



Precious Metals News

A Publication of the International Precious Metals Institute
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The European Chapter of the IPMI Organized a Seminar in Amsterdam

By Jonathan Jodry, Metalor

The European Chapter of the IPMI organized a Seminar in Amsterdam, on 7-8 November 2016, on “PGM Catalyst Use & Recycling”. More than 100 participants followed 11 presentations over 2 half-days, which were given in the beautiful Saint Olof’s chapel (the oldest chapel in Amsterdam, built 1440-50, which serves as conference centre for the NH Barbizon Palace Hotel).

Junlu Liang (Metalsfocus) presented the first paper on *Current Trends and Outlook for PGM Autocatalyst Recycling*, showing how the autocatalyst recycling of Pt and Pd has grown over the last 10 years compared to mine production.

Mike Belton focused on *Primary PGM Production in Southern Africa*. With 70% of world Pt production and a large mineral reserve, South Africa enjoys a central role in PGMs supplies, but faces at the same time important challenges with raising power prices, labour unrest and impairments charges for mining companies.

Two refiners followed on the stage. Lynda Sy-Ahmed introduced Metalor Technologies activities on spent PGM catalysts recycling. With its facilities in Americas, Europe and Asia, the company is able to handle the PGM wastes issued from heterogeneous and homogeneous catalysts of fine chemical, pharmaceuticals and agrochemical industries locally, thus limiting the exposure and paperwork of the suppliers.

Angela Alderman (Johnson Matthey) detailed *Moving Precious Metals* procedures. Mastering the European Waste Classification is a must in this business, as well as understanding the differences between Green wastes and Amber materials requiring specific procedures.

The last presentation of the day was by Ross Strachan (Thomson Reuters) on *Future Catalyst Trends & Implications for PGM Usage*. Although 6 emission stages (Euro I to Euro VI) already allowed to reduce NOx and PM generation by over 97%, the growth in vehicle production and stricter legislations still call for development of Pt and Pd catalysts and higher precious metal loadings. With 37% of Chinese vehicles and 68% of all off-road heavy-duty vehicles having no installed aftertreatment, the PGM usage for autocatalyst looks promising.

The day ended with a cocktail followed by a beautiful dinner - in the same Chapel - prepared at the kitchen of a Michelin-starred restaurant, offering a rather unusual quality for a seminar. After the



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European Chapter Seminar, continued from page 1

wine tastings in London, the European Chapter has set some very high standards on food and drinks!

On Tuesday morning, Cynthia Hollingsworth (Inspectorate) presented *Developing a Commercial Testing Procedure for Spent Auto Catalyst*. Quantification of Pt, Pd and Rh can be readily done by a pyrometallurgical process using gold as collector, followed by ICP-OES analysis after mineralisation of that gold. With the use of reference materials and participation of round robins, Inspectorate can offer the highest quality of analysis in that field.

Frank Fassbender, consultant for recycling technology and the catalytic converter recycling industry (k2fconsult), introduced how *Effective Grinding and Sampling* could be done. Fully automated solutions are available, which allows to process large quantities of waste with a minimum of human intervention.

In a very colourful paper, Willem van Kooten (Bru Tech) presented where PGM catalysts could be lost between their production and their evaluation for recycling. With sometimes the percentage of this loss being a double-digit one, it is not surprising that catalyst owners are sensitive on that matter! Losses can arise at multiple stages, including during preparation of the catalyst, loading and unloading, attrition during the catalyst usage, sampling and analysis.

Alexey Kornienko presented R&D Park, a research facility for technology development and its transfer to industrial partners, employing 55 scientists and working among other domains in hydro-, pyro-, electro- metallurgy & refining. R&D Park proposes unique collaborative R&D solutions for companies which have to fill a gap in their own R&D. As an example of collaborative R&D, a technology for PGM autocatalyst leaching was offered as alternative approach to smelting.

A joined-paper was prepared by Oliver Krestin (Hensel Recycling) & Pär Rosendahl (Arc Metal AB) on *SiC – Diesel Particulate Filters*. A challenge for Autocatalyst smelters. The level of carbon in smelter feed is getting increasingly problematic, and SiC needs to be oxidized to SiO₂ and CO₂ - while smelters usually operated under reducing conditions! Currently, penalties are applied for carbon content, but new technologies have to be developed to cope with the higher amounts of carbon expected in the future.

Finally, the seminar ended with Graham Couzens, who showed how a complex moving to a new thermal pre treatment facility in Buxton was performed by Mastermelt. This operation was done in close collaboration with the UK Environmental Agency, leading to the doubling of the pre treatment capacity.



Republic Metals Corporation Introduces New 1oz Silver Bar



Republic Metals Corporation has announced the release of its redesigned 1oz. minted silver bar to its line of fine silver products.

The new bar is designed with a clean and modern look to emphasize the purity of the good delivery accredited and IRA acceptable fine silver contained within. The front of the bar displays the Republic Metals logo on top, the weight and purity in the center, and the assay logo on the bottom. On the back of the bar is a repeating pattern of the Republic Metals logo with Republic Metals Corporation written in the center. This 1oz fine silver bar is part of Republic Metals larger line of minted silver products.

Click on the link below for more information on Republic Metals' 1oz minted silver bar.

<http://www.republicmetalscorp.com/1oz-ag-bar>



IPMI® NEWS

More News!

That's right we are giving IPMI members more news! IPMI newsletter, now in pdf format, will be issued monthly starting in January 2017. You can stay more connected to industry news, IPMI news, Seminar and Conference updates and other features with this new format. All active members will receive the newsletter via email and copies will be posted on our members only area on the IPMI website.

And we will offer advertising in each issue! Full page, half page, business card and quarter page ads will be featured - all in color. Ads can be interactive and changeable each month. An email with size specifications and pricing was emailed to all members earlier this month.

If you wish to run an industry news article or purchase an ad for an upcoming issue please contact IPMI headquarters-mail@ipmi.org.

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2016 Platinum Dinner A Success!
Held in the beautiful and elegant ballrooms at the historic New York Palace Hotel, with over 220 in attendance the 2016 Platinum Dinner was a success! The evening started with the cocktail hour where delegates enjoyed sipping and chatting and networking. At the ringing of the chimes the attendees flowed into the elegant ballroom for the dinner. With standing room only the attendees were studiously attentive to the address given by Fox Business Anchor Liz Claman. Claman, who anchors Countdown to the Closing Bell, gave a brief overview of how she rose from struggling street reporter to her current position at Fox before launching into a her economic narrative. At the end of her address Ms. Claman graciously took questions from the audience.
IPMI thanks its Platinum, Gold, Silver and Speaker Sponsors for the success of the 2016 Dinner. We hope to see you in New York in 2017 for the Fifth Annual Platinum Dinner!

PGM Catalyst Use and Recycling Seminar
PGM Catalyst Use and Recycling Seminar will be held November 7th and 8th in Amsterdam. Sponsored by the IPMI Europe Chapter, this event will be held at the NH Collection Barbizon Palace. Registration is open on the IPMI website and easy payment in both Euros and US dollars. This two day event will include such topics as:
• R & D
• Future Catalyst trends
• Legislation
• Material Handling
• Burning
• Sampling and Assay
Registration includes the following: Welcome Reception & Delegate's Dinner, Breakfast, coffee breaks, lunch on Monday and participation in all Seminar sessions.

IPMI® 41st Conference Call for Papers
Technical abstracts for the 41st Conference are now being solicited. The dates for the Conference will be June 10-13 and the venue will be the JW Marriott Grande Lakes Resort in Orlando, Florida.
Please email your topic or title to mail@ipmi.org, by January 31, 2017. An abstract should follow by March 1, 2017.

Precious Metal Suggested Topics
Analytics
Auto Catalysts
Catalysis
Business Practices
Electronics
Energy and Fuel
Environmental
Legal
Insurance/Risk Management
Mining
New Technologies
Pharmaceuticals
Regulators
Sampling

IPMI 41st Conference Update

The IPMI 41st Conference will be held June 10-13 2017 at JW Marriott Grande Lakes Resort and Spa in Orlando, Florida. A Call for Papers has been issued and already speakers, topics and sessions are being assembled. The Conference will begin on Saturday June 10 with the Welcome Reception and the Conference Technical Program will begin Sunday Morning June 11 just after the member and board meetings. The Exhibit Hall will be open on Sunday and Monday

all day and half day on Tuesday.

If you are interested in presenting a paper, being a moderator, having an exhibit booth or being an event sponsor please contact IPMI at your earliest convenience to ensure your company is included in the program for 2017. We can be reached at 850-476-1156 or mail@ipmi.org.



FinCEN and FATF Struggle to Stem Bank De-Risking

The banks have been refusing to open new accounts in certain industries and have been closing existing accounts. Notably, accounts of money service businesses, correspondent banks and, more recently, precious metals companies. In a previous newsletter, I described the reasons

- In the case of MSBs and correspondent accounts, banks know only their proximate customers. But they are vulnerable to the unidentified upstream customers of the MSBs and correspondents.
- In the case of dealers in precious metals and stones, banks have cut accounts because of Operation Chokepoint, informal pressure from their regulators and declining profitability.

For FinCEN, having non-bank financial institutions frozen out of the banking system is a nightmare. It means losing a window into the business of the companies it must regulate.

Last week, FinCEN and the Financial Action Task Force (FATF) both issued administrative guidance assuring that the obligation to “know your customer” does not extend to “knowing your customer’s customers.” Banks and non-bank financial institutions are obliged to know only the nature of their proximate customer’s business and are not required to look further up the supply chain.

This might allay the banks’ fears a little, but probably not a lot. The banks’ are far more concerned with the policies of their Federal and State supervisors—the Federal Reserve, OCC and FDIC—than they are with FinCEN’s interests. The supervisors focus almost entirely on banks’ safety and soundness, so the bank regulators do not necessarily share FinCEN’s concerns.

Certain dealers in precious metals have customer due diligence problems similar to those raised by MSBs and correspondent accounts. For instance:

- Aggregators that buy and consolidate mine material
- Recyclers that buy scrap from smaller collectors also mask their sources of supply.

Precious metals dealers have no regulatory supervisors, so FinCEN’s role is undiluted by the priorities of other agencies. So, from an AML standpoint, FinCEN’s and FATF’s positions on knowing your customer’s customer are more meaningful to precious metals dealers than to the banks.

But we have reasons other than the AML regulations to be concerned with our customers’ customers. (See below)

Financial Choice Bill Challenges Dodd Frank

Section 1502 of Dodd Frank requires not only that we know our customer’s customer but that we know every stage of the supply chain to the mine from which metal was produced. (Scrap is exempt from this provision).

Last week, the Financial Choice bill cleared the House Financial Services Committee. It challenges a number of Dodd Frank provisions, among them the Conflict Minerals rules, which the bill seeks to amend out of existence. The bill is unlikely to be passed this year but could be a template for future initiatives.

If Section 1502 disappears, will it make any difference? Probably not. The Certification bodies have co-opted the cause. They have become the standard setters and surrogate conflict minerals regulatory enforcers. So even if SEC-supervised companies cease to disclose purchases from the Democratic Republic of Congo and the adjoining countries, the LBMA and TUC will most likely block metal purchases from mines and regions where there is humanitarian abuse.

IRS Reorganization to Impact Metals and Stones Dealers

IRS was appointed by FinCEN to conduct AML examinations for dealers in precious metals and stones. Personnel cutbacks made IRS’ task more difficult, so it reorganized to make more flexible use of its agents.

By far the largest number of IRS agents is assigned to examining income tax returns. They work intensively during tax season but might have time to spare the rest of the year. IRS is determined to use agents’ downtime to focus on its other mandates, such as Bank Secrecy Act examinations.

The objective is to lower the barriers between specialized IRS units and encourage agents to become involved in related areas. So, if an agent identifies an AML problem while doing a tax audit, he or she may request the option to investigate the problem directly rather than passing it on to a BSA specialist. Specialized areas will continue to exist but interchange between sections will be encouraged, to the point where agents through grade GS-11 (of 13 grades) that request a transfer to another section will most likely be granted their request.

New Committee Chairs Announced

There are some new faces chairing two of IPMI's busiest committees.

Don Swaynos has been appointed to chair the **Petroleum Refiners Council**. Swaynos follows Lee Miller and Michel Merkel who co-chaired the committee for the past several years. Under their leadership the PRC has grown tremendously over the last few years. Don will be responsible for spearheading the meetings of the PRC. Don has extensive experience in process engineering, refinery operations, reactor design, catalyst selection, fuels and lubes product quality, government affairs, procurement and sustainable reclamation of all catalyst metals for ExxonMobil. Don worked in or consulted on projects for over 20 refineries. He served as Vice President of an ExxonMobil Catalyst Services Company for 12 years handling all aspects of PGM assets for the corporation.

Currently Don is a consultant serving as a Marketing Consultant for Gemini Industries Don has been an active member of the Petroleum Refiners Council, the Analytical and Sampling Committee and Environmental and Regulatory Affairs Committees of IPMI.

Don's vision for the PRC is knowledge transfer to newer members of the PRC on how to maximize the potential of their catalysts to preserve the value of the assets through proper handling. IPMI thanks Don for his willingness to chair this group.



Another familiar face, frequent speaker at IPMI conferences, **Steve Crogan**, Blue Water Risk Management, will now Chair the **Security Council**. He follows Nish Clarke who chaired this group for more than twenty years. Under Clarke's leadership the Security Council has become an active group who routinely keeps a pulse on industry thefts and plant security. Steve has a BA from Northeastern University, Boston and is a graduate of the U.S. Customs Service Master's program with National Lewis University. Crogan began a working relationship with the precious metals industry in an effort to help provide lessons learned from criminal investigations conducted in Boston, New York, Miami, Chicago, Los Angeles, and Dallas.

Following his career with the United States Government, Crogan was the Director-AML Compliance & Security for Metalor Technologies U.S.A. of Massachusetts from 2007-2012, and for Elemetal, LLC in Dallas, Texas from 2012-2015. He now has his own firm, Blue Water Risk Management. Thanks Steve for your willingness to chair this group!

ERAC and EHS Committees Hold Back-To-Back Meetings

On October 27 & 28, at the suggestion of a number of IPMI members, the IPMI held the **Environmental and Regulatory Affairs Committee (ERAC)** and the **Employee Health & Safety Committee (EHS)** meetings on back-to-back days.

The ERAC meeting convened on Thursday, Oct. 27. An excellent turnout of 19 were in attendance. Co-Chairs Larry Drummond (Consultant) and Mike Riess (Materials Management) put together a robust agenda. Topics were covered by leading experts from a wide variety of disciplines. Bryan Ledgerwood of US Trade Representatives gave an update on the TTIP and TPP trade agreements. Bottom line: the path forward for both is on 'hold' pending the outcome of the US elections and possible new directions from the US President. Chris Bryant, from Bergeson & Campbell, IPMI's environmental counsel, gave an update on legislative issues possibly impacting the industry. He likewise forecast that nothing much will be taking place till the new congress is seated and new directors named to the different agencies. Barbara Curtis (JM) gave a very interesting summary of the IPA Health & Science Research Group Report. It had some startling findings. In RE: Pt, evidence was found to indicate a Dermal exposure route in respiratory sensitization induction. Also, Pt nano-particles have been detected in brain tissue. Steve Gardner, IPMI's General Counsel, gave a presentation on an on-going issue being promulgated by the Federal Trade Commission. The FTC has

initially taken the stance that gold jewellery which is manufactured in the USA can no longer be marketed and sold as "Made in the USA" unless the manufacturer can certify that every molecule of gold was sourced solely from a mine in the USA. Mike Riess updated attendees on Banking & Commodity regulatory developments as well as on Conflict Minerals rules. Mike also updated members on BSAAG, FinCEN and the PGM ruling request developments. Dave Bushnell (BASF) update on the Environmental Goods agreement. The day was concluded with Steve Crogan (Blue Water Risk Management) giving an update on AML Enforcement.

The newly formed **EHS Committee** convened on Friday, Oct. 28. Co-Chairs Elba Lizardi (JM) and JR Rao (Republic Metals) put together an very interesting agenda of Health & Safety topics. Patrick Meyer (BASF) gave a very interesting presentation on refractory ceramic fibres from auto cat decanning operations and the health hazards they present. It appears to be a much bigger problem than previously thought. JR Rao and Peter Eckert (Heraeus) each gave very interesting presentations on "Compliance-How to Manage & Insure EHS Compliance at your Site." Each company had a different approach but both were reportedly very effective. In the afternoon, Elba Lizardi and Diane George (Metalor) each gave presentations on "Permit to Work. When is it Required? Where else do you use it?" Each company had some very interesting ways they manage this area of a safe plant operation and a very interesting discussion followed.

Moving ahead, two things were decided upon by the members of these committees. First, it was agreed that there was more than enough information to review and discuss on a twice yearly basis to keep both committees fully occupied. So the committees will remain separate, but will collaborate on those topics that end up overlapping from 'regulation' to 'procedures'. Second, it was unanimously agreed to schedule these committee meetings on consecutive days in the future.

In closing, these committees are open for participation by all IPMI members. We encourage you to join the next meeting, to be scheduled for late March or early April 2017.



ERAC Accomplishments

ERAC was formed to represent precious metals interests with State and Federal Government regulatory agencies. When the EPA began promulgating standards and regulations pertaining to metals and metals scrap, we anticipated ISRI would address precious metals interests along with the interests of other metals sectors. However, it became evident that the focus and funding of ISRI and other large recycling groups was—and continues to be—concentrated on their ferrous and nonferrous constituencies. The precious metals industry needed an intelligent and informed voice, current on new developments and able to respond proactively. ERAC has been that body.

ERAC has always been composed of a small group of committed individuals willing to concentrate on regulatory problems and resolve them. ERAC's initiatives have been remarkably successful:

- ERAC's first challenge was to obtain an exemption for precious metals from the Resource Conservation Recovery Act (RCRA). The program provides that hazardous waste requires special labelling, handling, transportation and receiving at the Treatment Storage and Disposal Facility. ERAC obtained an exemption for precious metals scrap at the destination facility, as long as the value of the metal returned is greater than the transportation and processing cost. The saving to the industry is millions of dollars a year.
- If ERAC had not succeeded in obtaining an exemption from the Boiler and Industrial Furnace ruling, the industry would have had to pay crippling fees and penalties for incinerating scrap. The ruling established that precious metals scrap is valuable and companies would recycle it and not discard it as waste. Again, millions of dollars a year in savings. And imagine where the industry would be if it could not burn scrap.

- With disturbing regularity, particularly when there are personnel changes at EPA, the Government reverts to its position that scrap is a waste disposal problem. Repeatedly, ERAC has successfully reversed these slides, explaining to the agencies that precious metals scrap is not discarded; that because of its value, it is husbanded, carefully managed, recycled and never discarded.

- ERAC successfully opposed EPA's designation of used electronic circuit boards as hazardous waste, demonstrating that the scrap was not discarded and never entered the waste stream, that the gold, silver, platinum, palladium and copper were recovered and that the organics were destroyed at the smelters—which were outside the US. Had ERAC failed, circuit boards could not have been shipped out of the country. This would have required burning and milling all circuit boards in the US in order to have them refined. At the time, most of the scrap circuit boards were generated by manufacturers and contained about double the metal content found in end of life circuit boards today. In the late '80s, the cost would have been prohibitive; today, the business would be impossible. So the impact of ERAC's initiative was staggering.

- When the AML Interim Final Rule for Dealers in Precious Metals, Stones of Jewels took effect, it was "Interim" partly because FinCEN could not decide whether silver should be considered a precious metal. So ERAC obtained an exemption for companies dealing only in silver until FinCEN made a determination. That was 10 years ago. There are perhaps 10 IPMI members that deal only in silver and dozens more in the industry. At a conservative cost of \$3000 a year, the 10 members have saved \$300,000.

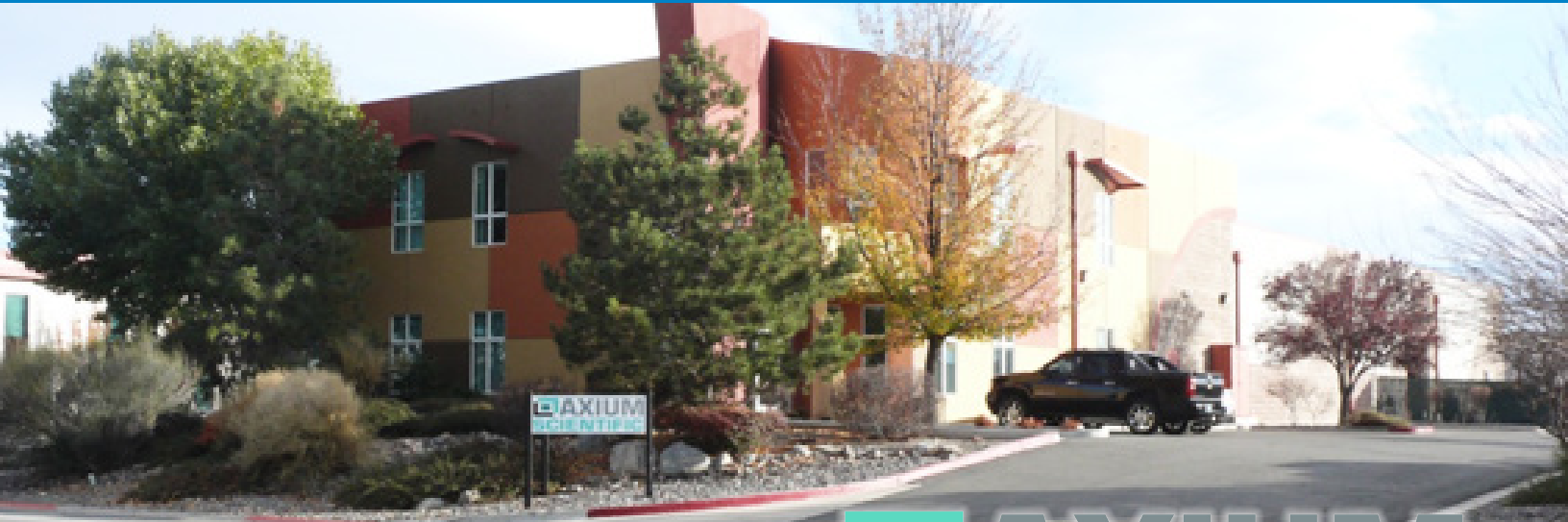


Happy Holidays and Best Wishes in the New Year from IPMI Staff:

JP, Alan, Sandra and Chris

IPMI Offices will be closed the week between Christmas and New Year's. We will reopen Tuesday, January 2, 2017.

PATRON PROFILE



Precious Metal Trade Protection

IPMI is pleased to announce **Axium Scientific**, a new independent Precious Metals analytical laboratory.

Chairman and Marketing Director Andy Roberts is a former Chairman of the IPMI and current director and EXCO Emeritus member. Many IPMI members will know Andy as a life-long member of the precious metals community and former director of a major international inspection and testing company.

Andy is joined by two former colleagues, President and Operations Director Christopher Bone and Technical Marketing Manager Lee Duclos. Both individuals need no introduction to the US precious metals analytical industry and bring with them the expertise and experience to provide the best and most accurate service in the industry with the utmost integrity and ethical standards. They are joined by a highly skilled team of experienced chemists and laboratory technicians.

Based in a 15,000sf purpose built laboratory in Sparks NV Axium's analytical expertise comprises Precious Metals, including Platinum Group Metals and common Base Metals in order to service the Mining, Auto catalyst, primary and secondary Refining, chemical and petrochemical industries globally.

Service levels include settlement analysis (party), arbitration analysis (umpire) and indicative analysis (pilot).

Key analytical approaches include industry standard fire assay smelting and cupellation, gravimetric complex separations and instrumental analysis. Assays will be conducted in triplicate within strict internal splitting limits to ensure the utmost accuracy and reliability.

Independent representation and witnessing services will also be offered at key refining locations. Axium will also have an open door policy for any client that wishes to view the facilities.



For further information or to request a fees list or free check-assay please visit our website www.axiumsci.com or contact:

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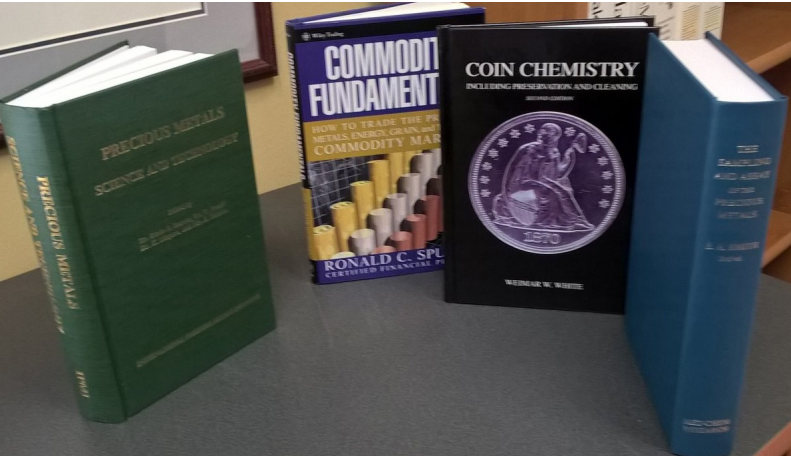
IPMI® SHOP

We have all been there. There's *that* person on your holiday list who is hard buy for. If any of our members know of such person we have got a 'go-to' plan for you. Go to our website store and choose an IPMI logo gift: Coffee mug, Polo Shirt, Coin or lapel pin.

Choose the gift and call our office to purchase. Payment is painless and turnaround is quick! No long lines, no annoyingly cheerful elves, and no incessantly repetitive holiday music!



And don't forget we have books too!



IPMI® Calendar

2017	Feb 7	Sampling and Analytical Council Meeting, Houston, TX
	Feb 8	Petroleum Refiners Council Meeting
	Feb 27 - March 1	Security Council Meeting, Fort Lauderdale, FL
2018	June 10-13	41 st Annual Conference JW Marriott Grande Lakes, Orlando FL
	Sept 14	5 th Annual IPMI Platinum Dinner New York Palace Hotel, New York NY
	June 9-12	42 nd Annual Conference JW Marriott San Antonio Hill Country, San Antonio TX
	Sept 13	6 th Annual IPMI Platinum Dinner New York Palace Hotel, New York NY

2016-2017 IPMI® Executive Committee

Jon Potts.....	Chairman
Bodo Albrecht	Vice Chairman
Sascha Biehl	Secretary
Oliver Krestin	Treasurer
Robert Bullen-Smith	Immediate Past Chairman
Dr. Conor Dullaghan.....	Committee Member
Harvey Gottlieb	Committee Member
Christopher Jones.....	Committee Member
Uve Kupka.....	Committee Member
Jason Rubin.....	Committee Member
JP Rosso	President

IPMI® Welcomes New Patron Member

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