

SIG3 - Special Interest Group on Aperiodic Crystals

Reported Period: July 2019 - June 2020

Report Date: 22 April 2021

Reported by: John Claridge (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:

SIG3 has a website common with IUCr Commission on Aperiodic Crystals (CAC). The following links refer to the same website:

<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> - **the link is broken)**

94

4. Existence of a SIG mailing list: Yes

Address of the mailing list: none

Number of members in the SIG mailing list : 29

Currently we maintain only distribution list for making various announcements. People interested in this mailing list can subscribe through the SIG#3 web page. There is however little or no interest in this form of communication.

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

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

6. List of MS, plenary and keynote lectures with the SIG participation at the last ECM Meeting

The 32nd European Crystallographic Meeting, ECM32, Vienna, Austria, 18-23 August 2019

- KN03 Luca Bindi, keynote lecture "Solar System Secrets Hidden in Quasicrystals"
- MS20 Combined Approaches for Structure Characterization of Complex Materials at Multiple Length Scales
- MS23 Aperiodic and modulated structures
- MS24 Magnetic order: Methods and Properties
- MS26 Complex Metallic Alloys: Periodic and Non-Periodic

7. Prizes sponsored/coordinated

none

8. Past Activities other than Microsymposia at ECM meeting

Title: The 4th International School on Aperiodic Crystals (8- 14 September 2019, Cotentin Peninsula, Normandy, France)

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 Caen, C-MAC, IUCr, CNRS, Jeol, Nanomegas ...

Short Description: Seven-days school about aperiodic structures, covering basics of the theory and experimental and computing approaches.

Title: Workshop on Symmetry and Superspace Approach to Modulated Crystal Structures, 23-24 October 2019, Oak Ridge, USA)

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? No

Other Sponsors/Organizers: --

Short Description: Concepts and applications of superspace symmetry to study complex and modulated crystal structures using single crystal neutron diffraction. Topical lectures will showcase examples and workflows. Hands-on tutorials on JANA2006 and ISODISTORT programs.

Title: The 10th Workshop on Structural Analysis of Aperiodic Crystals (12-16 March 2020, Bayreuth, Germany)

Cancelled

Title: Jana Ad Hoc Workshops No 37 and 38 (Prague, Czech Republic)

Number of Participants: 41

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

9. Future/Programmed Activities (July 2020 – June 2021)

Due to the Pandemy, the plans have been changed

- The IUCr Congress has been shifted from 2020 to 2021, and falls to the next period
- Aperiodic 2021 has been shifted to 2022

Title: Jana Ad Hoc Workshops on line (Prague, Czech Republic)

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

10. Other matters. (50 words max.)

none

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

Activities of SIG#3 were focused on workshops and conferences. Most notable event in the field of aperiodic crystallography was The 4th International School on Aperiodic Crystals.

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

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Supplementary Materials.

None