

Selected Refereed Journal Papers

Chernov, A.A., **Krishtopa, L.G.**, Korobeinichev, O.P., and Krasnoperov, L.N., "Kinetics, Products and Mechanism of Destruction of Ethane in Corona Discharge: Experiment and Modeling," submitted to *Journal of Physical Chemistry A*, 2003.

Krishtopa, L.G., and Krasnoperov, L.N., "Destruction of Isotopically Enriched Nitric Oxide, $^{15}\text{N}^{18}\text{O}$ in Air in Corona Discharge: Direct Observation of NO_x Reduction to Molecular Nitrogen," *Journal of Advanced Oxidation Technologies*, 2003, 1(6), 30-34.

Chernov, A.A., **Krishtopa, L.G.**, Korobeinichev, O.P., and Krasnoperov, L.N., "Kinetics, Products and Mechanism of Destruction of Ethane in Corona Discharge," *Journal of Advanced Oxidation Technologies*, 2003, 1(6), 23-29.

Glebov, E., **Krishtopa, L.G.**, Stepanov, V., and Krasnoperov, L.N., "Kinetics of a Diels-Alder Reaction of Maleic Anhydride and Isoprene in Supercritical CO₂," *J. Physical Chemistry A*, 2001, Vol. 105, 41, 9427-9435.

Glebov, E., Li, Y., **Krishtopa, L.G.**, Usov, O., and Krasnoperov, L.N., "Coating of Metal Powders with Polymers in Supercritical Carbon Dioxide," *Industrial & Engineering Chemistry Research J.*, 2001, 40, 4058-4068.

Krasnoperov, L.N., **Krishtopa, L.G.**, and Bozzelli, J.W., "Study of Volatile Organic Compounds Destruction by Dielectric Barrier Corona Discharge," *Journal of Advanced Oxidation Technologies*, 1997, 1(3), 1-9.

Published Reports

Krasnoperov, L.N., **Krishtopa, L.G.**, Baltzis B.C., "Development of a Hybrid Technology Based on Biofiltration and Corona Discharge," Final Report, September 30, 1999, HSMRC (BISM-52), 53 p.

Krasnoperov, L.N., **Krishtopa, L.G.**, "NJIT Sustainable Green Manufacturing Project, Research Task 3: Coating and Removal Research and Engineering, Subtask R3-6. Supercritical Fluid Process / Synthesis / Recovery", Final Report, September 25, 1998, 27 p.

Krasnoperov, L.N., **Krishtopa, L.G.**, "Development of Low-Energy Corona Discharge Technology for VOCs, NO_x and SO_x Destruction," Final Report, September 30, 1997, HSMRC, 104 p.

Selected Presentations/Publications

Krishtopa, L.G., and Krasnoperov, L.N., "Destruction of Isotopically Enriched Nitric Oxide, $^{15}\text{N}^{18}\text{O}$: Direct Observation of NO_x Reduction and Separation of NO_x Destruction and Formation in Corona Discharge," *Proceedings of The Third International Symposium on Nonthermal Plasma Technology for Pollution Control (ISNPT-3)*, Republic of Korea, April-23-27, 2001, pp. 125-129.

Krasnoperov, L.N., and **Krishtopa, L.G.**, "Kinetic Study on the Destruction of Hydrocarbons, NO_x and SO_x in Dielectric Barrier Discharge"- *Proceedings of The Third International Symposium on Nonthermal Plasma Technology for Pollution Control (ISNPT-3)*, Republic of Korea, April-23-27, 2001, pp. 18-23.

Chernov, A.A., **Krishtopa, L.G.**, Korobeinichev, O.P., and Krasnoperov, L.N., "Kinetics, Products and Mechanism of Destruction of Ethane in Corona Discharge: Experiment and Modeling," *Proceedings of The Third International Symposium on Nonthermal Plasma Technology for Pollution Control (ISNPT-3)*, Republic of Korea, April-23-27, 2001, pp. 192-196.

Glebov, E., Stepanov, V., **Krishtopa, L.G.**, and Krasnoperov, L.N., "Kinetics of a Diels-Alder Reaction of Isoprene with Maleic Anhydride in Supercritical Carbon Dioxide," *Abstracts, 16th International Symposium on Gas Kinetics*, Cambridge, U.K., 2000, July 23-27, p. PE14.

Krishtopa, L.G., and Krasnoperov, L.N., "Kinetics and Mechanism of Transformation of Nitrogen Oxides and Organic Compounds in Corona Discharge," *Abstracts, 32nd Middle Atlantic Regional American Chemical Society Meeting*, Madison, New Jersey, 1999, May 17-19, p. 62.

Krishtopa, L.G., and Krasnoperov, L.N., "NO_x Destruction in Air and Nitrogen by Dielectric Barrier Corona Discharge," Plasma Exhaust Aftertreatment (SP-1395): *Proceedings, International Fall Fuels and Lubricants Meeting*, San Francisco, California, 1998, Oct. 19 - 22, pp. 67-72, (SAE Technical Paper Series, #982510, 5 p).

Krishtopa, L. G., and Krasnoperov, L. N. "NO_x Destruction in Air and Nitrogen Streams by Dielectric Barrier Corona Discharge," *Book of Extended Abstracts, American Chemical Society National Meeting, Symposium: Reduction of NO_x and SO_x from Combustion Sources*, Las Vegas, 1997, Sept. 7-11.

Krishtopa, L.G., and Krasnoperov, L.N., "Kinetic Study of NO_x Destruction in Air and Nitrogen by Dielectric Barrier Corona Discharge," *Book of Abstracts, 4th International Conference on Chemical Kinetics*, Gaithersburg, Maryland, 1997, July 14-18, C 32, pp. 61-62.

Krasnoperov, L.N., **Krishtopa, L.G.**, and Bozzelli, J.W., "Kinetic Study of NO_x and VOC Destruction by Dielectric Barrier Corona Discharge," *Proceedings, Second International Symposium on Environmental Applications of Advanced Oxidation Technologies*, San Francisco, California, 1996, Feb. 28 - Mar. 1, Proceedings: Electric Power Research Institute, 1997, Section 5, pp. 1-17.

Krishtopa, L.G., and Krasnoperov, L.N., "Removal of NO_x from Air Streams by Corona Discharge," *Proceedings, Second International Symposium on Environmental Applications of Advanced Oxidation Technologies*, San Francisco, California, 1996, Feb. 28 - Mar. 1, 1996, Section 5, pp. 150-161.

Krasnoperov, L.N., **Krishtopa, L.G.**, and Bozzelli, J.W., "Study of Volatile Organic Compound Destruction by Dielectric Barrier Corona Discharge," *Proceedings, International Symposium on Environmental Technologies: Plasma Systems*, Atlanta, Georgia, 1995, Oct. 8-11, Vol. 2, pp. 583-595.

Krasnoperov, L.N., **Krishtopa, L.G.**, and Bozzelli, J.W., "Study of Volatile Organic Compound Destruction in Corona Destruction Plasma Reactor," *Abstracts, 13th International Symposium on Gas Kinetics*, Dublin, Ireland, 1994, Sept. 11-16, F4, pp. 384-386.

Krasnoperov, L.N., **Krishtopa, L.G.**, and Bozzelli, J.W., "Study of Destruction of Organic Compounds by Corona Discharge," *Book of Extended Abstracts, 208th American Chemical Society National Meeting*, Washington, D.C., 1994, Aug. 21-26, pp. 26-29.