





#### IUCr's Committee on Data Workshop

### "Data Science Skills in Publishing: for authors, editors and referees"

Organizers: John Helliwell (University of Manchester, UK) Brian McMahon (IUCr, R&D Department, UK)

> Date: 18th August 2019 Time: 8:25 a.m. to 5 p.m

## Introduction





# The Editor as Gatekeeper>>>

### Is refereeing the data as well **sustainable**?



Also the need for consistency; the crystallographic information file and Check cif>>>

### But, can Validation Reports cover everything that needs to be checked? No, you need to check all three:-

Narrative

Data

Validation report



### IUCr chemistry journals have followed this **exemplary practice** and are an inspiration to other fields of crystallography to follow their lead

Dr Madeleine Helliwell Acta Cryst C Coeditor



As EinC IUCr Journals (1996-2005) I could see Madeleine's Acta Cryst C editorial work on the submissions by authors In the mid 2000s with IUCr Chester we surveyed this topic and also considered archiving **and use of raw diffraction data** [1].

At that time harnessing raw data archiving was a gleam in the eye!

 [1] Strickland, P., McMahon, B. & Helliwell, J. R. (2008).
Integrating research articles and supporting data in crystallography. *Learned Publishing*, **21**, 63-72.

# Right, let's go to it

• Sunday 18th August 2019 proposed programme:

Session 1 Chair: Annalisa Guerri

Morning: 08:25 - 12:00

08:25-08:30 John R Helliwell: "Introduction to the Workshop"

08:30-09:00 Tony Linden: "Data refereeing and editing in chemical crystallography; the Acta Cryst C experience" 09:00-09:30 Brian McMahon: "The vital role of Crystallographic Information Files in chemical and biological crystallography to underpin the databases' validation reports"

09:30-10:00 Ton Spek: "Platon and raw diffraction data opportunities for chemical crystallography publishing"

10:00-10:30 \*\*\* COFFEE \*\*\*

Session 2 Chair: Brian McMahon

10:30-11:00 Miguel Aranda: "The role of raw powder diffraction data in peer review; past, present and future"

11:00-11:30 Kay Diederichs and Manfred Weiss: "Diffraction data deposition and publication"

11:30-12:00 Loes Kroon-Batenburg: "Raw data opportunities for biological crystallography publishing"

12:00-13:00 \*\*\* Lunch \*\*\*

Afternoon: 13:00 – 16:00

Session 3 Chair: Simon Coles

13:00-13:30 Simon Coles, Suzanna Ward and Carl Schwalbe: "Correcting the public record of chemical crystallography science"

13:30-14:00 Mariusz Jaskolski: "Correcting the public record of biological crystallography science" 14:00-14:30 Petra Bombicz: "Overview of the role of data reviews and tutorial reviews in improving crystallographic science training"

14:30-14:45 \*\*\* Comfort break \*\*\*

Session 4 Chair: Brian McMahon

14:45-15:15 Simon Billinge: "Moving towards a more data-centric scientific literature"

15:15-15:45 Gillian Holmes: "IUCrData - update on data publication and practices at the IUCr"

15:45-16:00 John R Helliwell: "Overview of the new opportunities in and a harmonisation of peer review of "data with validation report with article narrative" practices"

16:00-16:30 \*\*\* General Discussion \*\*\*

16:30-17:00 === TEA === 18:00 Opening Ceremony of ECM32