

11th International Symposium on High Pressure, Low Temperature Plasma Chemistry (HAKONE XI)

The 11th International Symposium on High Pressure, Low Temperature Plasma Chemistry (HAKONE XI) was held on Oléron Island, France, from September 7th to 12th, 2008, organized by the LAPLACE laboratory of the University of Toulouse. This specialized biannual conference derives its name from the small resort area Hakone in Japan where it was first organized in 1987. It is purposely kept small with no parallel sessions and preferentially meets in remote locations to stimulate scientific discussion. This year we had 117 contributions and 130 participants from 26 countries. The next meeting, HAKONE XII, will be organized in 2010 in the High Tatra Mountains in Slovakia.

Since the first conference, which was mainly devoted to ozone generation and NO_x formation in corona discharges (CDs) and in dielectric barrier discharges (DBDs) a number of new applications have evolved: DBD excited CO_2 lasers, excimer lamps emitting UV and VUV radiation and fluorescent lamps based on excimer radiation, flat plasma display panels, pollution control, surface modification and thin film deposition.

This symposium showed again that the field is still very active. New results were presented on a better understanding, the numerical modeling and the control of various discharge mechanisms: filamentary, regularly patterned or homogeneous DBDs, streamer formation and propagation. Various discharge types are investigated: special co-planar DBD arrangements, microplasma devices, pulsed coronas, gliding arc discharges, atmospheric-pressure plasma jets and electron beam generated plasmas.

The prospect of generating reactive non-equilibrium (cold) plasmas at atmospheric pressure without using expensive vacuum equipment has stimulated investigations in new fields: plasma sterilization and decontamination, biomedical applications, flow control in aeronautical applications. This special *Eur. Phys. J. Appl. Phys.* issue contains the 5 invited talks by leading experts in the field and a selection of contributed papers. All papers are available in the two-volume conference proceedings and on a CD distributed to all participants. More details about this Hakone Symposium, the main topics and the complete scientific program can be found in: <http://www.hakone11.univ-tlse.fr/>.

Nicolas Gherardi, Local Organizing Committee
Ulrich Kogelschatz, International Scientific & Organizing Committee
HAKONE XI Chairmen