



# COST

**Smart & Green Interfaces:  
From Single Bubbles/Drops to  
Industrial/Environmental/Biomedical Applications**

**MP1106**

**Start date: 01/06/2012**

**End date: 01/06/2016**

**Year: *Second (2013-2014)***

**Thodoris Karapantsios**

Chair

Aristotle University of Thessaloniki / Greece



# Status of Action

START date: 02/06/2013

END date: 01/06/2014

2nd Year of the Action

Number of signatories: 31 (**Lithuania** 23/5/2013, Dr Milieska, Lithuanian Energy Institute, **Sweden** 9/8/2013, Dr Sasic, Chalmers University)

Number of non-COST members: 4 (Canada, USA, N. Zealand, Australia)

Number of COST country entities (institutes, etc.) currently participating: 176

Number of non-COST entities (institutes, etc.) currently participating: 4

Number of MC Members: 55 (+ 20 substitutes)

Working Groups :

WG1: Fundamentals - 100

WG2: Materials - 99

WG3: Diagnostics - 45

WG4: Technology - 57

ESRG: - 56

# Action budget status

COST Grant budget plan	
Action no. and title: MP1106	
Grant period: 02/06/2013 – 01/06/2014	
Allocated budget: 213,418 €	
<b>A. SUMMARY BUDGET</b>	
(1) MEETINGS	€ 126981
(2) SHORT-TERM SCIENTIFIC MISSIONS	€ 25000
(3) TRAINING SCHOOLS	€ 31000
(4) PUBLICATIONS, DISSEMINATION, OUTREACH	€ 1 600
(5) OTHER	€ 1000
<b>B. TOTAL SCIENCE EXPENDITURE (sum of (1) to (4))</b>	<b>€ 185581</b>
C. Financial & Scientific Administration and Coordination ( <u>max.</u> of 15% of B.)	€ 27837
<b>D. TOTAL EXPENDITURE (B+C)</b>	<b>€ 213 418</b>

# STSM status and new applications

	Participant	Budget	Status
1	Dr Antonio Perazzo	2300	Paid
2	Dr Christophe Wylock	800	Paid
3	Ms Virginie Papadopoulou	2000	Paid
4	Mr Miguel Ángel Fernández Rodríguez	3500	Paid
5	Ms Leonor Perez Fuentes	2400	Paid
6	Mr Alexandros Askounis	800	Paid
7	Mr Federico Quinci	2100	Paid
8	Ms Marceta Brankica	2400	Paid
9	Dr Alexander Kartushinsky	850	Paid
10	Ms Zuzana Brabcova	3500	Paid
11	Mr. Vamseekrishna Ulaganathan	900	pending
12	Dr. Christopher Hamlett	1480	pending
13	Dr Konstantinos Samaras	1900	New app
		24930	



# Second Year Objectives

## Main objectives :

- (i) To coordinate the research activity among teams working on fundamental problems on Smart and Green Interfaces;
- (ii) To support and promote gender balance and the involvement of ESRs;
- (iii) To promote the dissemination of results, and the interaction with other communities;
- (iv) To organize and prepare applications for future joint training and research projects.



# Second Year Objectives

## Networking :

- (i) Provide an efficient continuation for interaction and networking both inside of the Action as well as with the external partners of the Action towards Pan-European and multidisciplinary platform to support the realization of the opportunities in the field of smart and green interfaces.
- (ii) Transfer of knowledge within the partners, exchange of persons, facilities, samples, sharing data and knowledge.
- (iii) Establish interdisciplinary links between physicists, chemists, material scientists, engineers, mathematicians for manifold approach to complex problems identified within the WGs;
- (iv) Development of appropriate specific activities for ESRs. Identify complementary coordination schemes and joint funds for young people;
- (v) Finding appropriate funding schemes for future joint projects;
- (vi) Fine tuning of the work plans for the second year of the Action's activities and – if necessary – the re-adjustment of the Action's activities as they have been foreseen in the MoU



# Second Year Objectives

## Science :

Continuing scientific activities within WG`s include:

- i. a common understanding on the fundamentals, materials, diagnostics and technology related to smart and green interfaces applied to Industrial/Environmental/Biomedical Applications.
- ii. identification of current knowledge gaps; starting of activities to detect the ways to overcome existing gaps
- iii. identification of horizontal Thematic Clusters across the four Working Groups in response to current and foreseen EU/Horizon 2020 Research Calls.



# Second Year Objectives

## Societal :

- Outreach: Update the website with multimedia information on Smart and Green Interfaces. The Website will be the main communication tool not only within the Action Members and the scientific community, but also towards the general public.
- Gender: Promote concrete responsibilities and duties within the Action to achieve gender balance
- Gender: Initiate gender related activities within the Action via the web-based forum and women in science presentations
- Gender: Promote gender balance within STSM program
- Interaction with other research programs: Identification of possible other projects /groups / Actions.





# Second Year Activities

For the second year the following Activities were anticipated:

- Management Committee Meeting and Annual MP1106 Workshop.
- Four Working Group Meetings
- Fifteen Short Term Scientific Missions
- Three Training Schools
- Dissemination (The website will be updated with job/postdoc announcements and MC meetings approved documents).

# Second Year Activities

## MC meeting & Annual Workshop 2014

The main event of the 2nd year of the Action will be the 4th MC meeting / Annual Workshop 2014 which will take place in Marseille, France, 22-24 April 2014.

## MC meeting is dedicated to:

coordination and networking activity: scientific evaluation, aimed to analyze the COST MP1106 Action scientific activities of the first and second year (output vs. objectives) and to discuss the second year scientific report and the mid-term self-evaluation report. Review the new members, STSM status and rules, fine-tune of the working plan for the upcoming 1-2 years in view of the scientific programs, milestones and deliverables for the whole duration period of the Action.

In the Memorandum of Understanding:

Self-evaluation: an Evaluation Committee comprising the Core Group, plus 3 invited external experts, plus 3 industrial representatives, plus the DC rapporteur will :

- evaluate the scientific output of the Action,
- identify the major achievements and their dissemination
- Identify possible routes to further funding.

**MC Decision** on Evaluation Committee members and procedure: max 2 pages, 1-2 experts (volunteers?) evaluate the 1<sup>st</sup> and 2<sup>nd</sup> Year Report, Endorsement by Core Group



# Second Year Activities

## Annual Workshop 2014 is dedicated to:

- presentation of scientific and technological progress of research groups
- discussion on short-, middle- and long-term activities to establish a new multidisciplinary European research community with ability to support European, national and regional efforts on appropriate smart and green interfaces will be realized as a round table discussion with the direct participation of the ESR group.
- Interaction with other COST Actions and other EU bodies for research and technology and particular for promoting Smart and Green interfaces among EU officials to include it as priority in next Horizon 2020 Research Calls.
- Organize Round Tables of the six selected Thematic Clusters of the Action with priority to set up consortia to submit proposals in forthcoming H2020 Research Calls:
  - A. Medical Diagnostics and Advanced Therapies (Coordinator: Claudio Nastruzzi)
  - B. Sustainable Food Science and Technology (Coordinator: Simeon Stoyanov)
  - C. Heat and Mass Transfer on a Solid Substrate (Coordinators: C.W.M. van der Geld and J.G.M. Kuert)
  - D. Wetting of complex surfaces (Coordinator: Tatiana Gambaryan-Roisman)
  - E. Nanomaterials and Nanotechnologies (Coordinator: Mustafa Merzoz)
  - F. Nanostructured Materials for Water Treatment/Purification (Coordinator: Vasileios Koutsos).

# Second Year Activities

## Combined WGs meetings:

### **A. Theme: Fluid/Fluid interfaces in science and technology**

Location: Sofia, Bulgaria

Date: Sept. 4-6, 2013

This theme is most popular among members as it covers the whole spectrum of WGs activities from small to large scale. The back-to-back organization with the ECIS 2013 conference ensures good visibility of the Action by the International community

### **B. Theme: Multiphase flows with/without phase change**

Location: Saragossa, Spain

Date: Oct. 3-4, 2013

This is a topic of great interest to industrial applications where several members perform high level R&D work. The meeting is meant to bridge notions between experimental and theoretical studies and allow the formation of common research strategies in the future

### **C. Theme: Wetting of solids: Material and kinetic aspects**

Location: Cargese (Corsica), France

Date: Nov. 13- 14, 2013

This is a very hot topic with important recent advancements in both fundamentals and materials. This topic has strong relevance with aspects covered by other COST Actions on materials properties and characterization and so it is an important ambassador for further networking and joint activities.

# Second Year Activities

## Training Schools:

### **A. Career development/Entrepreneurship**

Location: Thessaloniki, Greece

Date: 16-18 July 2013

This is to be organized every July for the next 3 years of the Action for a small group of ESRs (different every year). This explains the small number of trainees. This Training School was a joint event with Action MP1004 and a few participants were from that Action.

### **B. Particles at Interfaces**

Location: Bonassola, Italy

Date: 2-5, April 2014

This is dedicated to ESRs of our Action and is a Joint event with Action CM1101. Number of participants and trainers are shared equally between the two Actions.

### **C. Theme: Wetting of solids: Material and kinetic aspects**

Location: Darmstadt, Germany

Date: 5-10 May 2014

The small number of participants and trainers is because this Training School is organized as part of the respective Advanced School and so only a few seats will be available for the ESRs of the Action.

# Second Year Activities

## Core Group meeting

Location: Teleconference

Date: 13 December 2013

It is meant to organize the forthcoming 4th MC meeting & Annual Conference 2014 as well as the Training Schools in Spring 2014. It will also prepare a draft Budget/Workplan for the 3rd year of the Action

## STSMs

Considering the STSM`s as one of the most important type of activities to support ESR`s involvement and cross-sectoral co-operation at least 15 STSM`s are planned to be realized within the second year of the Action`s. They are meant to reinforce links between groups, jointly use of infrastructure and special equipments, exchange of data and knowledge serve as platform for future common research (funded projects) and academic (Ms/PhD) work.

# Outputs Planned for Year

## The following outputs were planned:

- Minutes of the Management Committee meeting (Marseille, France)
- Reports from the Working Group meetings and schools.
- Annual Status Reports from the WGs done by the WG'S Leaders, STSMs, Outreach and Gender Activities done by the responsible coordinators.
- 2nd Grant period Report including the financial, management and scientific aspects of the Action.
- Updating of the Action Website
- Scientific articles in peer reviewed international journals
- WG leaders together with the Chair and the Vice-chair have published a scientific Review article on the highly esteemed Journal *Advances in Colloid and Interface Science* (Elsevier Publishing, Latest Impact factor: 6.2, 5-year IF 8.0) which summarizes the state-of-the-art on Smart and Green interfaces.



# Budget Status of 3<sup>rd</sup> Year

- Grant Period starting on 2/6/2014 and finishing on the 01/06/2015 is **EUR 194000**
- **Provisional budget** subject to ongoing negotiation on COST H2020 Grant Agreement between the European Commission and the COST Association
- **Yearly work and budget plan**, using the new template, as soon as possible and no later than **30/05/2014**.





# Third Year Activities

## **5<sup>th</sup> MC meeting & Annual Workshop 2015**

Location: Piraeus, Greece

Date: 18-22 May 2015

# Third Year Activities

## Combined WGs/Cluster meetings:

1.

### **Nanomaterials and Nanotechnologies**

#### **Nanostructured Materials for Water Treatment/Purification**

Location: Antalya , Turkey

Date: Oct. 15-16, 2014

2.

### **Medical Diagnostics and Advanced Therapies**

#### **Sustainable Food Science and Technology**

Location: Brussels, Belgium

Date: late Oct-early Nov, 2014

3.

### **Heat and Mass Transfer on a Solid Substrate**

#### **Wetting of complex surfaces**

Location: Eindhoven, The Netherlands

Date: end Oct. 2014

# Third Year Activities

## Training Schools:

### A. Career development/Entrepreneurship **POSTPONED if REFUND (2000 Euro) is possible**

Location: Thessaloniki, Greece

Date: 15-18 July 2013

### B. Advanced Multi-physics Simulation Technology

Location: Luxembourg city, Luxembourg

Date: 24-25, Sept 2014

### C. Kinetics and wetting/spreading of complex liquids **POSTPONED**

Location: Loughborough , UK

Date: January 2015

# Third Year Activities

## Core Group meeting

Location: Teleconference

Date: December 2014

## STSMs

15 STSM's

### MC Decision:

**STSM new amounts: max 500 Euro for travel, max 160 Euro per day**

**Due to short new budget, until December 2014:**

- 1. Keep prior amounts 300 Euro for travel, max 90 Euro per day**
- 2. Only in special occasions and upon request new amounts may be considered**
- 3. Set maximum amount at 1500 Euro**



# Open issues

- Team presentations at our Action website? Links at our website?
- Significant news/events/results at our website. COST office checks for updates!
- GO for joint publications.
- Acknowledgement in publications: “ The work was conducted under the umbrella of COST MP1106 Action”
- Promote females participation.
- STSMs to ESRs for EU research proposals preparations. Senior partners for coordinators.



**Thank you for your attention**

# Update from the Grant Holder

## FP7 Grant - Intermediate Financial Report (IFR)

COST Action Number	MP1106
Period of reporting	2013-06-02 - 2014-02-26
Date of report	26 Feb 2014
Grant Budget	183,000.00 EUR

Table 1 - Eligible costs	Contract Budget EUR a	Actuals EUR b	Accruals EUR c	Total eligible EUR d=b+c	Forecast EUR e	Total EUR f=d+e	Delta EUR g=f-a
<b>A. Science Expenditure</b>							
A1. Total Meetings (*)	109,700.00	34,138.15	14,967.76	49,105.91	77,824.90	126,930.81	17,230.81
A2. Total STSMs (*)	13,000.00	3,100.00	14,050.00	17,150.00	2,500.00	19,650.00	6,650.00
A3. Total Training Schools (*)	34,200.00	11,339.51	0.00	11,339.51	19,600.05	30,939.56	-3,260.44
A4. Total Dissemination, publications (*)	1,600.00	1,040.00	0.00	1,040.00	560.00	1,600.00	0.00
A5. Total OERSA(**) (*)	631.00	0.00	0.00	0.00	0.00	0.00	-631.00
<b>Total Science Expenditure (sum: A1 to A5)</b>	<b>159,131.00</b>	<b>49,617.66</b>	<b>29,017.76</b>	<b>78,635.42</b>	<b>100,484.95</b>	<b>179,120.37</b>	<b>19,989.37</b>
<b>B. FSAC (Max. 15% of A) (***)</b>	<b>23,869.00</b>	<b>7,442.45</b>	<b>4,352.55</b>	<b>11,794.99</b>	<b>12,074.01</b>	<b>23,869.00</b>	<b>0.00</b>
<b>C. Total Eligible Costs (= A+B)</b>	<b>183,000.00</b>	<b>57,060.11</b>	<b>33,370.31</b>	<b>90,430.41</b>	<b>112,558.96</b>	<b>202,989.37</b>	<b>19,989.37</b>

Total Meetings		Paid	Accruals	Total
	Meeting 1	23324.03 EUR	0.00 EUR	23324.03 EUR ✓
	Meeting 2	10814.12 EUR	0.00 EUR	10814.12 EUR ✓
	Meeting 3	0.00 EUR	14967.76 EUR	14967.76 EUR
<b>Total</b>		<b>34138.15 EUR</b>	<b>14967.76 EUR</b>	<b>49105.91 EUR</b>

## Training Schools



# Update from the Grant Holder

## STSMs

	Participant	Budget	Status
1	Dr Antonio Perazzo	2300	Paid
2	Dr Christophe Wylock	800	Paid
3	Ms Virginie Papadopoulou	2000	Paid
4	Mr Miguel Ángel Fernández Rodríguez	3500	Paid
5	Ms Leonor Perez Fuentes	2400	Paid
6	Mr Alexandros Askounis	800	Paid
7	Mr Federico Quinci	2100	Paid
8	Ms Marceta Brankica	2400	Paid
9	Dr Alexander Kartushinsky	850	Paid
10	Ms Zuzana Brabcova	3500	Paid
11	Mr. Vamseekrishna Ulaganathan	900	pending
12	Dr. Christopher Hamlett	1800	pending
13	Dr Konstantinos Samaras	2000	New app

## Dissemination Costs

List of Paid Dissemination instruments	25350
Title	maintenance of the web-site
Type	Other
Name of the publisher	Prof. Nikolai D. Denkov
Invoice Date	2013-11-25
Amount PAID	1040.00
Additional comment	Distribution List: Website open to public
List of Dissemination instruments still to be reimbursed - Accruals	
<i>No more dissemination still to be reimbursed.</i>	



# Update from the Grant Holder

## eCost CGS - Report 1.4

Forecast - COST Action MP1106	
From	2014-02-27
To	2014-06-01
Total	100,484.95 EUR

### MEETINGS

Title	Place	Type	Start Date	End Date	Amount (EUR)
MP1106 Annual Workshop	Marseilles	Management Committee Meeting	22-04-2014	24-04-2014	77,824.90
<b>Total</b>					<b>77,824.90 EUR</b>

### STSM's

Title	Place	Start Date	End Date	Amount (EUR)
1 STSM's x 2500 EUR				2,500.00

### TRAINING SCHOOLS

Title	Place	Start Date	End Date	Amount (EUR)
Particles at Liquid Interfaces: Fundamentals and Applications	Bonassola	02-04-2014	05-04-2014	10,600.00
International Advanced Course in Liquid Interfaces, Drops and Sprays (LIDESP)	Darmstadt	06-05-2014	08-05-2014	9,000.05
<b>Total</b>				<b>19,600.05 EUR</b>

### DISSEMINATION

Title	Date	Amount (EUR)
dissemination 2nd instalment	01-06-2014	560.00
<b>Total</b>		<b>560.00 EUR</b>

### OERSA

Title	Date	Amount (EUR)
No Other Related Expenses exist for the selected forecast period.		