1. **Introduction.** (50 words max.)

As in 2017 there was no ECM meeting, the activities of the SIG were concentrated on participating in the topic related MS at the IUCr meeting in Hyderabad. Several of the SIG officers and individual member were involved in the organization of the MS, were invited speakers or chairs and were very actively contributing to the conference. In addition, members of the SIG were contributing substantially to the EHPRG in Poznan, as well as to other conferences and workshops. SIG11 is also deeply involved in planning activities and developing experimental set-ups for beam-lines at large-scale facilities, in particular at the ESRF, PETRAIII, and the MLZ. Webpage and Mailing list of SIG11 are fully operational.

2. **SIG web site:**

   http://ecanews.org/mwp/groups/sig-11-crystallography-under-extreme-conditions/

3. **Number of ECA individual members registered with the SIG according to**

   (http://www.xray.cz/eca/im-payment.htm)

   SIG 11 Crystallography under Extreme Conditions ~80

4. **Existence of a SIG mailing list Yes**

   Address of the mailing list: http://list.ehu.es/mailman/listinfo/ecasig11

   Number of members in the SIG mailing list: 135

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

   About 200 people based on the number of participants of MS at ECM30 and special sessions at IUCR, EHPRG and AIRAPT organised or co-organized by SIG11, and the number of members of the SIG mailing list.

6. **List of MS organized by the SIG at the last ECM**

   As there was no ECM in 2017, also no MS were organized.

7. **Prizes sponsored/coordinated**

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8. **Past Activities other than Microsymposia at ECM**

   Title: 24th Congress and General Assembly of the International Union of Crystallography, August 2017, Hyderabad, India

   Number of Participants: 1750

   Level of involvement of SIG in the activity:
   
   x ECA Individual members registered with the SIG involved in the organizing committee
   
   x ECA Individual members registered with the SIG involved as lecturers
Sponsored by ECA? No
Other Sponsors/Organizers:
Short Description: The IUCr conference covers all aspects of Crystallography. Several sessions were dedicated to subjects closely related to high-pressure crystallography; a large number of individual members of SIG11 contributed to the conference.

Title: EHPRG-55 Meeting, September 2017, Poznan, Poland
Number of Participants: 220
Level of involvement of SIG in the activity:
- x ECA Individual members registered with the SIG involved in the organizing committee
- x ECA Individual members registered with the SIG involved as lecturers
Sponsored by ECA? No
Other Sponsors/Organizers:
Short Description: The EHPRG was a large scope conference and fully concentrated on science at high pressures. Several sessions were dedicated to subjects closely related to high-pressure crystallography; a large number of individual members of SIG11 contributed to the conference.

Title: Workshop Hot topics in contemporary crystallography, April 2017, Poreč, Croatia
Number of Participants: approx. 50
Level of involvement of SIG in the activity:
- x ECA Individual members registered with the SIG involved in the organizing committee
- x ECA Individual members registered with the SIG involved as lecturers
Sponsored by ECA? Yes
Other Sponsors/Organizers: Croatian Association of Crystallographers
Short Description: Workshop focused on dynamic crystallography, non-ambient crystallography and experimental charge density studies

Title: 26th Annual Conference of the German Crystallographic Society, March 2018, Duisburg/Essen, Germany
Number of Participants: 300
Level of involvement of SIG in the activity:
- x ECA Individual members registered with the SIG involved as lecturers
Sponsored by ECA? No
Other Sponsors/Organizers:
Short Description: Several MS dedicated to topics of the SIG were organized.

Title: Chemical Crystallography Beamline P24 Workshop, May 2017, Hamburg, Germany
Number of Participants: 30
Level of involvement of SIG in the activity:
- ECA Individual members registered with the SIG involved in the organizing committee
- x ECA Individual members registered with the SIG involved as lecturers
Sponsored by ECA? No
Other Sponsors/Organizers:
Short Description: Workshop to define the future scope of science for the chemical crystallography beamline at PETRA III (including single crystal diffraction at extreme conditions)

SIG Officers and individual members are currently actively involved in the organization of the MS for the next ECM meeting in Vienna.

Other conferences were SIG11 is actively involved in the preparation include:

Title: IUCr High Pressure Workshop, July/August 2018, Honolulu; US
Number of Participants:
Level of involvement of SIG in the activity:
  x ECA Individual members registered with the SIG involved in the organizing committee
  x ECA Individual members registered with the SIG involved as lecturers
Sponsored by ECA? No
Other Sponsors/Organizers:
Short Description: Specialized conference on high pressure crystallography organized by the IUCr commission on high pressure.

Title: EHPRG-56: International Conference on High Pressure Science and Technology, Averio Portugal, September 2018
Number of Participants:
Level of involvement of SIG in the activity:
  x ECA Individual members registered with the SIG involved in the organizing committee
  x ECA Individual members registered with the SIG involved as lecturers
Sponsored by ECA? No
Other Sponsors/Organizers:
Short Description: Large international conference related to all subjects concerning High pressure techniques and applications

10. Other matters. (50 words max.)

11. Brief annual activity report (100 words max.)
SIG officers and individual members of SIG11 were deeply involved in the most important workshops and conferences dedicated to research at extreme conditions, where they participated as members of the organizing committees, chairs for microsymposia or invited lecturers.
In particular, one should stress the high level of involvement of the SIG members in the further development of new infrastructure at large scale facilities (PETRA III, MLZ, and ESRF).

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