

XRF SUBCOMMITTEE MEETING MINUTES

Wednesday, 25 March 2009

International Centre Headquarters

Conference Room D

George Havrilla, Chairman

1. Call to Order and Opening Remarks

George Havrilla called the meeting to order.

2. Appointment of Minutes Secretary

H. McDonnell was appointed Minutes Secretary.

3. Roll Call and Attendance

Attendance sheet is on file at Headquarters.

4. Review proposed Mission Statement

G. Havrilla presented the new mission statement for the XRF Subcommittee.

The X-ray Fluorescence Subcommittee will provide recommendations for X-ray Fluorescence to be a complement to both the PDF and ICDD. This includes having XRF data to be part of the PDF by considering instrument configurations, data collection, and simulation from calculated powder patterns; developing new educational opportunities for ICDD and offering guidance on addressing elemental composition issues which are of strategic interest to ICDD.

Approval of the Mission Statement

T. Blanton Moved

J. Faber Seconded

8 For

0 Oppose

0 Abstain

5. Approval of Minutes

Approval of the Minutes from March 2008.

T. Blanton Moved

D. Taylor Seconded

9 For

0 Oppose

0 Abstain

6. Board of Directors' Liaison Report P. Scardi

During the 2008 meeting, P. Scardi recommended the XRF Subcommittee define its purpose to the ICDD. G. Havrilla moved that headquarters develop a plan for implementation of XRF spectral data into PDF.

- Provide guidelines for requiring Grants-in-Aid to have elemental spectral data beginning 2010
- Develop implementation plan with Tim Fawcett based on FBI proposal
- Form XRF working group to develop plan by March 2009
- Acquire preliminary data for evaluation of necessary information to be included in database and format

(X-ray Fluorescence Subcommittee) **Response:** *Administration Department, Executive Director: As noted above, initial steps involve development of a plan by the XRF subcommittee and acquiring data for evaluation. This is a good target for the 2009 meeting. ICDD programmers and scientific staff need data so they can work on import/export of common formats and data editing – the data does not need to be of a reference material.*

7. Subcommittee Charter Overview and Responsibilities

8. XRF Course Offerings by ICDD

Discussion: Pittcon has no sessions on XRF. Present a proposal to the subcommittee. T. Fawcett suggested that we host workshops at ICDD headquarters.

Three vendors offer handheld instruments. There are no regulations for XRF handheld equipment (to date). D. Taylor stated there were regulations in the UK; it is a national law. The onus is on the user, not the vendor. Discussions ensued regarding online certifications.

9. New Business

- a) **XRD/XRF data** – T.Blanton is collaborating with G. Havrilla, develop test data for ICDD staff to work with on incorporating XRF data into database
 - 6 samples – TBD (alloy, general materials – ceramic, paint)
 - 4 pure and 2 mixtures
 - Collect XRD patterns
 - Collect XRF data; SEM, EDS, EDXRF and WDXRF, if possible
 - Discuss with Tim Elam possibility of simulating XRF spectra/composition from calculated powder patterns for comparison with actual spectra
 - BENEFIT
 - Value added to PDF product – across subfiles, alloys, ceramics, forensics, pharmaceuticals
 - Add tab to Data QUACKER

- b) **XRF of Pharmaceuticals** - This is becoming a big issue in terms of alternative analyses for impurities such as residual catalysts. Opportunities exist for providing guidance and tie-in with database product, as well as training to the pharmaceutical community. Discussion ensued and consensus was that this is an area to keep tabs on with lots of potential.

10. Adjournment