SIG3 - Special Interest Group on Aperiodic Crystals

Reported Period: July 2021 - June 2022

Report Date: xxxx

Reported by: John Claridge (Chair) and Michal Dusek (Secretary)

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 website:

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. Existence of a SIG mailing list: Yes

Address of the mailing list: none

Number of members in the SIG mailing list: 31

Currently, we maintain only a 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.

4. 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 the number of individual members.)

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

ECM meeting has not been organised

6. Prizes sponsored/coordinated

none

7. Past Activities other than Microsymposia at ECM meeting

Title: Twenty-Fifth Congress and General Assembly of the International Union of Crystallography (14-22 August 2021, Prague, Czech Republic)

Number of Participants: ~2000 (hybrid meeting)

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

Other Sponsors/Organizers: IUCr

Short Description: Members of SIG3 participated in lectures and organization of microsymposia. Keynote lecture of Uwe Grimm "State of the art understanding of diffraction from aperiodic crystals".

Title: Aperiodic2022 (20-24 June 2022, Sapporo, Japan)

Number of Participants: ~150 (hybrid meeting)

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

Other Sponsors/Organizers: IUCr Commission on Aperiodic Crystals (main organiser)

Short Description: Members of SIG3 participated in lectures and organization of microsymposia.

Title: The 5th International School on Aperiodic Crystals (23-27 May 2022, Kutna Hora, Czech Republic)

Number of Participants: 66 (in person meeting)

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

Other Sponsors/Organizers: IUCr Commission on Aperiodic Crystals

Short Description: Members of SIG3 were the main organisers of the event. They also participated in lectures and exercises.

Title: Jana Ad Hoc Workshops No 43 and 44 (Prague, Czech Republic)

Number of Participants: 90 (online event)

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? No

Other Sponsors/Organizers: Institute of Physics, Prague

Short Description: Small workshop on various topics connected with software Jana2020. Members of SIG3 were the main organisers of the event.

Title: Advanced Software Tools for Single Crystal Data Analysis (2-3 August 2021, Oak Ridge, USA)

Satellite workshop in Joint Nanoscience and Neutron Scattering User Meeting

Number of Participants: ~200

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

Other Sponsors/Organizers:

Short Description: Members of SIG3 participated in lectures and organization of microsymposia

Title: Representational Analysis of Magnetic Structures RAMS-2021 (8-12 November 2021, Maryland, USA)

Number of Participants: ~100

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

Other Sponsors/Organizers:

Short Description: Members of SIG3 participated in lectures and organization of microsymposia

9. Future/Programmed Activities (July 2021 – June 2022)

Title: ECM33 (23-27 August 2022, Versailles, France)

Number of Participants: ~1000

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

Other Sponsors/Organizers: ECA

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

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

Number of Participants: ~50

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? No

Other Sponsors/Organizers: Institute of Physics, Prague

Short Description: Small workshop on various topics connected with software Jana2006. Members of SIG3 will be the main organisers of the event.

Title: MaThCryst school (12-16 June 2023, Nancy, France)

Number of Participants: ~30

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

Other Sponsors/Organizers: IUCr Commission on Mathematical and Theoretical Crystallography Short Description: Members of SIG3 will participate in lectures and organization of microsymposia

Title: 10th workshop on Structural Analysis of Aperiodic Crystals (March 2023, Bayreuth, **Germany**) (planned but not yet announced)

Number of Participants: ~30

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

Other Sponsors/Organizers:

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

10. Other matters. (50 words max.)

Uwe Grimm, Professor of Mathematics at the Open University, Milton Keynes, died suddenly and unexpectedly on 28 October 2021. Uwe was a leading mathematical physicist, well known for his work on quasicrystals.

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

Activities of SIG#3 were focused on workshops and conferences. The most notable event in the field of aperiodic crystallography was the conference Aperiodic2022 in Sapporo.

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

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Supplementary Materials.

None