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CIP 2007 – Bilan

The 11th International Colloquium on Plasma Processes (CIP – 2007) took place from June 4th to 8th 2007 in Toulouse, France. The colloquium was paired with the Annual Vacuum Exposition of the French Vacuum Society. The organizing committee was pleasantly surprised by the unusually high attendance, consisting of 196 participants, of which half originated from France and half from approximately twenty other countries throughout Europe, Asia, and North Africa. The tremendous increase in participation in comparison with previous CIP gatherings may be attributed to three factors: the level of local participation from the Laplace Institute of Toulouse, the increase level of development in bio medical research and finally the development of nanotechnology through plasma processes.

The high level of student participation reflects the elevated interest of young people in the science and technology of plasma processes, as well as the employment possibilities that exist therein.

Before the colloquium, (June 3–4) three half-day courses were offered by specialists in their fields: "*Discharge Physics* (*Energy Deposition*, *Reactivity*)" by **A. Rousseau** (LPGP-Orsay), "*Optical Diagnostics of Plasma Reactors*" by **A. Ricard** (CPAT-Toulouse), "*PVD Processes for Metallurgical Applications*" by **A. Billard** (LSGS – Nancy), "*Deposition of Thin Inorganic Films by PECVD*" by **A. Granier** (LPCM-Nantes), "*Plasma Etching for Microelectronics and Microtechnology*" by **C. Cardinaud** (LPCM-Nantes) and "*Plasma Treatment of Polymeric Surfaces for Adhesive or Bio-adhesive Materials*" by **F. Poncin-Epaillard** (LPCI-Le Mans).

The colloquium was organised as two parallel sessions, with invited presentations by leading international researchers, oral presentations, as well as posters sessions.

Accompanying the presentations, some papers were submitted for publication in EPJ-AP. These submissions were peer-reviewed according to the usual procedure and the selected papers are presented in this special issue of the journal.

Invited speakers:
Microwave plasmas at atmospheric pressure: theoretical insight and applications in surface treatment, T. Belmonte (Nancy, FR)
Ion sources for space propulsion: J.-P. Bœuf (Toulouse, FR)
Cryo-etching of silicon for MEMS and microelectronic components: R. Dussart (Orleans FR)
Plasma processes for medicine, biology and biomaterials: P. Favia (Bari, IT)
The use of high power impulse magnetron sputtering for improved thin film depositions, U. Helmersson (Linköping, SW)
Plasma assisted atomic layer deposition for 3D integration, E. Kessels (Eindhoven NL)
Adaptive nanocomposite coatings designed to provide lubrication throughout a broad temperature range and over multiple thermal cycles, C. Muratore (Air Force Research Lab., Dayton US)
Mass sensitive immunosensors by plasma polymerisation technique: M. Mutlu (Ankara, Turkey)
Microplasmas: physics and applications: V.Puech (Orsay, FR)
Applications of plasma polymers in life science and medicine, R. D. Short (Mawson Lakes Australia)
Cold gas plasma therapy: wound care and non-inflammatory tissue treatment, E.Stoffels (Eindhoven NL)
Investigation of fundamental mechanisms of plasma sterilisation using beam experiments, A. von Keudell (Bochum DE)
At the end of the conference, three student prizes were awarded to E. Despiau-Pujo from LPTP (Palaiseau FR), to Ismail Guesmi from LPGP (Orsay FR) and to Marcio Mafra (Nancy FR / Porto Allegre Brasil)

Gilbert Legeay
Chairman

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