



**PARTNER:** University of Wrocław

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**REVIEWER:** Grzegorz Karwasz

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**Minutes from PM03 – Work Package 3 Workshop in Orsay**

**VERSION:** B

## Project meeting 03 - Workshop for WP3 High-Tech Minds-On Kit

### Participants

J. Bobroff (Uni Paris-Sud), F. Bouquet (Uni Paris-Sud), V. Engstrom (Simplicatus), T. Greczyło (Uni Wrocław), G. Ireson (Uni Nottingham) W. Peeters (Uni Antwerp) only on Monday, L. Santi (Uni Udine)

### Presentations

The presentations given at the meeting are annexed to these minutes and can be found in the Project File Repository on the Project Intranet. They provide further details on the decisions. Also, the decisions refer to the work package descriptions set out in the project proposal.

### WP3 decisions

- WP3.5 Work Plan for the WP was presented by the group leader, discussed among participants and approved by them. The plan is available in the Project Forum.
- WP3.6 A temporary list of experiments for the Kit was proposed for further testing (see annex). Costs of the Kit components was estimated and appeared to be in proposed budget borders. Responsibilities for certain experiments was distributed among partners (see annex).
- WP3.7 Merging in between Low and High-Tech experiments in a coherent pedagogical path was discussed and approved. Components of the Kit should be placed in the pedagogical paths list proposed for the Low-Tech (see annex, to be expanded) and correlated with SUPERCOMET 2 materials. Further discussion will take place on the Forum – T. Greczyło responsible, deadline for a document 2008-02-28.
- WP3.8 Developing an additional pedagogical path concerning High-Tech Kit will be prepared by University of Paris Sud. – F. Bouquet responsible, deadline 2008-02-28.
- WP3.9 A template for describing activities related to experiments was proposed (see annex) for further evaluation on the Forum.
- WP3.10 The WP budget could be increased after pre-testing phase if necessary – possible sources are the Orsay material budget (J. Bobroff) or the travel budget (V. Engstrom responsible).
- WP3.11 Discussion about 4-point measurements for a superconductor was made based on the preliminary measurements done with samples delivered to the Italian partner during Kick-off meeting. Heating of the sample and its container will be considered as an option for future development. Platinum resistor should be consider as a way to determinate temperature and also to show the resistivity versus temperature dependence for metal. Use of thermocouple is determinate by the type of sample – selfmade or commercial. Electrical contacts and whole superconducting probe should be covered with a stycast (transparent) to isolate them from humidity. More superconducting samples will be given to Udine partner during the meeting with the Coordinator. Software for USB interface should have a possibility for easy translation to different languages.



### WP6 decisions

WP6.5 Supporting materials for teachers about superconductivity explained in Quantum Mechanics will be prepared by University of Paris Sud. – F. Bouquet responsible, deadline 2008-03-15.

WP6.6 Supporting materials concerning Liquid Nitrogen will be developed – G. Ireson responsible, deadline 2008-03-15.

### Discussions

1. Information about the WP budget was recalled.
2. The WP leader presented the Work Plan.
3. Merging in between Low and High-Tech experiments in a coherent pedagogical path was discussed.
4. A list of experiments for the Kit was created with distinction between need to have and nice to have (see annex).
5. Costs of the Kit components was estimated and appeared to be in proposed budget borders
6. Problems concerning Hall effect were discussed.
7. Responsibilities for certain experiments were distributed among partners.
8. Details concerning 4-point measurements were brought and told about.
9. Details concerning levitation experiments were brought and told about.
10. Discussion about a new MOSEM 2 project took place.