SIG12 Reported Period: 2017-2018 Report Date: 10/07/2018 Reported by: Andrzej Grzechnik, Manuel Hinterstein, Jerome Rouquette

1. Introduction. (50 words max.)

The main activities of the SIG team have been to prepare the ECM31 in Oviedo. The SIG12 representative to the program committee is Jerome Rouquette.

2. SIG web site:

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

3. Number of ECA individual members registered with the SIG

SIG12 Materials Science

106 (as of 10/07/2018)

4. Existence of a SIG mailing list: yes

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

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

106 members registered on http://ecanews.org/mwp/groups/sig-12-crystallography-of-functional-materials/

6. Keynote speaker suggested by SIG12 for the ECM31 in Oviedo

Prof. Yaroslav Filinchuk Université Catholique de Louvain (Belgium)

7. List of MS organized by the SIG at the ECM31 in Oviedo

SIG12 proposed and was the principal organizer of the following microsymposia :

- 1. Materials on energy saving and climate sustainability
- 2. Understanding of functional materials

SIG12 also co-organized the following microsymposia proposed by other SIGs:

- 1. Combined approaches for structure characterization of modulated & complex structures
- 2. Combined approaches for the structure determination of new materials at the nanoscale

8. Prizes sponsored/coordinated

STOE regularly sponsors a poster prize in the field of the crystallography of functional materials at the ECMs (Warwick, Rovinj, Basel, and Oviedo).

9. Past Activities other than Microsymposia at ECM

SIG12 members participated in the organization of the following conferences :

1. 2nd "International Conference on Applied Crystallography" in Chicago (USA, October 16-18, 2017).

2. 3rd Edition of International Conference on Advanced Spectroscopy, Crystallography and Applications in Modern Chemistry in London (UK, June 4-5, 2018)

9. Future/Programmed Activities.

Currently, the SIG12 representative, Andrzej Grzechnik, participates in the organization of the ECM32 in Vienna as a member of the program committee.

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 and workshops related to materials crystallography at material science and diffraction-related meetings. They participate in review and advisory committees in various European large-scale facilities.

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

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