

SIG8 – Powder Diffraction

Reported Period: 2018-2019

Report Date: 17 June 2019

Reported by: Paolo Scardi, Bob Cernik, Michela Brunelli

1. Introduction. (50 words max.)

The past 12 months were intermediate between two EPDIC congresses, so the level of activity was low, mainly focused on the production of EPDIC16 proceedings, which will appear soon on Powder Diffraction. At the time of writing SIG8 starts organizing the next EPDIC at Šibenik, Croatia, May 2020

2. SIG web site:

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

3. Number of ECA individual members registered with the SIG according to (<https://ecanews.org/>)

SIG8 Powder Diffraction 103

4. Existence of a SIG mailing list: Yes

Address of the mailing list: Available from the EPDIC organizers

Number of members in the SIG mailing list: ca 400

The SIG8 is mainly active within the EPDIC scientific committee, currently composed of 23 active members, whose skills cover most of the cultural fields of the sector and represent geographically almost the entire continent. The information is available on the SIG (and EPDIC) website and on the site of the next EPDIC event, at the moment, <https://www.epdic17.org/>

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

The following MSs were accepted and included in the program of ECM32 at Vienna

MS42 – “In Situ and In Operando Analysis of Functional Materials”

MS43 – “Total Scattering Studies and Disorder”

MS44 – “Solving structures through combination of reciprocal and direct space method”

Then we have co-proposed 3 more Mss with other SIGs, namely:

MS17: “Pressure and Mechanical Stress Induced Phase Transition and Polymorphism in Inorganic, Metalorganic and Organic Compounds” - co-proposed with SIG 11, 12, 5, 7

MS18: “Materials for Energy Storage and Conversion” - co-proposed with SIG 11, 12, 5

MS27: “Structural Dynamics, Disorder and Physical Properties” - co-proposed with SIG 14

As of the previous ECM (ECM31 at Oviedo), SIG8 proposed two MSs, (“Operando and in-situ crystallographic studies using powder diffraction”; and “Total Scattering approach for disordered, partially ordered materials and nanomaterials using powder diffraction”), whereas a third one was a joint proposal with SIG5 on "New insights on minerals and related materials diffraction study"

7. Prizes sponsored/coordinated

The SIG, as EPDIC committee, awarded two prizes at the last congress in Edinburgh (1-4 July 2018), respectively for Young Scientists (Stef Smeets, Stockholm University) and for Distinguished Powder Diffractionist (W.I.F. (Bill) David, University of Oxford). Next award will be delivered at Šibenik, Croatia (May 2020), during EPDIC17.

8. Past Activities other than Microsymposia at ECM

Title: EPDIC-16, Edinburgh (U.K.), 1-4 July 2018

Number of Participants: ~300

Level of involvement of SIG in the activity: 100% (SIG8 coincides with the EPDIC scientific committee)

Sponsored by ECA? Yes

Other Sponsors/Organizers:

Main manufacturers / retailers of XRD equipment, crystallography and related topics

Short Description: (50 words max.)

EPDIC is the world's leading event entirely dedicated to Powder Diffraction. As such it presents the most up-to-date and complete panorama on the discipline, with thematic insights that vary in the various editions, especially aimed at applications in all relevant sectors of science and technology.

9. Future/Programmed Activities

Title: EPDIC17, Sibenik, Croatia (May 26-30, 2020)

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: (25 words max.)

EPDIC is the main event organized every two years by the joint SIG8-EPDIC committee.

10. Other matters. (50 words max.)

No other matters.

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

As already pointed out the past 12 month were in between two EPDIC events, so the main activity was in the editing of the proceedings, to appear in the journal Powder Diffraction. At the time of writing this report the organization of next EPDIC has just started. Among the first and relevant task involving the SIG, choice of plenary speakers, name/content of sessions and Chairs, candidates to the two awards (Young scientist and Distinguished Powder Diffractionist) to be delivered at Sibenik in 2020.

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

Committee Member	City/Country	Email
A. (Angela) Altomare	Bari, Italy	angela.altomare@ic.cnr.it
J.P. (Paul) Attfield	Edinburgh, Scotland, UK	j.p.attfield@ed.ac.uk
N. (Nathalie) Audebrand	Rennes, France	nathalie.audebrand@univ-rennes1.fr
P. (Pierre) Bordet	Grenoble, France	pierre.bordet@grenoble.cnrs.fr
M. (Michela) Brunelli	Grenoble, France	brunelli@esrf.fr
R.J. (Bob) Cernik	Manchester, UK – vice-Chairman	B.Cernik@manchester.ac.uk
W.I.F. (Bill) David	ISIS, Oxon, UK	bill.david@stfc.ac.uk
M. (Milan) Dopita	Prague, Czech Rep.	dopita@gmail.com
A.N. (Andy) Fitch	ESRF, Grenoble, France	Fitch@esrf.fr
G. (Gwilherm) Nenert	PANalytical, Almelo, The Netherlands	gwilherm.nenert@panalytical.com
A. (Antonella) Guagliardi	Bari and Como, Italy	antonella.guagliardi@ic.cnr.it
K.M.Ø. (Kirsten) Jensen	Copenhagen, Denmark	kirsten@chem.ku.dk
J.E. (Jens-Erik) Jorgensen	Aarhus, Denmark	jenserik@chem.au.dk
A. (Arnt) Kern	Bruker AXS, Karlsruhe, Germany	Arnt.Kern@bruker.com
A. (Alexander) Kremenovic	Belgrade, Serbia	aleksandar.kremenovic@rgf.bg.ac.rs
I. (Irene) Margiolaki	Patras, Greece	imargiola@upatras.gr
A. (Antonia) Neels	Dübendorf, Switzerland	antonia.neels@empa.ch
W. (Wojtek) Paszkowicz	Warsaw, Poland	paszk@ifpan.edu.pl
J. (Jasminka) Popovic	Zagreb, Croatia	jpopovic@irb.hr
D. (David) Rafaja	Freiberg, Germany	rafaja@ww.tu-freiberg.de
G. (Gwen) Rousse	Paris, France	gwenaelle.rousse@college-de-france.fr
P. (Paolo) Scardi	Trento, Italy – Chairman	Paolo.Scardi@unitn.it
O. (Oriol) Vallcorba	ALBA, Barcelona, Spain	ovallcorba@cells.es
P.S. (Pam) Whitfield	Excelsus and PSI, Villigen, Switzerland	pamela.whitfield@excels.us