

SIG1: Macromolecular Crystallography

Reported Period: 2014-2015

Report Date: 17 July 2015

Reported by: Gerlind Sulzenbacher

=====

1. Introduction. (50 words max.)

The principal objectives of the Macromolecular Crystallography SIG are to support advances in macromolecular crystallographic research by both theoretical and experimental methods and their applications, and to represent and bring together researchers interested in these areas.

2. SIG web site:

SIG1 url: <http://www.afmb.univ-mrs.fr/SIG1>

This page will be soon hosted elsewhere.

3. Number of ECA individual members registered with the SIG according to **(<http://www.xray.cz/eca/im-payment.htm>)**

SIG1	Macromolecular Crystallography	252
------	--------------------------------	-----

There has been a substantial increase in SIG1 membership since last year.

4. Existence of a SIG mailing list: Yes

Address of the mailing list: <https://groups.google.com/forum/#!forum/sig1eca>

Number of members in the SIG mailing list: 22

5. Approximate total number of researchers involved in the SIG (please indicate the basis for the estimate)

SIG1 currently has 252 registered members (from <http://www.xray.cz/eca/eca-sig.asp?id=SIG1>), while meetings are normally attended by ~30-50 individuals. Several dozens of researchers are involved in SIG1 activities, especially in the organization of courses and workshops.

6. List of MS organized by the SIG at ECM29 in Rovinj

MS 1 Recent experimental developments in Synchrotron macromolecular crystallography

MS 2 X-ray free electron lasers (XFEL) in macromolecular crystallography

MS 3 Structure solution on the fly (software) / Parallel data collection and structure analysis

MS 4 Advances in phasing, refinement and autobuilding

MS 5 Structure and function of enzymes

MS 6 Membrane proteins and signal transduction pathways

MS 7 Nucleic acids and their complexes and assemblies with proteins

MS 8 Molecular machines and motors

MS 9 Pharmaceutical crystallography and drug design

MS 10 Structural bioinformatics

MS 11 Hybrid approaches

MS 12 Crystallisation and crystal treatment

7. Past Activities other than Microsymposia at ECM

An important number of workshops and courses have been organized by individual SIG1 members, including CCP4 initiatives, EMBO training courses and other courses financed with European or national funds. Some of the activities have been sponsored by ECM or IUCr.

8. Future/Programmed Activities.

Currently SIG1 is actively organising a number of keynote lecture and microsymbosia for the forthcoming ECM30 meeting in Basel

As for past activities, a large panel of workshops and courses are foreseen for the coming year. A specificity of SIG1 is the fact that sample preparation is an important part of structural biology and the theme of many courses goes well beyond crystallography. Many of the activities will be organised by INSTRUCT, <http://www.structuralbiology.eu/>, the network for structural biology in Europe.

9. Other matters. The next annual meeting of SIG1 will take place at ECM29 in Rovinj. This will be the occasion to elect new SIG1 officers, as chair Keith Wilson and secretary Gerlind Sulzenbacher are leaving.

10. Brief annual activity report (100 words max.)

The main activity of SIG1 involves the organization of the microsymbosia and keynote speakers for the individual European crystallographic meetings. The aim is to offer a wide variety of topics to structural biologists with a view to increase the attendance of our current and potential members at the annual meetings. In addition, individual members participate in organizing workshops and conferences of interest to European structural biologists.

11. List SIG officers, name and e-mail, and specify their main function in the SIG:

Chair: Keith Wilson, York, United Kingdom, keith@ysbl.york.ac.uk

Vice-Chair: Marjolein Thunnissen, Lund, Sweden Marjolein.Thunnissen@maxlab.lu.se

Secretary: Gerlind Sulzenbacher, Marseille, France, Gerlind.Sulzenbacher@afmb.univ-mrs.fr