Marie Curie Actions

Nano²fun

Initial Training Network

Nanochemistry of molecular materials for 2-photon functional applications

Starting: September 1, 2013
Closing: August 31, 2017
Funds > 3.6 Million Euro

PEOPLE

MARIE CURIE ACTIONS

Initial Training Network

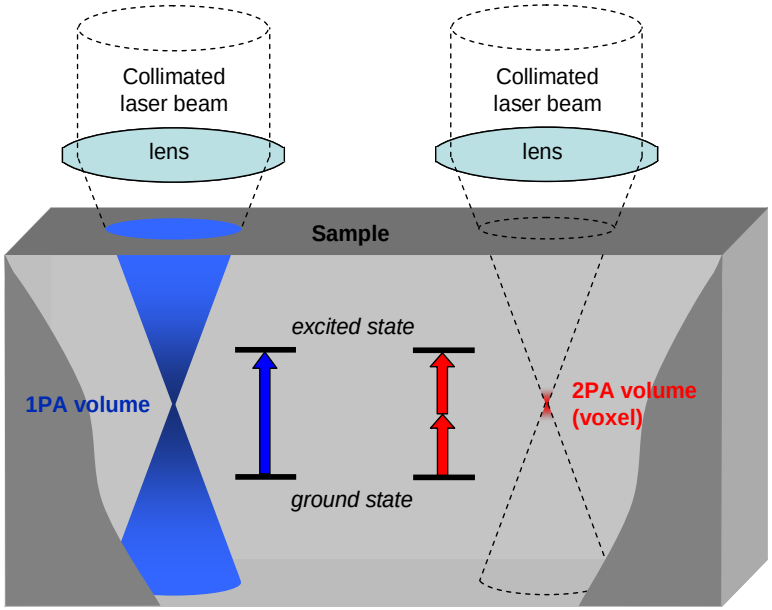
Education through Research

Nanochemistry of molecular materials for 2-photon functional applications

Flag-words:

- Technological development through research
- Knowledge transfer

2-photon absorption (2PA) initiated processes

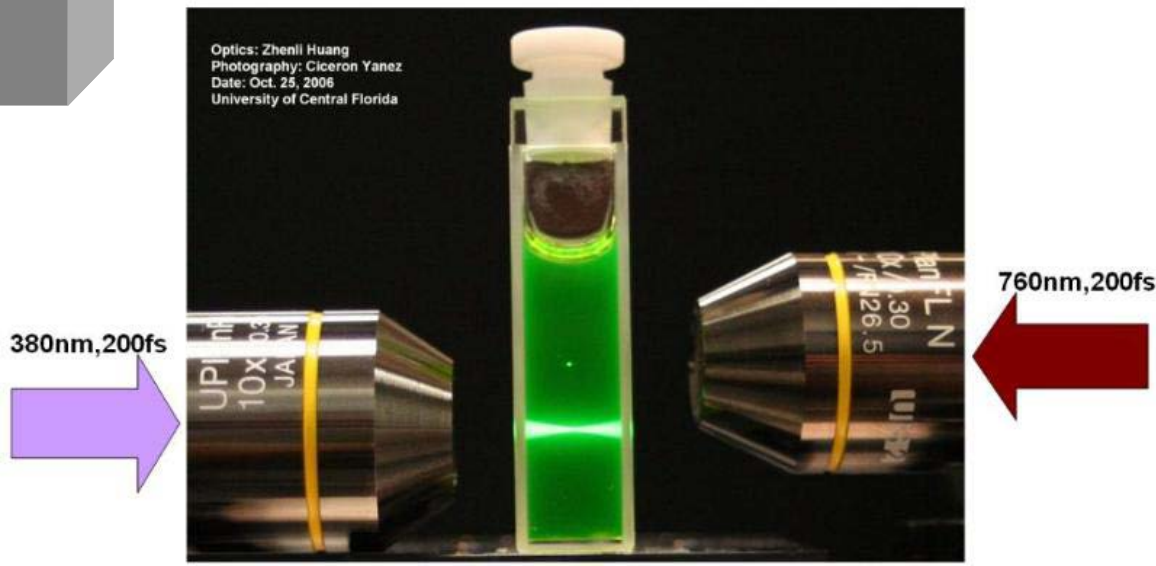


- superlinear dependence of the 2PA process on light intensity
- 2PA-initiated processes are confined in the focus of a laser beam.

voxel

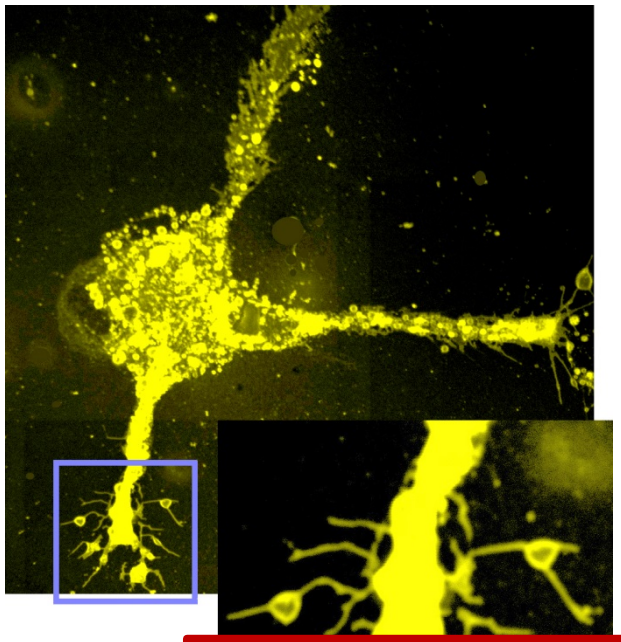
elementary volume unit ~ 0.001 μm^3

3D resolution

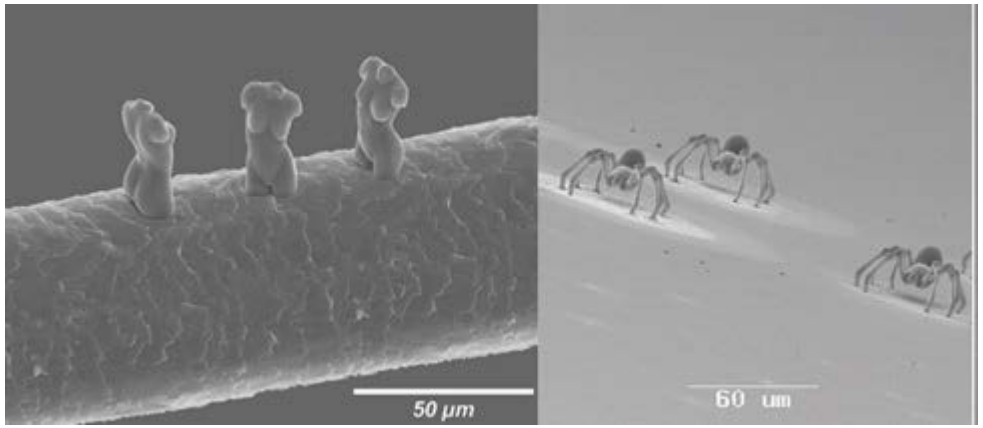


Applications: *from basic research to the market*

Two Photon Microscopy



Two Photon Polymerization



Nano2Fun

chemical & photophysical control
of 2PM & 2PP processes at the nanoscale

workpackages

WP1. Training program
- Network wide training
- Institutional training
- Secondment program

WP2. Planning a scientific career
- Complementary skills
- Secondemnts @ private sector
- Doctors @ industry days

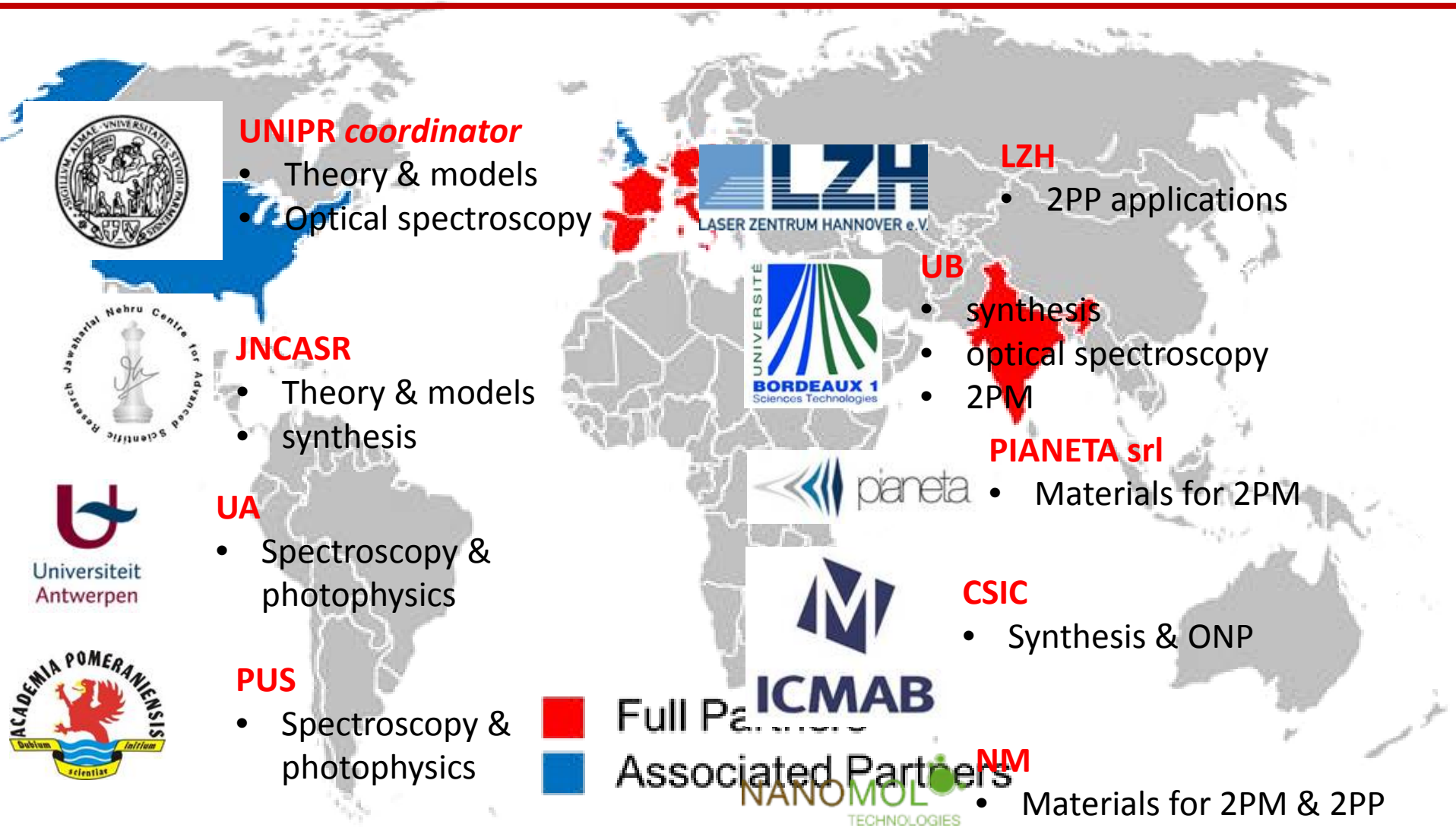
WP3. Enabling Knowledge
- Molecular & supramolecular synthesis
- Optical spectroscopy & photophysis
- Theory & models

WP4. 2-photon microscopy
- Optimized dyes & ONP
- STED-2PM

WP5. 2-photon polymerization
- Optimized initiators & resists
- STED-2PP

WP6. Outreach

WP7. Managment



UNIPR *coordinator*
- Theory & models
- Optical spectroscopy

JNCASR
- Theory & models
- synthesis

UA
- Spectroscopy & photophysics

PUS
- Spectroscopy & photophysics

CB
- Computer tools for 2PM

LZH
- 2PP applications

UB
- synthesis
- optical spectroscopy
- 2PM

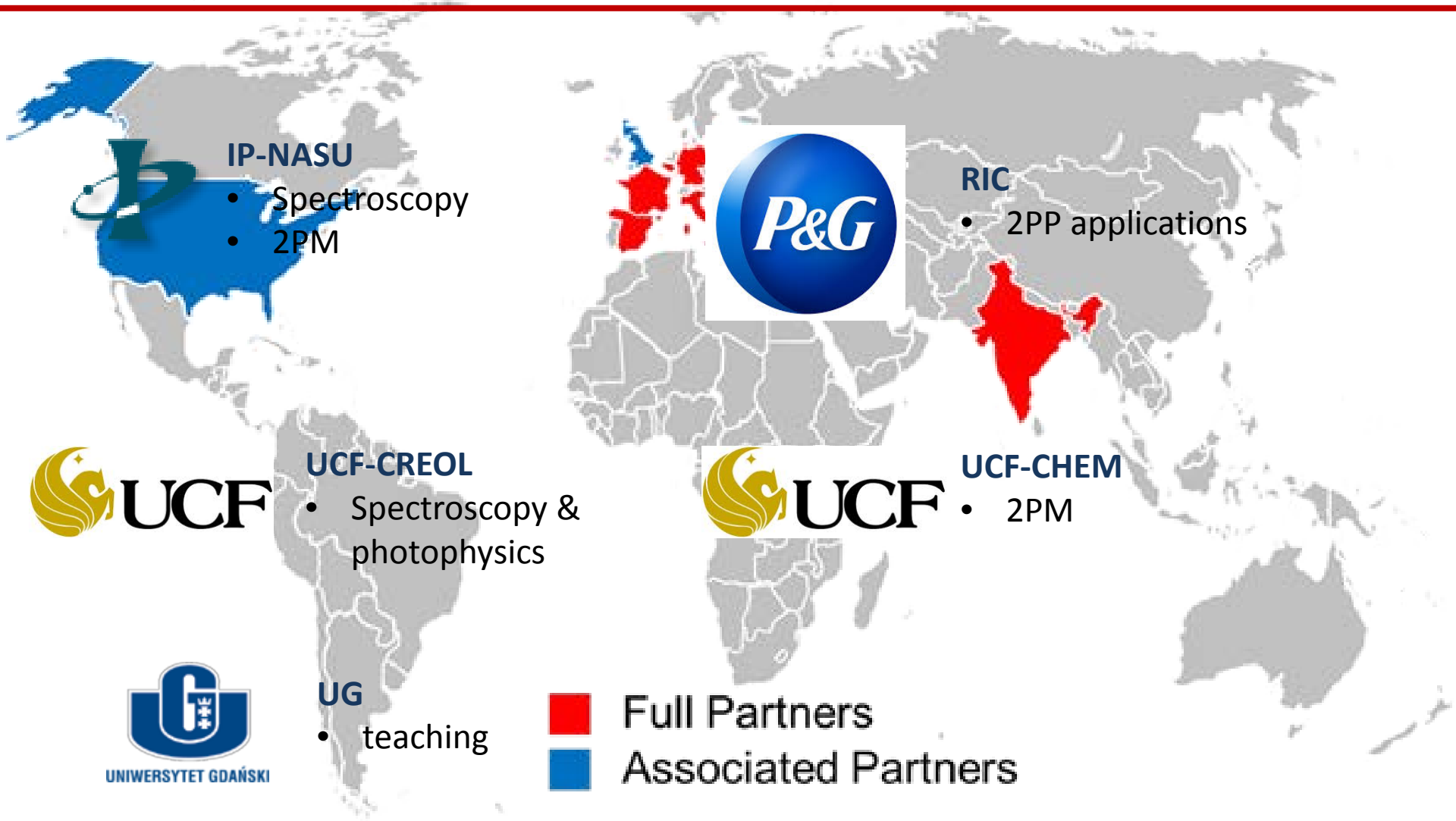
PIANETA srl
- Materials for 2PM

CSIC
- Synthesis & ONP

NM
- Materials for 2PM & 2PP

AN
- Materials for 2PM & 2PP

Full Partners
Associated Partners



IP-NASU
- Spectroscopy
- 2PM

RIC
- 2PP applications

UCF-CREOL
- Spectroscopy & photophysics

UCF-CHEM
- 2PM

UG
- teaching

Full Partners

Associated Partners

Initial Training Network

Education through Research

12 PhD students & 5 PostDoc
will work for **492 months** overall
in **advanced research laboratories**
in the **public and private sectors**

ESR	Host institution
1	UNIPR
2	UNIPR
3	UNIPR
4	LZH
5	LZH
6	UB
7	UB
8	JNCASR
9	UA
10	CSIC
11	CSIC
12	PUS

ER	Host institution
1	PIANETA
2	NM
3	CB
4	LZH
5	AN

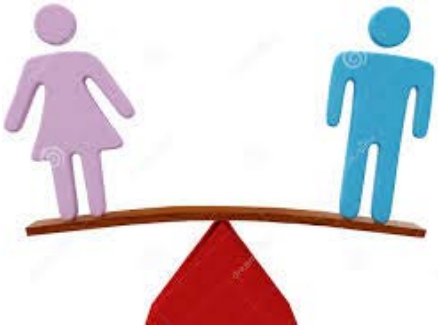
	ESR												ER					
	UNIPR			LZH		UB		JNC ASR	UA	CSIC		PUS	PIAN ETA	NM	CB	LZH	AN	Tot.
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*1*	*2*	*3*	*4*	*5*	
UNIPR						2			5		2	2						11
LZH		1					2					2		2				7
UB		2								2	2				2			8
JNCASR	8						3				2							13
UA		2						2				3						7
CSIC								6									2	8
PUS				2	2	2										2		8
PIANETA						1		1			1							3
NM	1			1														2
CB							2											2
AN									2	1								3
IP-NASU		6	6	3		3				2								20
RIC					4					1		1				4		10
UCF-CREOL			2		2				2									6
UCF-CHEM			3										2					5
Total	9	11	11	6	8	8	7	9	9	6	7	8	2	2	2	6	2	

Recruitment:

12 PhD students & 5 PostDoc

http://www.nano2fun.unipr.it/jobs.html

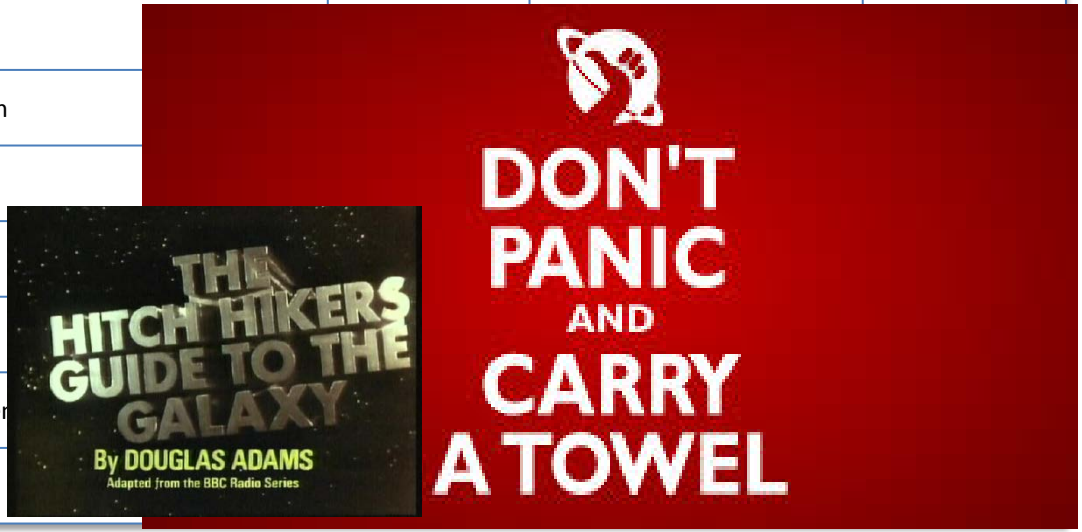
http://ec.europa.eu/euraxess/index.cfm/jobs/index



female scientists wanted

	Training events, workshops & conferences		Planned date	Planned venue
1	Kick-Off Meeting		September 2013	Parma
2	Project meeting 1		March 2014	Slupsk
3	Training day 1 Light, molecules and models			
4	Project meeting 2		September 2014	Antwerp
5	Training day 2 Photophysics & Nonlinear spectroscopy	UA		
6	Project meeting 3		March 2015	Bangalore
7	Training day 3 Communicating Science	JNCASR		
8	Project meeting 4		September 2015	Barcelona
9	Training day 4 Professional conduct & Career planning			
10	Training day 5 Doctors @ Industry	CSIC		
11	Project meeting 5			
12	Training day 6 Nanofabrication			
13	Project meeting 6			
14	Training day 7 Microscopy			
15	Project meeting 7			
16	Final Event: International Conferer			
17	Final Event: Outreach			

we are here...



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