

**International Centre for Diffraction Data**  
**X-RAY FLUORESCENCE SUBCOMMITTEE MEETING MINUTES**  
**Wednesday, 25 March 2015**  
**Mark Rodriguez, Chairman**

1. Call to Order and Opening Remarks Mark Rodriguez
  
2. Roll Call and Attendance  
Attendance sheet on file at headquarters. D. Taylor was appointed as BoD liaison due to absence of J. Anzelmo.
  
3. Approval of the 2014 Minutes  
Motion to approve minutes by M. Rodriguez. Seconded by D. Taylor.  
**Voted: 4-YES, 0-NO, 0 Abstain**
  
4. Appointment of Minutes Secretary  
S. Gates was nominated to record this year's minutes.
  
5. Review of Mission Statement  
Concerns were stated about how the mission statement reads. The statement, "*includes having XRF data to be part of the PDF by considering instrument configurations, data collection, and simulation from calculated powder patterns;*" in the mission statement seemed unclear and the committee wanted to better define our overall purpose.  
  
M. Rodriguez indicates the purpose of the subcommittee is to determine how best to push the comprehensiveness of the database to include XRF information/data, and we deconstructed and updated the mission statement.  
  
New Mission Statement (proposed):  
The X-ray Fluorescence Subcommittee will provide recommendations for X-ray fluorescence to be a complement to both the PDF and ICDD. This entails synergistic interchange between data collected from XRD and XRF:
  - Use of chemical composition to support powder diffraction analysis
  - Ability to improve chemical composition by use of the powder diffraction data
  - To ultimately obtain simulated XRF data as a means of material analysis validation, such as refinement of data from multiple analytical methodsIn addition, the subcommittee shall develop new educational opportunities for ICDD and offer guidance on addressing elemental composition issues, which are of strategic interest to ICDD.  
Moved by: Dave Taylor. Seconded by: Mark Rodriguez  
**Vote: 4-YES, 0- NO, 0 Abstain**
  
6. BoD Liaison Report D. Taylor  
Nothing to report.
  
7. Review of Membership  
List needs to be updated to include Jeffrey Nicolich as a member of the XRF subcommittee.
  
8. Old Business (**NOT ADDRESSED IN 2015**)  
After some discussions, the following action items were generated:
  - Post a link on ICDD's website, to J. Anzelmo's recent SPECTROSCOPY article pertaining to the basic needs for XRF experimentation. T. Fawcett  
**\*\*FIRST\*\***: John will verify that posting the article on ICDD's webpage will not violate any copyright permission. J. Anzelmo

- Utilize social media (Facebook, LinkedIn, and Twitter) to promote the SPECTROSCOPY article, as well as other XRF educational tools and workshops. T. Maguire
- Research initiative to improve Fundamental Parameter Constants
  - Funding to carry out this research is required. The XRF subcommittee believes this would be profitable for ICDD if we could exclusively develop these parameters and add them to the database.
  - Initiative was mentioned by other groups, so some contact needs to be made to Mr. Madler (Austria) to determine the current status of this project before we proceed. M. Rodriguez
- Discuss possibility of moving around the XRF workshops to other meetings besides DXC, if economically beneficial. T. Fawcett will have some discussions with J. Anzelmo and other XRF experts about this possibility. T. Fawcett

## 9. New Business

### Motion 1:

The XRF Subcommittee recommends to the Technical Committee that a test of the database be performed wherein X-ray Fluorescence composition results from a series of common compounds and/or minerals be processed through the *Composition field* of the *Elements* tab. The test of these known single phase materials (perhaps 50-100 “common phases” in the PDF database) would assess the effectiveness of the database to perform phase identification from XRF results alone. A report would be generated by ICDD to document how well the identification process worked, as well as possible recommendations for improved means of identification. With a request a report would be completed by the Fall Board 2015 meeting.

**Voted: 4-YES; 0-NO, 0 ABSTAIN**

### Motion 2:

The XRF Subcommittee recommends to the Technical Committee that newly determined (updated) Fundamental Parameters (FP) values be compiled and archived by ICDD for the benefit of XRF experimentalists, equipment manufacturers, and future ICDD projects requiring accurate FP tabulations.

## 10. Adjournment