

3rd CORNET Call for Collective Research Proposals

--- Project Idea ---

Subject:	Nextplastics (Umbrella Project) New Properties and Functionalities to Plastics and Plastic made Products. Integration of electronic devices and properties.
Coordinator:	CENTIMFE –Technological Center for the Mouldmaking Special Tooling and Plastic Industries
Other applicant(s):	Universities and R&D Institutions, Polymers producers, Engineers and Designers of New Products, Embedded Electronics Industry, Software Developers, Manufacturers of Plastic Products/Equipments and Mould makers.
Sector/target group:	Manufacturers of Plastic Products/Equipments both for industrial and home/general usage.
Proposal summary:	<p>Using newer lower power and lower cost Electronic Devices and Technologies, and new standardized Wireless Communications Devices, develop new products and applications to plastics products. The overall objective is to make devices in plastics that will be autonomous, intelligent and self-sustained, as they will be capable of produce the energy they need or use long-life power devices, and be able to communicate wirelessly with others. There will be no need to use any cable. The applications are enormous both for domestic devices, home and industry. The concept would be close to Smart Objects when a small size and level is considered but not limited.</p> <p>This project should be very production minded oriented, meaning that some technologies/know-how should be made available to be used by Manufacturers on commercial products, on a reasonable schedule, despite continued research and development.</p> <p>ElectronicsPlastics</p> <p>Project that aims to assign Electronic properties and functionalities to (small) Plastic parts or devices. The technologies to be used should consider either Embedding Electronic Devices or making plastic parts with Electronic properties by Printing Electronics components within plastics. Each part or module may be more or less complex, having their own functionalities, CPU, I/O, Communications or less capable, and function as parts or modules that may be plugged to others</p> <p>EmpoweredPlastics</p> <p>Project that aims to provide low current and low power to energize small electronic devices with low energy needs. The items to consider will include renewable or alternative energies such as of environment light and wind power, induction energy, fuel batteries and others. It is expected to obtain small plastic devices that generate and accumulate energy that may exist as individual parts or modules that may be plugged to other devices and provide them energy.</p>

	<p>SoftPlastics</p> <p>Develop software to control the net of a mesh of electronic devices such as home electro-domestic devices, automation, industrial, and newer plastic based electronic and communications enabled devices and to create an open interface to connect to existent software.</p>
Advantages for trade and industry:	<p>New kind of products wide usage and enormous potential of sale. Applicable to Home, Building, Toys, Industrial, Surveillance, Electric/electronic goods, ...</p>
Dissemination concepts:	
Profile of additional partners:	<p>Universities and R&D Institutions, Polymers producers, Engineers and Designers of New Products, Embedded Electronics Industry, Software Developers, Manufacturers of Plastic Products/Equipments and Mould makers.</p>
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