# **SIG No:9 Crystallographic Computing**

Reported Period: 2012-2013

Report Date: 17/06/2013
Reported by: Harry Powell

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#### **1. Introduction.** (50 words max.)

SIG9 now has a website and has been organising a computing school to take place before ECM28. We have secured funding for a poster prize to be awarded at this and future ECMs. We are running a software competition.

#### 2. SIG web site:

SIG 9 url: http://sig9.ecanews.org/

# 3. Number of ECA individual members registered with the SIG according to

(http://www.xray.cz/eca/im-paymenthtm)

SIG 9 ecacomsig 169

# 4. Existence of a SIG mailing list O Yes / O No

No (an informal list is kept by HRP; a

list is held on IUCr web server but does not seem to elicit any replies)

Address of the mailing list:

Number of members in the SIG mailing list: 92

5. Approximate total number of researchers involved in the SIG (please indicate the basis for the estimate) ~200 (based on the mailing list and knowledge that most researchers in this field are not on the list).

# 6. List of MS organized by the SIG at the last ECM

MS 29 Likely to be useful: Statistical software packages

MS 30 Buy one, get one free: Software for twin handling

MS 41 Dynamics in crystals: experimental techniques and software

MS 45 Advances at lower resolutions: new experimental and modeling approaches

- + keynote speaker: Simon Parsons, University of Edinburgh, Edinburgh, Scotland: Absolute Structure Determination
- + Software Fayre

#### 7. Prizes sponsored/coordinated

Poster prize sponsored by OlexSys - to be awarded first at ECM28

A competition will be held for one free registration to ECM28 (open to young members).

# 8. Past Activities other than Microsymposia at ECM

none this year

For Each Activity

Title:

Number of Participants:

Level of involvement of SIG in the activity:

O ECA Individual Members registered with the SIG involved in the organizing committee

O ECA Individual Members registered with the SIG involved as lecturers

O endorsed (SIG logo on the web page/leaflets)

Sponsored by ECA?

OYes/ O No

Other Sponsors/Organizers:

Short Description: (50 words max.)

# 9. Future/Programmed Activities.

For Each Activity

Title: Software Fayre at ECM28 - now a MS rather than run separately over two days.

Number of Participants: unknown, since this is a new format.

Level of involvement of SIG in the activity:

O ECA Individual members registered with the SIG involved in the organizing committee 1

O ECA Individual members registered with the SIG involved as lecturers unknown

O endorsed (SIG logo on the web page/leaflets) no

Sponsored by ECA?

OYes/ O No no

Other Sponsors/Organizers: no

Short Description: (25 words max.)

Interactive lectures based on use of ~4 different software packages.

Title: Introduction to Software Development for Crystallographers (prior to ECM28)

Number of Participants: 40 +

Level of involvement of SIG in the activity:

O ECA Individual members registered with the SIG involved in the organizing committee 2

O ECA Individual members registered with the SIG involved as lecturers ~5

O endorsed (SIG logo on the web page/leaflets) yes

Sponsored by ECA?

OYes/ O No No

Other Sponsors/Organizers: CCP4, CCDC, Rigaku, Dectris, Agilent, Bruker, OlexSys

Short Description: (25 words max.)

lectures and in-depth tutorials outlining how to start implementing crystallography in software - planning, developing pipelines with existing software, use of existing libraries, visualising results, GUI essentials, manipulating matrices, symmetry and space groups, using Fourier methods.

## 10. Other matters. (50 words max.)

We will be helping the IUCr Commission on Crystallographic Computing to organise and run their workshop prior to IUCr XXIII in Montreal, Canada.

# 11. Brief annual activity report (100 words max.)

Appointed a SIG Secretary who has been extremely helpful in organising the Computing School.

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

Chairman - Harry Powell, harry@mrc-lmb.cam.ac.uk or hrp1000@cam.ac.uk

Deputy Chairman - Martin Lutz, m.lutz@uu.nl

Secretary - Andrea Thorn, andrea.thorn@WEB.DE

Committee: Laura Roces, laura.uniovi@gmail.com

Garib Murshudov, garib@mrc-lmb.cam.ac.uk Rocco Caliandro rocco.caliandro@ic.cnr.it

# **Supplementary Materials.**

(List of all supplementary materials, if any, related to the SIG report)

- Addendum 1 to n (to be sent in separate files)