

SIG08 – POWDER DIFFRACTION

Reported Period: 2020-2023

Report Date: Sept. 6th 2023

Reported by: Jasminka Popović, Rosanna Rizzi, Irene Margiolaki, Paolo Scardi

1. INTRODUCTION

The main activity of SIG08 during the last three years was the organization of EPDIC17 conference, originally planned for June 2020. The conference was cancelled due to COVID-19 pandemic. The meeting was, finally, held as an in-person conference from 31 May to 3 June 2022 in the Convention Centre Šibenik, Croatia.

Currently, SIG08's activities are focused on the organization of next EPDIC18, chaired Dr. Rosanna Rizzi, that will take place 30 August-2 September 2024, in Padova, Italy.

2. SIG WEB SITE:

<http://epdic.inq.unitn.it/>

3. NUMBER OF ECA INDIVIDUAL MEMBERS REGISTERED WITH THE SIG ACCORDING TO ECA WEBSITE:

53

4. EXISTENCE OF A SIG MAILING LIST: Yes

The SIG8 operates within the EPDIC scientific committee, currently composed of 23 active members whose skills cover all fields related to powder diffraction and geographically represent almost the entire continent. Number of members in the EPDIC scientific committee mailing list: cca 400

5. APPROXIMATE TOTAL NUMBER OF RESEARCHERS INVOLVED IN THE SIG

(PLEASE INDICATE THE BASIS FOR THE ESTIMATE)

400, based on average participation in past EPDIC conferences.

6. LIST OF MS ORGANIZED BY THE SIG AT THE LAST ECM

MS13- Structural Characterization of Functional Materials

MS14- Materials for energy storage and Conversion

MS15- Mineralogical and inorganic crystallography

MS16- Time-resolved diffraction and scattering techniques

MS17- Total scattering studies and disorder

MS18- Biomineralogy and bioinspired materials

MS27- Minerals and Materials Under Extreme Conditions

MS37- Advances in Structure determination of new materials by multi-technique approach including imaging techniques

MS38- Computations with/for Pair Distribution Functions

MS40- Operando and in-situ crystallographic studies

MS42- Solving Structures Through Combination of Reciprocal and Direct Space Methods

MS43- Crystallography for cultural heritage materials

MS44- Crystallography in large scale facilities

7. PRIZES SPONSORED/COORDINATED

The SIG08, as EPDIC committee, awarded two prizes: one for Young Scientists (Dr Mark Senn from the University of Warwick, UK) and for Distinguished Powder Diffractionist (Professor Simon Billinge, Columbia University and Brookhaven National Laboratory, USA) at the last congress in Šibenik.

8. PAST ACTIVITIES (OTHER THAN MS AT ECM)

Title: EPDIC17, 31 May to 3 June 2022, Šibenik, Croatia
Number of Participants: ~300
Level of involvement of SIG in the activity: 100%
Sponsored by ECA? Yes
Other Sponsors/Organizers: IUCr, Main manufacturers/retailers of XRD equipment (Bruker, Panalytical, Rigaku, Dectris, ICDD, among the many other), local donators

Short Description: EPDIC17 gathered 303 participants from 28 countries. Thirty-four young participants (PhD students and postdoctoral fellows) received support to attend EPDIC17: 25 were awarded IUCr Young Scientist Awards and 5 received ECA bursaries. All of them, along with another four young participants, received additional support funded by the Croatian Association of Crystallographers. The scientific programme contained 2 award lectures, 6 plenary lectures, 26 keynote lectures, 40 oral presentations and 147 poster presentations organised into 12 thematic microsymbiosia. In the Exhibition area, 13 companies presented their products and services. The Conference was generously supported by a number of sponsors: Bruker AXS and Malvern Panalytical (Diamond sponsors); Anton Paar, ICDD and Rigaku (Platinum sponsors); STOE and PROTO X-ray diffraction (Gold sponsors), as well as many other sponsors and supporters: Huber, ThermoFisher, Dectris, X Spectrum, Eldico Scientific, Oxford Cryosystems, Excelsus, Crystal Impact, IUCr, European Crystallographic Association (ECA), Croatian Academy of Science and Arts (HAZU), Fidelta, Faculty of Science, University of Zagreb and Ruđer Bošković Institute. Prior to EPDIC17, two satellite events took place: TOPAS Intensive Course from 29 to 31 May and ICDD Workshop on 31 May 2022.

9. FUTURE ACTIVITIES

Title: EPDIC18, Padova, Italy, 30 August-2 September 2024
Number of Participants: ~400
Level of involvement of SIG in the activity: All scientific activities are proposed and approved by the SIG
Sponsored by ECA? In preparation
Other Sponsors/Organizers: Bruker, Panalytical, Rigaku, Dectris, ICDD among the many
Short Description: EPDIC is the main event organized every two years by the joint SIG8-EPDIC committee.

10. OTHER MATTERS

No other matters.

11. BRIEF ANNUAL ACTIVITY REPORT

Main activity of SIG08 currently is the organization of EPDIC18 that involves the choice of plenary speakers, name/content of MS's and chairs as well as candidates to the two awards (Young scientist and Distinguished Powder Diffractionist).

12. LIST SIG OFFICERS, NAME AND E-MAIL, AND SPECIFY THEIR MAIN FUNCTION IN THE SIG:

Jasminka Popovic (Chair), Division of Materials Physics, Rudjer Boskovic Institute, Croatia
Rosanna Rizzi (Vice-Chair), Institute of Crystallography, National Research Council, Bari, Italy
Irene Margiolaki (Secretary), Biology Department, University of Patras, Patras, Greece

Whole list of SIG08-EPDIC committee can be found <http://epdic.ing.unitn.it/index.php/epdic-committee/>