

Expanding Crystallography as science in Africa: some initiatives

Andreas Roodt¹

¹University Of The Free State, Bloemfontein, South Africa

E-mail: roodta@ufs.ac.za

Crystallography is an important vehicle to promote and expand science in Africa due to its many applications and cross-cutting nature over a number of 'classic' science disciplines. It is not only critical in many fundamental studies, but naturally also has potential to contribute to different applied sciences.

This presentation will discuss some activities launched into Africa by different individual entities and science initiatives by individuals, scientific organizations [in particular crystallographic organizations], and governments.

It will focus on drives as initiated by, and pushed forward, by associations closely linked to crystallography, and in particular supported by the International Union of Crystallography (IUCr) and the European Crystallographic Association (ECA); the latter being a 'formal crystallographic custodian' of the African region.

These initiatives include those funded by the IUCr, ECA and ICSU (International Council for Science) and UNESCO, and comprise of meetings and workshops hosted across Africa over the past decade; also in collaboration with the African Materials Science initiative.

Some aspects of these meetings will be reported on, and perspectives will be given, also on selected workshops which were presented. Initiatives from, and in South Africa will also be discussed.

Specific meetings on fundamentals of Crystallography in South Africa, but also across Africa will be briefly highlighted, but with more detail. These include the Pan African and South African Meeting of the International Year of Crystallography (IYCr2014) - IYCr2014 Africa, fittingly titled 'Crystallography as vehicle to promote Science in Africa and beyond', hosted in Bloemfontein, South Africa 12-17 October 2014.[1]

This meeting preceded the 5th Tunisian Crystallographic Meeting (March 2016) and International Conference in Hammamet in Tunisia, and more recently the First Pan African Conference on Crystallography (PCCR1) hosted in Dschang in Cameroon during October 2016.[2]

Coupled with the above, other initiatives in Africa and South Africa, such as the Indaba series of meetings, triennially hosted in South Africa since the nineties of the previous millennium,[2] as well as BloemCrystSchool1 and 2, will be briefly discussed. [3]

Finally, some thoughts on the future establishment of an 'African Crystallographic Association' (AfCA) will be presented.

[1] [http://www.ufs.ac.za/conferences/conference/international-year-of-crystallography-conference-\(iyacr2014africa\)-home](http://www.ufs.ac.za/conferences/conference/international-year-of-crystallography-conference-(iyacr2014africa)-home).

[2] <http://pccr1-2016.univ-dschang.org/>; and <http://www.sacrs.org.za/indaba/>

[3] <http://www.crystallography.fr/mathcryst/SouthAfrica2014.php>; and <http://conferences.ufs.ac.za/default.aspx?DCode=724>

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