



cost
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IN SCIENCE AND TECHNOLOGY

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Subject | Workshop minutes annual scientific meeting “Physical requirements of Magnetic fluid hyperthermia” / MC meeting and joint WG meetings of COST Action TD1402 - Multifunctional Nanoparticles for Magnetic Hyperthermia and Indirect Radiation Therapy (RADIOMAG)

*Hotel Royal Olympic, Athens (Greece)
7th - 8th of April 2016*

1st day, 7th of April

Welcome to participants

The participants were welcomed around 9 AM by the local organisers George Loudos, Spiridon Spirou, Eleni Efthimiadou and the Action Chair Simo Spassov.

Meeting content

The meeting commenced by the presentation of first results of the SAR ring test given by Simo, followed by two invited lectures from experts in medical applications of magnetic NPs and physical principles of MFH, Prof. Urs Häfeli (Canada) and Prof. Carlos Rinaldi (USA), respectively. Both talks gave insights into the current state of the art of MFH and ERT from a different perspective.

Further talks were organised by WG1 and WG3 members giving an overview of their current research. The day closed with a clinical session during which two local clinicians, Dr. Georgios Koukourakis and Dr. Anthoula Miliadou, spotlighted the practical application of combined MFH & ERT. The round table discussion was postponed at the end of the second day.

2nd day, 8th of April

The morning of the second day was devoted to presentations of young RADIOMAG STSM grantees outlining their research done within the frame of their STSM. During the subsequent poster session, space was given for individual know-how exchange and discussion. The scientific part of the meeting closed with an invited lecture by Prof. George Kordas from the National Centre for Scientific Research “Demokritos”, Athens on the importance of magnetic MP for therapeutic cancer approaches.

The afternoon of the 2nd day dealt with the MC meeting and individual WG discussions.



MC meeting

1. Adoption of the agenda

The agenda was adopted (18 of 24 countries present). Simo added one additional point onto the agenda:

- Status of the observers

2. Status of the Action

2.1 Feedback of Chair

Simo gave small overview about the financial status of RADIMAG Action. According to the financial report up to date, the budget is probably spent until end of the April, (the end of current grant period). The remaining financial means will be used for Athens meeting, STSMs, and London meeting.

2.2 Feedback of WG leaders

- **WG1:** Thanh informed about meeting between WG1 and WG3 members planned to be organise 21. – 22. April 2016 in London.

She asked, if it possible to invite members from other WGs if they are interested in.

List of participants should be send to Simo.

- **WG2:** Simo informed about the core expertise and draft working strategy. Document will be circulated by Simo. It was mentioned, that there is a deficit of the modelling know-how. Fortunately a new WG member, Istvan Nandori, joined the WG and will be happy to collaborate.
- **WG3:** Frank Couillaud informed participants that there are few interactions in the frame of WG3. List of the competences will be done.
- **WG4:** Carlton Jones mentioned that more people MFH instrumentation are needed in the WG4. Group members are solving problems with thermometry, measurement/determination of the magnetic field and field uniformity. It would be useful to send him the pictures of the instrumentation that will be used in the next round of the standardization measurements.

3. Action Website

Simo mentioned that the Action web page is online but not in a good state. Due to time related bottlenecks it the website was not updated since going online. He asks for support from the MC members. Sofia Costa Lima (slima@ff.up.pt) kindly agreed to give a hand on this. Based on subsequent voting (unanimous) she was nominated to be responsible for updating new information on the RADIMAG Action web page: <http://www.cost-radiomag.eu/>

Following persons have now administrator rights: Sofia Costa Lima, Robert Muller, Daniel Ortega, Olivier Sandre and Simo Spassov

Sofia shall receive login information & instructions for updating from Simo.

4. Changes in the WG strategy

Simo will resend document: Changing in the WG strategy to the RADIMAG members and WG leaders will revise the content of it.

5. Planning of the next GP 1.V.2016 – 30.IV.2016

In order to foster collaborations between the WGs and to move on with the implementation of objectives given in the MoU, it was proposed to have only one big meeting during the next GP and to allocate budget for several smaller intra-WG meetings focussing on specific topics. This proposition was unanimously accepted by the present MC members. Then Simo informed that the overall budget allocated by COST for our action is 120 k€. The present MC members voted unanimously for the following distribution of financial means





- 18 000 € FSAC
- 22 000 € Training school
- 43 000 € Spain meeting
- 24 000 € Small group meetings (4 x 6 000 €)
- 3 200 € Core group meeting
- 9 800 € STSM

Simo mentioned further that some adjustments may still be necessary because the dissemination meetings in Lille and Vancouver as well as means for the website maintenance were not yet taken into account. The final Work and Budget plan will be sent out after the meeting, and voting will be done via e-COST in order to approve the W+B plan.

- Simo proposed to organize Lyon training school “Physical aspects of MFH and ERT treatment” and next management committee meeting/annual conference/workshop separately.
- Lyon training school will be organized by Claire Billotey. The training school will be organised as it was planned. Simo will contact Claire, if the date is OK.
- For the next RADIOMAG meeting:
 - Confirmed date: 27-28. April 2017.
 - Confirmed place: Bilbao (Spain)

No further propositions for meeting places, all present MC members agreed with the proposed dates and places.

Thanh informed that WG1 planned (at the Action’s kick off meeting) to organise RADIOMAG session at the EMRS spring meeting in 2016. She asked about possibility to cover costs of the RADIOMAG members who are going to attend/organize EMRS meeting in May 2016. Simo explained that it is not possible for administrative reasons.

6. Scientific Progress Report

Scientific report has to be written till June 2016 (***addendum: new date 15th of December 2016***). Simo will send a word document containing tables to be filled. WG leaders are responsible for this task.

The participants asked how to acknowledge COST in publications/posters. Simo will send Acknowledgment template to the MC members.

Following the COST Vademecum, publications must be authored by at least by 2 participants from 2 different Participating COST Countries. Publications and dissemination activities must also reflect the MoU and must be in line with the Action’s objectives

7. Status of Observers

Currently there are following observers registered in e-COST but their official nomination process was not accomplished due to the lack of documents and information to be filled by the candidates

- John Dobson (University of Florida, USA)
- Heiko Frima (EU commission)
- Thompson Mefford (Clemson University, USA)
- Nguyen Xuan Phuc (Vietnamese Academy of Sciences)
- Nikolai Usov (Russian Academy of Sciences)
- Bronislav Khashevsky (Belarus)

A new applicant, Liudmyla Storozhuk, from the Ukraine, has asked for participation in RADIOMAG and completed all administrative procedures from her side. Simo presented a letter from her home institute, *i.e.* the Chuiko Institute of Surface Chemistry of the National Academy of Sciences, which supports the

candidature. Dr. Storozhuk is a chemist experienced in synthesis / property characterisation / surface modification of, as well as various coating techniques for MNPs and she would fit well in WG1. The present MC members voted unanimously for Liudmyla Storozhuk to be an official observer of RADIOMAG. Further it was agreed on to revive the contacts with Nikolav Usov who is an expert modelling of magnetic nanoparticle assemblies and to encourage him to participate in RADIOMAG.

8. AOB

Discussion and voting new WG3 leader

- There were two nominated candidates for WG3 leadership: Andreani Odysseos and Spirou Spiridon. Spirou agreed to be WG3 leader for the next period. All present MC members approved Spirou as new WG3 leader.
- As decided during the kick-off meeting in 2014 Fernando Plazaola becomes WG4 vice leader instead of Carlton Jones.

9. WG meetings

After the common part of the MC meeting, individual WG discussion took place in order to discuss the next steps for going on with the implementation of the objectives set in the MoU. The outcome of these individual WG discussions was presented during the final round table session.

10. Location and date of next meeting

Bilbao (Spain), 27-28 of April 2017

11. Summary of MC decisions

- Confirming Sofia Costa Lima as additional web site administrator → ok
- Having several small brainstorming meetings instead of a 2nd big meeting → ok
- Approval of preliminary budget & meetings for next GP → ok
- Next meeting being held in Bilbao → ok
- Liudmyla Storozhuk being official observer → ok
- Nikola Usov being official observer → ok
- Confirmation Spirou Spiridon being the new WG3 leader → ok

12. Closing

The Action Chair thanked the participants, particularly the invited speakers, for their contributions and closed the meeting around 6:30 PM.



13. MC meeting ToDo list

Action	Deadline	Responsible
Send participants list London meeting to Simo for official invitations	asap	Thanh (done)
Circulate WG2 draft working strategy	after Athens	Simo
Provide Sofia instructions & login for Action website	after Athens	Simo
Update Action website	October 2016	Sofia, Simo, Daniel, Olivier, Robert
Resend action strategy for updating	Mai 2016	Simo
Update Action strategy	June 2016	All WG leaders
Finalising work+budget plan next GP	asap	Simo (done)
Doodle for next core group meeting	asap	Simo
Send template for scientific report	Mai 2016	Simo
Feedback template scientific report	October 2016	All
Send official text for acknowledging COST	asap	Simo
Contact Claire for Training school to confirm dates	asap	Simo
Document mutual benefit for TD1402 participation Liudmyla Storozhuk	Mai 2016	Simo

Abbreviations

AOB	Any other business
CG	Core Group
EMA	European Medicines Agency
ERT	External radiation therapy
FF	Ferrofluid
FP	Frame Work Programme
FSAC	Financial, Scientific and Administrative Coordination
GP	Grant period
MC	Management Committee
MFH	Magnetic fluid hyperthermia
MNP	Magnetic nanoparticle
MoU	Memorandum of Understanding
NP	Nanoparticle
SAR	Specific absorption rate
STSM	Short term scientific mission
W+B	Work and budget plan
WG	Working Group



List of Annexes

- Annex A1:** Workshop programme
- Annex A2:** Signed COST Attendance list
- Annex A3:** SAR ring test: post-survey results

- Annex M1:** Agenda MC meeting
- Annex M2:** WG2 core expertise & strategy
- Annex M3:** Draft W+B plan for next GP
- Annex M4:** WG discussions
- Annex M5:** Financial situation
- Annex M6:** WG3 meeting discussions