

Brève EuCheMS 10#01

Objet : Euchems EU policy development update: FP7 opportunities

Please contact Catherine Feore, EuCheMS Policy Development Manager, if you are interested in receiving further information on the following Commission Work Programmes - e-mail: catherine.feore@chemistryeurope.eu

Food, Agriculture and Fisheries and Biotechnology

At a recent meeting some of the opportunities within the next work programme were highlighted. Actions include, Activity 2.3 Life Sciences, biotechnology and biochemistry for sustainable non-food products and processes, which is subdivided into : Novel sources of biomass and bioproducts; Plant photosynthetic efficiency: from C3 towards C4 system; Perennial grasses: optimisation of biomass production; Marine and fresh water biotechnology (Blue biotechnology); Marine biotechnology ERA-NET preparatory action; Industrial biotechnology: novel high added-value bio-products and bio-processes; Biocatalysis for chiral compounds; Cellular, metabolic and genetic engineering for novel compounds; Biorefinery; BioWASTE - Novel biotechnology approaches for transforming industrial and/or municipal biowaste into bioproducts; Towards bio-industry - Biotechnology for renewable chemicals and innovative downstream processes.

Energy

There are several potential opportunities for chemists within this programme. To give a flavour of some of the areas of activity. Some areas are : Development and demonstration of standardized building components; thermal energy storage for CSP plants; Advanced heat transfer fluids for CSP technology; development of new or improved standardised sustainable bio-energy carriers; Materials for thermal storage systems; high-efficiency post-combustion solvent-based capture processes; optimising the integration of CO₂ capture into power plants.

Health

There are several potential opportunities for chemists within this programme. One of the main areas of interest is Biotechnology, one objective is to catalyse progress in developing new research tools for modern biology including fundamental genomics that will significantly enhance data generation and improve data and specimen (bio-banks) standardisation, acquisition and analysis. The focus will be on new technologies for: sequencing; gene expression, genotyping and phenotyping; structural and functional genomics; bioinformatics and systems biology. Other areas include : SME-targeted research for developing tools and technologies for high-throughput research; genome-based biomarkers for patient stratification and pharmacogenomic strategies; and, the development of innovative regenerative therapies and their application.