Editorial

The JENI 9 meeting (Journées d'Etudes sur les Nitrures—30–31 March, 1993) dedicated to Professor Michel Billy was organized at the Faculty of Sciences of Limoges by the 'Laboratoire de Matériaux Céramiques et Traitements de Surface' and the 'Groupe Français de la Céramique', a French branch of the European Ceramic Society.

During the last 30 years an impressive number of studies has been devoted to structural ceramics and especially to nitride-based materials (Si₃N₄, SiAlON, SiCN, AlN). Although the industrial applications are still limited, the fabrication of mechanical parts, electronic devices or substrates has now begun. The requirements that exist for continued improvement in the performance of these ceramics underline the need for international exchange of information between engineers and researchers in order to focus activity on the essential issues.

The main topics developed during the meeting concerned: structural studies of new compounds; powder synthesis (processes, nanostructures, characterization); sintering (microstructural development, grain boundaries); new glasses; ceramic-ceramic composites; CVD or plasma CVD coatings; oxidation/corrosion; thermal and mechanical properties at low and at high temperatures, applications.

The objective of this symposium (80 participants) was to present and discuss the recent advances in the field of nitrogen ceramics in terms of both processing and characterization with particular encouragement given to the participation of graduate students. The participants from industry or research laboratories in Europe (France, England, Ireland, Germany, Italy, Spain, The Netherlands) presented 42 contributions which were an impressive confirmation of the vitality of research in these scientific areas.

A selection of the contributions presented at the symposium is published in this special issue of the Journal.

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