

Summary of CLS Spectromicroscopy Project Design meeting #2

at ALS, 23-Oct-00
9:00 – 12:30 am

(CLS-SM-design2-min.doc: last changed: 13-Nov-00)

Attendance

(from CLS) Emil Hallin (EH), Konstantin Kaznachev (KK)

(from BT) Adam Hitchcock (APH), Tolek Tyliczszak (TT); visitor: Hiromi Ikeura Sekiguchi

(consultant) Tony Warwick (TW)

GOAL

To review progress towards the Nov 17, 2000 presentation of the draft Conceptual Design Report to the beamline team during the spectromicroscopy workshop.

WHAT HAPPENED

A. Structure of the Design Team

There was a short discussion of the organization, roles and responsibilities of the design team to clarify the confusion that arose in calling this meeting. It was agreed:

Emil Hallin (CLS Work Package #6 leader) has the only signing authority on funds and will be involved throughout to ensure informed exercise of that authority.

Konstantin Kaznachev (= Kon) (CLS beamline development scientist for SM project) has responsibility to ensure proper liaison of beamline team and the CLS. This would involve officially calling DT meetings, keeping orderly any notes, reports, documents etc associated with the design process. He is officially Leader of the DT.

Adam Hitchcock (CLS-SM BT leader) is the Scientific Leader of the project. His role is to ensure the work carried out under the project, specifically the ID, beamline and end stations designed, constructed, and commissioned, meet the agreed upon goals of the SM BT.

Wherever possible consensus decision making is to be employed. In case of conflict, Emil Hallin has final say. Until Kon is a full time CLS employee, Adam Hitchcock will act as the 'managing leader' of the DT, to organize notes etc.

B. Status of Beamline Design

The bulk of the meeting was spent discussing the current 'straw' design(s), which are a hybrid of concepts proposed by Tony and Kon. Two beamlines are being conceptually designed in parallel. This COULD be an actual implementation, to take maximum advantage of the light produced by the EPU, with optimization of one beam line for STXM and the other for PEEM, plus other flux/spectroscopy oriented applications. It was recognized that the funding identified for the CLS SM project may not suffice to cover this plan, but it was felt this process was a positive step forward to explore the correct optimization of individual lines. Floor layout plans for the Jun-00 design were provided by Emil.

C. Status of Elliptically Polarized Undulator

Emil reported on the recent workshop on EPU's for 3rd generation light sources. The consensus at that meeting was that a 'modified Apple' design (Sasaki type, with independent motion of 3 of the 4 quadrants) was the preferred solution to achieve as much polarization control as possible. The figure-8 devices used in Spring-8 were not recommended as they were considered untested with regard to ability to rotate the orientation of linear polarization.

The urgency to get *Ingvar Blomqvist* involved in the design of the ID for this project was emphasized. He has been supplied with a CLS – computer loaded with relevant software. It is hoped he will be able to attend the Nov 17 meeting, and discuss options for the ID. If he is not able, the plan is to have Tony and Kon speak to this issue.

D. Future Work

Kon and Tony agreed to do an intensive development of the straw design and discuss with Adam on Friday Oct 27. *(update on Oct 27 – this has resulted in a plan to compare 3 possible designs on an equal basis, to report on them and, on the basis of this comparison, to provide a recommendation to the SM BT group on Nov 17th of the optimal choice relative to meeting our performance goals for spectromicroscopy.)*

The full draft conceptual design report will be provided to Adam by Wed am Nov 15, to allow E-distribution to all workshop registered attendees prior to the workshop.

NEXT MEETING

Nov 17, 2000 at CLS

The DT should meet that evening (after workshop dinner – 8:30 –10:00) to discuss the feedback from the workshop participants and how the Conceptual Design is to be finalized.