

## SIG08 – POWDER DIFFRACTION

Reported Period: 2023-2024

Report Date: Aug 20th 2024

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

### 1. INTRODUCTION

The main activity of SIG08 during 2023-2024 was the organization of EPDIC18 conference. The meeting is to be held from 30 Aug to 2 Sept 2024 in the Padova Congress, Italy, chaired by Dr. Rosanna Rizzi.

In the following period SIG08's activities will be focused on the organization of the next EPDIC19, chaired Dr. Pascal Schouwink, that will take place in 2026, in Crans Montana, Switzerland.

### 2. SIG WEB SITE:

<http://epdic.ing.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)*

300-400, based on average participation in past EPDIC conferences.

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

Proposed, organized or participated in:

M17: Minerals and inorganic materials: state of art and new perspectives

M24: Advances in Powder Diffraction Instrumentation

M35: Methods for diffuse scattering analysis from powder and single-crystals

M27: High Pressure Crystallography: Exploring Structure and Method Development at Extreme Conditions

M22: AI and Automation in data collection and processing

### 7. PRIZES SPONSORED/COORDINATED

The SIG08, as EPDIC committee, awarded two prizes: one for Young Scientists (Dr. Maxwell Terban Max Planck, Germany) and for Distinguished Powder Diffractionist (Prof. Paolo Scardi University of Trento, Italy) at the congress in Padova.

### 8. PAST/CURRENT ACTIVITIES (OTHER THAN MS AT ECM)

**Title:** EPDIC18, 30 August to 2 September 2024, Padova, Italy

**Number of Participants:** ~330

**Level of involvement of SIG in the activity:** 100%

**Sponsored by ECA?** Yes

**Other Sponsors/Organizers:** AIC, IUCr, Main manufacturers/retailers of XRD equipment (Bruker, Panalytical, Rigaku, Dectris, ICDD, among the many other)

**Short Description:** EPDIC18 gathered 330 participants from 29 countries. 39 young participants (graduate, PhD students and postdoctoral fellows) received support to attend EPDIC18:

6 received support funded by the Italian Association of Crystallography (AIC)

8 from ELETTRA (Synchrotron Trieste)  
2 from Sesame (Synchrotron in the middle east)  
20 from IUCr  
3 from ECA

The scientific programme contained 2 award lectures, 7 plenary lectures, 24 keynote lectures, 38 oral presentations and 158 poster presentations organised into 12 thematic microsymposia. In the Exhibition area, 11 companies presented their products and services. The Conference was generously supported by a number of sponsors: Bruker AXS and Malvern Panalytical (Gold sponsors); Anton Paar and Rigaku (Silver sponsors); ICDD, STOE, Dectris and PROTO X-ray diffraction (Bronze sponsors), as well as many other sponsors and supporters: Huber, American Elements, Polycrystalline, Crystals, Crystal Impact, Excelsus, IUCr, European Crystallographic Association (ECA), University of Padova, Institute of Crystallography (CNR). Prior to EPDIC18, two satellite events took place: TOPAS Intensive Course from 28 to 30 August and ICDD Workshop on 30 August 2024.

## 9. FUTURE ACTIVITIES

**Title:** EPDIC19, Crans Montana, Swiss (to be yet confirmed in Padova)  
**Number of Participants:** ~300-400  
**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 during last year was the organization of EPDIC18 that involved 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/>