Gonzalos ineering), Raymond Mumme (Physics, n (Physics), Collin Pallissery (English), Andrew and Behavior), Melissa Quevedo (REU student, Colombia), Neal Ravindra (Physics in Medicine), ockholm University, Sweden), Harrison Schurr Diana Spulber (Applied and Computational ics, Physics, Honors Program), Tanner Tarkleson oscience and Behavior), Cole Weber (Physics in Yong (Chemical Engineering, Economy), Elek and Behavior), Daniel Williams (Physics), Hulin ent Xi'an Jiao Tong University), James Yurkovich , Wei Zha (REU student Xi'an Jiao Tong ca) Zhou (Mathematics)
High school students	Current: Former:	 Christian Huntington, B	enjamin Kolda, Emmy Kunce, Joseph Patus,
		Pramod Kamalapathy	
COURSES TO	· ·		(S-spring, F-fall)
S2011, S2012,		PHYS 20330	General Physics III Biological Physics
S2014, S2015, F2015, S2016,			Biological Physics Moreau First Year Experience
S2018	12010, 5201	PHYS 11422	Physics B Lab: Electricity and Magnetism
S2019		PHYS 10310	Engineering Physics I: Mechanics
F2020, F2021,	F2022. F2024		Physics of the Brain
F2023	,	PHYS 20210	Physics for Life Sciences I
SERVICE TO	PROFESSIO		-
2024			n International Conference on Ionizing Processes
		-	me, Notre Dame, IN, August 11-15, 2024
2024			Fundamental Processes & Applications at 27th

2024 International Conference on the Application of Accelerators in Research and Industry (CAARI) and the 55th Symposium of Northeastern Accelerator Personnel (SNEAP), Fort Worth, TX July 21-26, 2024

2023	Conference chair and local organizer: POSMOL 2023: XXI International Workshop on Low-Energy Positron and Positronium Physics and XXIII International Symposium on Electron-Molecule Collisions and Swarms, University of Notre Dame, Notre Dame, IN, August 3-6, 2023
2023	Workshop organizer, Laboratory-Based Ambient-Pressure X-ray Photoelectron Spectroscopy Focus Topic Workshop and chaired the session on Laboratory-Based AP- XPS: Advances in Instrumentation and Applications at the 69th American Vacuum Society International Symposium and Exhibition in Portland, Oregon, November 5-10, 2023
2021	Workshop organizer for Gaseous Electronic Conference (GEC): Electron Scattering Processes: fundamentals, challenges, opportunities, and advances, October 4, 2021 (virtual)
2021	Conference organizer: POSMOL/EMS 2021 (XXII International Symposium on Electron-Molecule Collisions and Swarms), July 29-30, 2021 (virtual)
2020-present	Editor in Chief of European Physical Journal D: Atomic, Molecular, Optical and Plasma Physics
2019, 2020	Executive Committee Officer of Gaseous Electronics Conference (Treasurer)
2018-2020	Guest editor for Multidisciplinary Digital Publishing Institute (MDPI) journals: Plasma (Atmospheric Pressure Plasma Sources Applied in Biological Systems) and Materials (Atmospheric Pressure Plasmas in Material Science)
2017-present	Electron-Molecule Collisions and Swarms (EMS) Advisory committee
2016-present	Editorial Board of Multidisciplinary Digital Publishing Institute (MDPI) journal: Plasma
2016	Discussion Leader (Biotechnology session): NSF workshop on Science Challenges in Low Temperature Plasma Science and Engineering: Enabling a Future Based on Electricity through Non-Equilibrium Plasma Chemistry, Washington DC, August 22- 23 2016
2015/2016	Guest editor for a European Physical Journal D topical issue on Low-Energy Interactions Related to Atmospheric and Extreme Conditions
2014,2016	NSF and DOE proposal review panelist
Since 2014	NSF and DOE proposal reviewer
2015-present	Editor: European Physical Journal D: Atomic, Molecular, Optical and Plasma Physics Co-Editor: Journal of Chemistry, Special Issue: Early Stages in the Damage Biological
2013	Systems Induced by Radiation US member of COST Action: Nano-IBCT (Nano-Ion Beam Cancer Therapy)
2012-2015	Member of DEA (Dissociative Electron Attachment) club
2015-present	Reviewer of scientific articles: physics, chemistry, physical-chemistry, and engineering journals
	Chairing sessions:
	• 14th International Congress of Radiation Research, 28 August-1 September 2011, Warsaw, Poland. Eye Opener session
	 Gordon Research Conference: Radiation Chemistry Radiation Driven Processes in Physics, Chemistry, Biology and Industry, Andover, NH, USA, July 29 - August 3 2012, Young investigator session
	 Collaborative Conference on 3D & Materials Research (3DMR), Incheon, South Korea, June 23-27, 2014
	• 1st International Conference on Ionizing Processes, Brookhaven National Laboratory, Upton, NY October 10-14, 2016, Young investigator session

- 8th POSMOL 2019: (XX International Workshop on Low-Energy Positron and Positronium Physics and XXI International Symposium on Electron-Molecule Collisions and Swarms) Belgrade, Serbia, July 18-20, 2019
- Electron Molecule Collisions and Related Topics, 72nd Annual Gaseous Electronics Conference (GEC 2019), College Station, TX, October 28 November 1, 2019
- Collisions involving positron and positronium, 73rd Annual Gaseous Electronics Conference (GEC 2019), October 5-9, 2020 (virtual)
- Electron Scattering, 32nd International Conference on Photonic, Electronic and Atomic Collisions (ViCPEAC), July 20-23, 2021 (virtual)
- Laboratory-Based AP-XPS: Advances in Instrumentation and Applications at the 69th American Vacuum Society International Symposium and Exhibition in Portland, Oregon, November 5-10, 2023
- Electron Dynamics Across Solvation and Bio-molecular Systems at 4th DEA Club Meeting, Potsdam, Germany June 19-21, 2024
- Positronium in Medicine at 5th Jagiellonian Symposium on Advances in Particle Physics and Medicine (JS:2024), Jagiellonian University, Kraków, Poland June 29 -July 7, 2024
- Atomic Collisions: Fundamental Processes & Applications at 27th International Conference on the Application of Accelerators in Research and Industry (CAARI) and the 55th Symposium of Northeastern Accelerator Personnel (SNEAP), Fort Worth, TX July 21-26, 2024
- Radiation-Induced Effects in Biological Systems at 4th International Conference on Ionizing Processes (ICIP 2024), University of Notre Dame, Notre Dame, IN, August 11-15, 2024

UNIVERSITY SERVICE

	SERVICE
	University:
2024	Notre Dame Energy Search Committee member
2023, 2024	Nomination Committee for Barry Goldwater Scholarship and Excellence in
	Education Foundation ND Learning's Kaneb Center Faculty Fellow
2019-2020	Dean of Science Review Committee Member
2019	University council for Academic Technologies, College of Science Representative
2018-2022	Valedictorian Selection Committee
2017-2022	Faculty Senator, Dept. Phys. Representative
2016-present	Steering committee member for the International PhD Program in Science between
	Università Cattolica del Sacro Cuore, Katholieke Universiteit Leuven, University
	of Notre Dame du Lac and Pontificia Universidad Católica de Chile
2016/2017	Campus Life Council
2012-2015	Faculty Senator, at large
	College:
2017-present	Biophysics graduate program Steering Committee
2015-2019	Elected member of College of Science Council
2015-2020	College of Science Biophysics Committee Member
2016-2018	Virtuous Scientist Science Working Group
	Department of Physics and Astronomy:
2024-present	Director of Graduate Admissions
2019-2021	Colloquium Committee

2018-2019	Demonstrations & Instructional Labs
2016-present	Graduate Admission
2015-2018	Strategic Planning/Departmental Review
2011-2014,	Safety Committee Member
2016-2021	
2010-2016,	Graduate Recruitment Committee Member
2022-2024	
2012-2014	Undergraduate Research Committee Member
2011-2013	Research Services

	Radiation Laboratory
2011-2021	Safety Committee
2014-2018	Seminar Organizers

Other:

2011-2016, Panelist of International Teaching Assistant Workshop organized by KANEB

2018

OUTREACH

- Radiation Laboratory tours and seminars for undergraduate students and campus visitors
- Notre Dame Department of Physics and Astronomy representative at Conference for Undergraduate Women in Physics (CUWiP 2024)
- "Lunch'n'Learn" seminar (ND, 2011)
- Notre Dame Department of Physics representative at Physics Congress (PhysCon 2012, Orlando Florida)
- Lunch Discussion Leader ("Mentoring Undergraduate Students) and resume and CV reviewer at the AWIS Women in Science Conference on October 1, 2016 Notre Dame
- Women in Physics Lunch on October 5, 2016, Department of Physics, Notre Dame
- "Plasma: From Lightning to Medical Applications" as part of the Our Universe Revealed: Physics for Everyone lecture series, Notre Dame, IN, September 27, 2016
- Judge in the Northern Indiana Regional Science and Engineering Fair (2012-2015, 2017-2018)
- Notre Dame Department of Physics representative at the Society of Black Physicists meeting (2017)
- Panelists on discussion about Self-Reflection as a Pathway to Improve Teaching organized by Notre Dame Learning, Kaneb Center (2020)
- Advisor for Notre Dame Polish Club Kielbasa (from 2021)
- Panelist "Insights on the Publication Process From Notre Dame Faculty: Journal Editors" Notre Dame Colleges of Science and Engineering, September 12, 2023