

SIG5

Reported Period: September 2023- August 2024

Report Date: 20th August 2024

Reported by: Isabella Pignatelli, Oleg Siidra, Sergey Krivovichev

=====

1. Introduction.

SIG5 focus on the fine-scale characterization of the structure and properties of minerals and related inorganic compounds. Attention is paid for the development of theoretical and experimental methods to investigate their crystal-chemistry and crystal structures.

2. SIG web site:

SIG5 <http://sig5.ecanews.org/>

Facebook page <https://www.facebook.com/groups/253256622175656/>

3. Number of ECA individual members registered with the SIG5 according to ECA website:

90

4. Existence of a SIG mailing list Yes (general renewal is required)

Number of members in the SIG mailing list: 164

5. Approximate total number of researchers involved in the SIG (please indicate the basis for the estimate) 164 (this is the number of members of the mailing list, *i.e.* number of researchers who explicitly indicate their involvement in the SIG)

6. Past Activities

Titre: 34rd European Crystallographic Meeting

<https://www.ecm34.org/committees>

Number of participants: 700

Level of involvement of SIG in the activity: SIG5 gave its support to organize the conference and it proposed three MS and a keynote.

Titre: ECS9, the 2024 European Crystallography School

<https://ecs-9.event.univ-lorraine.fr/>

Number of Participants: 60 participants

Level of involvement of SIG in the activity: SIG5/ECA individual member (I. Pignatelli) was involved in the organizing committee

Sponsored by ECA? Yes

Short description: ECS9 edition will focus on the improving of crystallography skills: from basic structure analysis to understanding of chemical bonds, bonding interactions and structure-properties relationships in materials. Main sections will deal with:

- (i) An introduction to X-Ray Diffraction (XRD) theory
- (ii) Structure determination and analysis
- (iii) Packing and interaction analyses
- (iv) Using aspherical models of the electron density distribution
- (v) Crystallography under constraints.

Title: 4th European Mineralogical conference

<https://emc-2024.org/>

Number of participants: 500

Level of involvement of SIG in the activity: SIG5/ECA individual members will be involved as chairs of sessions and they proposed several sessions.

7. Future/Programmed Activities.

Title: 35rd European Crystallographic Meeting

Level of involvement of SIG in the activity: SIG5 gave its support to organize the conference and it will propose few MS and a keynote.

8. Other matters. (50 words max.)

None.

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

SIG5 keeps promoting activities aimed to enhance the interest towards Mineral & Inorganic Crystallography. However, one of the representative of this interest group changed last year, so the new team of representative is working together to improve our activities in the international scientific community in the next future.

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

Chair Dr. Isabella Pignatelli isabella.pignatelli@univ-lorraine.fr

Vice-chair Prof. Dr. S.V. Krivovichev skrivovi@mail.ru

Secretary Dr. Oleg Siidra o.siidra@spbu.ru