Patent in Non-Thermal Plasma Technology

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Recently, a patent for a segmented electrode capillary discharge, non-thermal plasma apparatus and the process for promoting chemical reactions (plasma reactor) was awarded to Dr. Christos Christodoulatos, director the Center for Environmental Systems at Stevens; Dr. Erich Kunhardt, dean of Stevens' School of Sciences and Arts; Dr. George Korfiatis, dean of Stevens' School of Engineering; and Richard Crowe, a technologist and Stevens graduate alumnus (1999) of the Executive Master's in Technology Management program.

"This is an excellent example of a building block of the Technogenesis® environment at Stevens," commented Dean Korfiatis. "Interdisciplinary collaboration in the lab, with the purpose of creating new technologies that benefit society, is the focus for the Institute, both in the lab and the classroom. And we are seeing great results."

The Stevens plasma reactor is more energy efficient than conventional devices and does not require a carrier gas to remain stable at atmospheric pressure. It has a wide range of application, such as the destruction of pollutants in a fluid, the generation of ozone, the pretreatment of air for modifying or improving combustion, the destruction of various organic compounds, and surface cleaning of objects.

This particular Stevens' non-thermal plasma technology, or NTP, forms the basis of commercial applications licensed to the Stevens Technogenesis spin-out company PlasmaSol Corp.

Source: Stevens Institute of Technology