International Precious Metals Institute Sampling & Analytical Council Seminar



Agenda/Minutes

February 5th, 2019 Marriott Hotel, Bush Intercontinental Airport, Houston, TX

- 1. Welcome and introductions, review of the IPMI antitrust policy, Sampling & Analytical Council Mission Statement.
 - a. Alan Kaye reviewed the IPMI antitrust policy, Larry Drummond addressed the group and reviewed upcoming IPMI events
 - b. Algis Naujokas reviewed the SAC mission statement, no changes proposed
- 2. "IPMI Sampling & Analytical Council Round Robin Exercise #11: Interlaboratory Comparisons of Platinum/Ruthenium Ash", Algis Naujokas
 - a. Reviewed the results from RR11.
 - b. 17 labs participated, reviewed the experience and methodology used
 - c. Final report to be distributed to participating labs by 2/22/19, Algis Naujokas
 - d. Discussed and agreed to keep the present reporting format, excel and pdf
 - e. Discussed grain size, outliers/methods, reporting temperature and possibility of comparing riffled vs. non-riffled samples in the future

3. Round Robin discussion:

- a. Reviewed past RR and updated the list of future RR
- b. Discussed next RR (#12), spent EO catalyst
 - i. To be distributed by Josh Husvar of Bureau Veritas (Inspectorate), ~60g samples
 - ii. Discussed grade, agreed to assay the prepared catalyst only
 - iii. Agreed to report both soluble and total Ag, on dry basis at 110C for 8 hours
- c. Solution RR (#13)
 - i. Mark Kottke of Gemini has ~200 ppm solutions ready
 - ii. Will email all with details and reporting parameters
- d. Discussed RR of interest to PRC, possibly RR#14
 - i. High carbon Pt/Re catalyst, 30-40% carbon
 - ii. In process of acquiring spent catalyst, Don Swaynos
 - iii. Would like to get this in before the June conference if possible
- e. Discussed joint RR exercise with the LPPM, purity grade metal (Pt)
 - i. Agreed this would be of interest to the group
 - ii. Awaiting word from Jonathan Jodry of Metalor as to cost and timing

4. Old Business

- a. Discussed deadline for presentations at the general conference in June
- b. Submit working title or abstract to IPMI by 2/22/19

5. New Business

- a. Discussed the creation of a mining session during the June conference
- LD discussed the need for presentations regarding the sampling and analysis of mining material.

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- c. **Commercial lab representatives** agreed to look into this as they have the most experience with these types of samples
- 6. "Representation and Analysis: Analytics, Quality and Sampling Challenges", Keith Peterson, Ledoux and Co.
 - a. Reviewed LIMS upgrade and benefits
 - b. Discussed the importance of determining settlement weight in-plant using qualified representatives
 - i. This led to a group discussion on the merits of the pill LOI/LOD done in-plant at the supplier or reclaimer, eliminates weight/ moisture changes during transit that can lead to errors, emphasized that the LOD/LOI on the ground sample must be done using the same conditions as the pill sample
 - ii. The commercial laboratories, petroleum refiners and precious metal reclaimers agreed that this was the best option when settling this type of material.
- 7. "Analytical Options for the Determination of Platinum and Ruthenium in Complex Matrices", Jacob Gasiorek, Sabin Metal Corp.
 - a. Discussed different analytical methods for analyzing this type of material. Similar to the RR#11
 - b. The group commented on possible improvement to the methods, potential spectral and sample introduction interferences and alternative fluxes (Pb vs Bi) and collectors (Ag vs Au) for fusions
- 8. "Value Stream Mapping for Operational Excellence in the Laboratory", Dr. Zachary Henneman, et al., BASF
 - a. Discussed factors to improving process flow in the laboratory and the challenges associated.
- 9. "Processing and Preparation of WEEE for Precious Metals and commodities assay", Pawel Jasinski, SIMS Recycling Solutions
 - a. Detailed the processing and analysis of waste electronic and electrical scrap
- 10. "Fundamentals of Trace Impurity Analysis by ICP-OES", presentation by Thomas Kozikowski, R&D Chemist, Inorganic Ventures
 - a. Discussed the challenges associated with trace level analysis such as sample prep, standard integrity, common contamination issues, calibration techniques and spectral interferences
- 11. "Solutions for Powder and Slag Analysis for Precious Metals by XRF, a Comparison of ED-XRF vs. WD-XRF", presentation by Daniel Pecard, Bruker AXS, Inc.
- 12. Discuss details of the next meeting
 - a. Next meeting will be at the general conference in June
 - b. Tentatively set for Monday, June 17th, 1-3 pm. Room location TBD
 - c. Looking for 3-4 short presentations for that meeting, 5-10 minutes each