

## **BILATERAL S&T COOPERATION BETWEEN**





AND



## UNDER THE GENERAL COOPERATION AGREEMENT FOR SCIENTIFIC RESEARCH BETWEEN THE INSTITUTUL DE FIZICĂ ATOMICĂ (IFA), ROMANIA AND THE COMMISSARIAT À L'ENERGIE ATOMIQUE ET ENERGIES ALTERNATIVES (CEA) FRANCE

## 2<sup>nd</sup> JOINT SYMPOSIUM

17-18 October 2012, Magurele (IFA Council Room), Romania

The Symposium is dedicated to the progress of the running projects funded under the IFA-CEA General Agreement for Scientific Research, the presentation of the obtained results and the perspectives of the collaborations.

The program of the event includes also two invited lectures, an invited presentation, visits in the laboratories on the Magurele Physics Platform, announcements and information about the 3<sup>nd</sup> CEA-IFA Call launched on 1<sup>st</sup> of October 2012 and discussions.

The Symposium can be attended by all scientists/people interested in the cooperation between Romanian research institutions and CEA units.

Preliminary program of the Symposium:

## October 17, 2012

09.00-09.30	Opening of the Symposium		
09.30-10.15	Invited lecture: CEA involvement in French laser Science,		
	J-P. Duraud, CEA		
10.15-11.00	Invited lecture: Status of the ELI-NP project,		
	Gh. Cata-Danil, University "Politehnica" Bucharest		
11.00-11.20	Coffee break		
11.20-13.00	Project presentations (first 5 projects)		
	C1-01: Photosensitive azopolymers for biological applications		
	C1-02: Study of the influence of forced and natural convection on impurity		
	segregation and coating stability in the ingot growth of		
	multicristalline Silicon for photovoltaic applications		
	C1-03: Numerical Simulations for Radioactive Waste Disposal		
	C1-04: Electrochemical study of iron monosulfide dissolution		
	C1-06: Efficient Handling and Processing of PetaByte-Scale Data for		
	the Grid Centers within the FR Cloud		
13.00-14.00	Lunch break		

14.00-15.20	Project p C1-07: C1-08: C1-09: C2-09:	TiO <sub>2</sub> -based nanoparticles for applications in photovoltaic cells or bactericide elements  Ferroelectric and diluted magnetic semiconductor based multiferroic heterostructures for energy applications  Investigation of metal-ferroelectric interface at macro and nanoscale Study of new physics cases and preparation of SPIRAL2 experiments using the PARIS array	
15.20-15.40	Coffee break		
15.40-17.00	Project p C2-08:	Actinides and Heavy Metals interactions on proteins and their Biosensing Incorporated surface plasmons into core-shell fluorescent	
	C2-01:	nanoparticles using microemulsion assisted photoreduction technique Development of innovative binders for the stabilization / solidification of low- or intermediate-level radioactive wastes containing aluminium Functional surfaces obtained by electroplating of nano – sized	
		dispersed ceramic phases with metals for use in the nuclear industry to increase the corrosion and tribocorrosion resistance	
17.00-19.00	Visits in laboratories, discussions		
October 18, 2012			
09.00-09.30	<i>Invited presentation:</i> The WEST project: the Tore Supra upgrade as a full actively cooled tungsten divertor machine, C. Grisolia, CEA		
09.30-10.10	=	Plasma and Laser Processing of Powders for Nuclear Applications AMS analyses of concentrations of hydrogen isotopes and other elements in tiles dismounted from the Toroidal Pump Limiter at Tore Supra Tokamak	
10.10-10.30	Coffee break		
10.30-11.10	Project p C2-05:	cresentations (last 2 projects)  Creation of national standards for some emerging pharmaceutical radionuclides to ensure the radioprotection of patients and medical staffs	
	C2-06:	Development and characterization of solid apatite matrices capable of storing inorganic pollutants: structure and adsorption processes	
11.10-11.30	Closing discussions		

Further information available on the web site <a href="www.ifa-mg.ro/cea">www.ifa-mg.ro/cea</a>.