

***SIG3 - Special Interest Group on Aperiodic Crystals***

***Reported Period: 2017-2018***

***Report Date: 30 June 2018***

***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:**

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>)**

93

**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.

**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 IUCr Congress**

Twenty-Fourth Congress and General Assembly of the International Union of Crystallography, Hyderabad, India, 21-28 August 2017

- Ron Lifshitz, keynote lecture "Soft quasicrystals"
- MS 017. Extending the boundaries of crystallography
- MS 059. Quantitative electron diffraction
- MS 069. High-pressure crystallography
- MS 089. Chemistry and physics of modulated and composite crystals
- MS 098. Recent advances in quasicrystal research

**7. Prizes sponsored/coordinated**

none

**8. Past Activities other than Microsymposia at IUCr congress**

**Title: Twenty-Fourth Congress and General Assembly of the International Union of Crystallography, (21-28 August 2017, Hyderabad, India)**

Number of Participants: 1748

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 participated in lectures and organization of microsymbosia

**Title: Quasicrystals: pattern formation and aperiodic order (4-8 June 2018, Edinburgh, UK)**

Number of Participants: 40

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) No

Sponsored by ECA? No

Other Sponsors/Organizers: University of Loughborough, Open University, University of Leeds

Short Description: The workshop capitalised on recent progress by giving leading and upcoming researchers a forum to discuss how different approaches can be most effectively combined to tackle and solve the big open problems in the field.

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

Two workshops (33,34) listed in <http://jana.fzu.cz>

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
- 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.**

**Title: ECM31 (Oviedo, Spain)**

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: 9th International Conference on Aperiodic Crystals (Aperiodic 2018) (Ames, Iowa, USA)**

Number of Participants: ~120

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: IUCr

Description: A conference about theoretical and practical aspects of aperiodic structures

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

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
- 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.)

On September 29 2017 passed away one of the founders of aperiodic crystallography, Ted Janssen. Obituary is available at [http://sig3.ecanews.org/doc/Ted\\_Janssen.pdf](http://sig3.ecanews.org/doc/Ted_Janssen.pdf).

#### 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 the Aperiodic2015 conference in Prague and The 3rd International School on Aperiodic Crystals in Antwerp.

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

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**Supplementary Materials.**

None