Preface

Electro-active materials are presently experiencing a considerable industrial growth towards very large scale productions and disseminated applications. On a societal point of view, these materials allow to reduce pollution (fuel injection in cars), to save energy (optimised actuators, motors, acoustic filters and transformers), to increase the reliability and life duration of components (adaptive or smart structures), and at the end to improve the quality of life (active noise cancellation, medical non invasive therapy...). But they can also be at the origin of a pollution (i.e. by lead in piezoelectric ceramics) at the end-of life of the devices.

The aim of this scientific workshop is to analyse the advantages and drawbacks of these new technologies and to propose innovative solutions for taking up the challenge of the future generations needs, without add to the environmental load.

The Meeting, which took place in the abbey of Vaux de Cernay near Paris, was supported by the European Commission within the POLECER network of expertise, within the "Growth Program" of the 5th EU framework.

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