

SIG No: 3

Reported Period: 2014-2015

Report Date: 1 July 2015

Reported by: Artem Abakumov (Chair) and Michal Dusek (Secretary)

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1. Introduction.

The activities of SIG#3 concentrate on spreading the knowledge about aperiodic crystallography in conferences and workshops as well as through the WEB site on Aperiodic Crystals.

2. SIG web site:

SIG#3 url:

<http://sig3.ecanews.org>

<http://aperiodic.iucr.org>

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

77

4. Existence of a SIG mailing list Yes

Address of the mailing list: none

Number of members in the SIG mailing list : 28

Currently we maintain only distribution list for making various announcements. People interested in this mailing list can subscribe through the SIG#3 web page.

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

70 (estimate based on the attendance of MS organized by SIG#3, the interest in giving lectures in those MS, number of individual members and similar measures.)

6. List of MS, plenary and keynote lectures organized by the SIG at the last IUCr congress

Twenty-Third Congress and General Assembly of the International Union of Crystallography, August 2014, Montreal, Canada.

- MS10 "Chemistry and Physics of Modulated and Composite Crystals", chairs A. Abakumov/C. Pinheiro;

- MS42 "Diffuse scattering and Partial Disorder in Complex Structures", chairs R. Welberry/M. de Boissieu;

- MS81 "Pushing the Boundaries of Aperiodic Magnetic and Crystal Structure Solution", chairs V. Petricek/W.Steurer;

- Keynote lecture KN04 "Phonons and Phasons – From Modulated Structures to Quasicrystals" M. de Boissieu

- Plenary lecture PL01 "Quasi-Periodic Crystals – a Paradigm Shift in Crystallography" Dan Shechtman

7. Prizes sponsored/coordinated

The tenth Ewald Prize has been awarded to Professors A. Janner and T.W.J.M. Janssen (both from the Institute for Theoretical Physics, University of Nijmegen, The Netherlands) for the development of superspace crystallography and its application to the analysis of aperiodic crystals. The Ewald Prize was presented at the Montreal Congress Opening Ceremony on 5 August 2014.

8. Past Activities other than Microsymposia at IUCr congress

Title: Introduction to aperiodic crystals (Montreal, Canada) – satellite of IUCr Congress

Number of Participants: 30

Level of involvement of SIG in the activity:

- ECA Individual members registered with the SIG involved in the organizing committee
- ECA Individual members registered with the SIG involved as lecturers

Sponsored by ECA? No

Other Sponsors/Organizers: IUCr

Short Description: One-day workshop introduced modulated structures, quasicrystals and related physical properties

Title: Workshop on the Role of Magnetic Symmetry in the Description & Determination of Magnetic Structures (Hamilton, Canada) – satellite of IUCr Congress

Number of Participants: 30

Level of involvement of SIG in the activity:

- ECA Individual members registered with the SIG involved in the organizing committee
- ECA Individual members registered with the SIG involved as lecturers

Sponsored by ECA? No

Other Sponsors/Organizers: IUCr

Short Description: Three-day workshop about magnetic structures, including incommensurate ones

Title: 8th Workshop on Structural Analysis of Aperiodic Crystals (Bayreuth, Germany)

Number of Participants: 25

Level of involvement of SIG in the activity:

- ECA Individual members registered with the SIG involved in the organizing committee
- ECA Individual members registered with the SIG involved as lecturers

Sponsored by ECA? No

Other Sponsors/Organizers: German Association for Crystallography, university of Bayreuth

Short Description: Four-day workshop about aperiodic structures

Title: Ad hoc Workshops on Jana2006, No 23 - 25 (Prague, Czech Republic)

Number of Participants: 30 (together)

Level of involvement of SIG in the activity:

- ECA Individual Members registered with the SIG involved in the organizing committee
- ECA Individual Members registered with the SIG involved as lecturers
- endorsed (SIG logo on the web page/leaflets)

Sponsored by ECA? No

Other Sponsors/Organizers: Institute of Physics, Prague

Short Description: Small workshops organized on various topics about Jana2006. Participants select the topics through the web page jana.fzu.cz and workshops are organized continuously.

Title: Workshop Jana2006 (TU Munich, Garching, Germany)

Number of Participants: 21

Level of involvement of SIG in the activity:

- ECA Individual Members registered with the SIG involved in the organizing committee
- ECA Individual Members registered with the SIG involved as lecturers

Sponsored by ECA? No

Other Sponsors/Organizers: TU Munich

Short Description: Two-day workshop about magnetic structures.

Title: The 5th Shanghai Workshop of X-ray Crystallography (Shanghai, China)

Number of Participants: 55

Level of involvement of SIG in the activity:

- ECA Individual Members registered with the SIG involved as lecturers

Sponsored by ECA? No

Other Sponsors/Organizers: Shanghai university, Max-Planck institute Dresden

Short Description: Six-day workshop about crystallography.

Title: 6th Workshop on Neutron Scattering Applications in Structural Biology (Oak Ridge, USA)

Number of Participants: 15

Level of involvement of SIG in the activity:

- ECA Individual Members registered with the SIG involved as lecturers

Sponsored by ECA? No

Other Sponsors/Organizers:

Short Description: Four-day workshop about neutron crystallography.

Title: JDN22 - School Crystallography and Neutrons (Oleron, France)

Number of Participants: 50

Level of involvement of SIG in the activity:

- ECA Individual Members registered with the SIG involved as lecturers

Sponsored by ECA? No

Other Sponsors/Organizers: LLB Saclay, ILL Grenoble

Short Description: Seven-day school on electron diffraction.

9. Future/Programmed Activities.

Title: The 29th Meeting of the European Crystallographic Association (Rovinj, Croatia)

Number of Participants: ~800

Level of involvement of SIG in the activity:

- ECA Individual members registered with the SIG involved in the organizing committee
- ECA Individual members registered with the SIG involved as lecturers

Other Sponsors/Organizers: IUCr

Short Description: Members of SIG3 will participate in lectures and organization of microsymbosia

Title: 8th Conference on Aperiodic Crystals - Aperiodic 2015 (Prague, Czech Republic)

Number of Participants: ~150

Level of involvement of SIG in the activity:

- ECA Individual members registered with the SIG involved in the organizing committee
- ECA Individual members registered with the SIG involved as lecturers

Other Sponsors/Organizers: IUCr, European C-MAC, ICDD, Rigaku, Bruker, HPST, NanoMEGAS

Short Description: The aim of the conference is to bring together scientists dealing with all aspects of aperiodic crystals and related problems.

Title: Jana Ad Hoc Workshops (Prague, Czech Republic) (~ five workshops during the next year)

Number of Participants: 50

Level of involvement of SIG in the activity:

- ECA Individual members registered with the SIG involved in the organizing committee
- ECA Individual members registered with the SIG involved as lecturers
- endorsed (SIG logo on the web page/leaflets)

Sponsored by ECA? No

Other Sponsors/Organizers: Institute of Physics, Prague

Short Description: Small workshop on various topics connected with software Jana2006

Title: The 3rd International School on Aperiodic Crystals (Antwerp, Belgium)

Number of Participants: ~50

Level of involvement of SIG in the activity:

- ECA Individual members registered with the SIG involved in the organizing committee
- ECA Individual members registered with the SIG involved as lecturers

Sponsored by ECA? Yes

Other Sponsors/Organizers: University of Antwerp, C-MAC Euroschool

Short Description: Five-day workshop about aperiodic structures

10. Other matters. (50 words max.)

The web page of SIG 3 at sig3.ecanews.org maintained by Michal Dusek now serves also to CAC (like aperiodic.iucr.org). It contains information on conferences, computer programs, research groups on aperiodic crystals and a weekly updated list of publications dealing with aperiodic crystals.

Wulf Depmeier resigned from the position of the Steering Committee member due to retirement. John Claridge has been elected to the Steering Committee of the SIG#3.

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

Activities of SIG#3 were focused on workshops and conferences and WEB activities. Most notable events in the field of aperiodic crystallography were satellite workshops of IUCr congress and the workshop in Bayreuth.

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

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Supplementary Materials.