

SIG12

Reported Period: 2019-2021

Report Date: 26/04/2021

Reported by: Manuel Hinterstein, Jerome Rouquette, Claire Colin

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1. Introduction. (50 words max.)

Due to the pandemic most summer schools, workshops and conferences were cancelled or postponed. The main activities of the SIG team have been to prepare the ECM33 in Versailles. The SIG12 representative to the program committee is Manuel Hinterstein.

2. SIG web site:

SIG12: <https://ecanews.org/groups/sig-12-crystallography-of-functional-materials/>

3. Number of ECA individual members registered with the SIG

SIG12 Materials Science 125 (as of 26/04/2021)

4. Existence of a SIG mailing list: yes

SIG12 communicates with its members via the ECA webpages <https://ecanews.org/groups/sig-12-crystallography-of-functional-materials/>

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

125 members registered on <https://ecanews.org/groups/sig-12-crystallography-of-functional-materials/>

6. Keynote speaker suggested by SIG12 for the ECM33 in Versailles

7. List of MS organized by the SIG at the ECM32 in Vienna

SIG12 proposed the following microsypnosia with support from other SIGs:

- Operando and in-situ crystallographic studies (SIG5, SIG8)
- Structural Characterization of Functional Materials (SIG5)
- Materials for Energy Storage and Conversion (SIG8)
- Time-Resolved Diffraction and Scattering Techniques (SIG8)

SIG12 supported the following microsypnosia proposed by other SIGs:

- Minerals and Materials Under Extreme Conditions
- Mineralogical and Inorganic Crystallography
- Structure determination of new materials by multi-technique approach

8. Prizes sponsored/coordinated

Due to the Pandemic no conference was held.

9. Past Activities other than Microsymposia at ECM

SIG12 supports the Molecular Crystal Engineering Course in Erice in 2021.

9. Future/Programmed Activities.

Currently, the SIG12 representative, Manuel Hinterstein, participates in the organization of the ECM33 in Versailles as a member of the program committee.

SIG12 supports the Molecular Crystal Engineering Course in Erice in 2021.

10. Other matters. (50 words max.)

Members of SIG 12 are also involved in the design and use of experimental stations and new sample environments at large scale facilities (Petra-III in Hamburg, FRM-II in Munich and ESRF and ILL in Grenoble) to open new possibilities for the structural investigation of functional materials under *in situ* and *in operando* conditions.

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

SIG officers are involved in the organization of conferences related to materials crystallography at material science and diffraction-related meetings. They participate in review and advisory committees in various European large-scale facilities. Due to the pandemic most meetings were cancelled or postponed.

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

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