



**Coordination action (CA) proposal in FET Proactive  
(or)  
ERANET Plus action proposal in FET Proactive**

**ICT Call 10  
FP7-ICT-2013-10**



**EUPHONON for  
Building a European NanoPhonics Community**



**EUPHONON**

<b>Participant no. *</b>	<b>Participant organisation name</b>	<b>Part. short name</b>	<b>Country</b>
1 (Coordinator)	Centre National de la Recherche Scientifique	CNRS	FR
2	Fundacio Privada Institut Catalan de Nanotecnologia	ICN	ES
3	VTT	VTT	FI
4	Université du Maine	UMaine	FR
5	Max Planck Institute	MPG	DE
6	Universty of Konstanz	UKon	DE
7	Fundacion Phantoms	PH	ES

**U. du Maine : Institut des Molécules et Matériaux du Mans, UMR CNRS 6283 :  
Groupe DPMC : G. Vaudel, T. Pezeril, V. Gusev, P. Ruello.**

**Proposal abstract**

The aim of this project is to amalgamate the existing and future activities on phonon science and technology in Europe to establish a strong community in this emerging research field. The impact of EUPHONON will extend from academia to ICT-related industry by providing means for thermal management, optimisation of data handling and, in longer term, new methods for material characterisation and new paradigms for information processing. EUPHONON will set the definition for the phononics science and manifest the crucial goals in solid state physics, nanoelectronics and in bioscience in which the role of phonons has been overlooked. EUPHONON will create intimate collaboration between the various research fields, including theory, modelling, computation, information technologies and experimental science. A position paper on the importance and role of phonons will be one of the main outcomes of the project together with a research agenda, which could become the basis to guide, advance and prioritise the foci of the research resources in this field.