



Precious Metals News

A Publication of the International Precious Metals Institute
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June 2017



Trish Regan of Fox Business Network to be Keynote Speaker at IPMI Platinum Dinner

IPMI is gearing up for its 5th Annual Platinum Dinner. With Trish Regan lined up as our Keynote Speaker and again to be held in the elegant Holmes Ballroom of the historic Palace Hotel in New York, it promises to be as grand, entertaining and informative as last year's.

Trish Regan joined FOX Business Network (FBN) as an anchor and markets reporter in April 2015.

Before starting at FBN, Regan was at Bloomberg where she served as the anchor of the daily market-close program, *Street Smart with Trish Regan*. While there, she also anchored a series of primetime specials, including the network's 2012 Presidential campaign coverage.

Prior to Bloomberg, Regan served as a markets and documentary anchor for CNBC. She was also a regular contributor to NBC's *Nightly News* and the *Today* show. She joined CNBC from CBS News in 2007, where her work as a financial correspondent for *CBS Evening News* earned her an Emmy nomination for investigative journalism. From 2001-2005, Regan was based in San Francisco where she served as a correspondent for *CBS MarketWatch* and anchored for the CBS affiliate, KPIX-TV.

Her Keynote Address will be "What the Change in Washington May Mean for Wall Street, Business and You."



If you have not purchased your table or seat yet, there is still time to do so, but hurry - they are going fast!

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- Silver Sponsorship includes signage, sponsor acknowledgement and seats for 2 - \$1400
- Single seat for members of IPMI, LBMA and LLPPM - \$375
- Non members - \$400, also includes year's membership in IPMI

We hope to see you there!

Europe Chapter Seminar in Prague!



The Seminar will be held at the Boscolo Prague hotel - 13-14 of November 2017 - titled "What will our metal's future look like in Europe."

The hotel is open for booking. Use this handy link:

http://www.marriott.com/meeting-event-hotels/group-corporate-travel/groupCorp.mi?resLinkData=IPMI%20European%20Chapter%20Seminar%5EPRGAK%60SV3SV3A%60155%60EUR-60false%602%6011/10/17%6011/15/17%6010/30/17&app=resvlink&stop_mobi=yes

IPMI Seminar to be held in Bangkok, Thailand



PANDORA
IPMI Seminar Fall 2017
"Advanced Practices for Precious Metals in Jewelry"
4 – 5 September 2017
Bangkok, Thailand
CONTACT THE IPMI FOR SPEAKING SLOTS & SPONSORSHIP INFORMATION!

EVENT Precedes the 60th Edition of the BANGKOK GEMS & JEWELRY FAIR



Sala Rim Naam (meeting venue)
45 min from Suvarnabhumi airport

Suvarnabhumi Airport
Remark: Travel time is subject to traffic condition on event day and period of event.

OVERALL EVENT PROGRAM

Date / Period	DAY 1 3 September 2017	DAY 2 4 September 2017	DAY 3 5 September 2017	DAY 4 6 September 2017
AM	Arrival Transfer of speakers	Full day meeting at Sala Rim Naam	Full day meeting at Sala Rim Naam	Departure of speakers
Lunch		Lunch at Mandarin Oriental Bangkok	Lunch at Mandarin Oriental Bangkok	
PM	Bangkok Highlight by Tuk Tuk	Continue meeting	Continue meeting	
Evening	Dinner at Sala Rattanakosin	Cocktail reception at Sala Rim Naam Terrace	Dinner at The Never Ending Summer	

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Silver Sponsor: USD\$5,000 - Allowed to invite 5 guests
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Seminar Venue
2 Full days Meeting at Sala Rim Naam
Time: 09:00 – 17:00
Venue: Sala Rim Naam (indoor, air-condition)
Set-up: Class room



PANDORA **sea**

PRELIMINARY TOPIC PROGRAM

Social responsibility in the jewelry industry	Best practices in jewelry manufacturing
Emerging opportunities in precious metal	Precious metal procurement, inventory mgmt & security

PANDORA **sea**

SPONSORSHIPS & BENEFITS: invite Clients & Prospects as your 'Special Guests'

IPMI is pleased to announce its first precious metals seminar in Asia since April 2001

In partnership with Pandora (the worlds largest jewelry manufacturer), IPMI is organizing a comprehensive seminar on:

"Precious Metals in the Jewelry Industry"

The seminar will be conducted over two (2) full days.

The topics will include virtually every aspect of the precious metals supply chain:

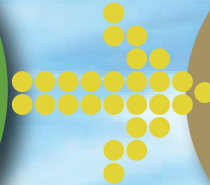
- hedging & financing
- minimizing production scrap
- effectively managing production
- inventory security
- "fair mined gold"
- Supply & demand price & supply trends in RE jewelry
- Improving hardness of "fine gold"
- Best practices for handling low grade dust/fines, etc

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41st Conference Awards and Recognition Recipients



Bodo Albrecht Presenting Past Chair Award to Jon Potts



IPMI George Benvegno Sr. Memorial Scholarship Award presented by Mary Benvegno and George Benvegno Jr. to Kai Wan



Richard Rubin Republic Metals Memorial Award presented by Dr. Robert Ianniello to Behzad Vaziri Hassas



IPMI Graduate Student Award presented by Dr. Robert Ianniello to Rong Ye



IPMI Colt Refining Student Award presented by Harvey Gottlieb, Colt Refining to Tyler Finamore



IPMI Metro NY Chapter Award presented by JP Rosso to Megan Moyer



IPMI Johnson Matthey Student Award presented by Robert Bullen-Smith, Johnson Matthey to Javier Grajeda



IPMI Bright Futures Award sponsored by the Gero Family Trust presented by George and Gale Gero to Hao Cui



IPMI Metalor Technologies Student Award presented by Samantha Uminski, Metalor Technologies to Qingyuan Lin



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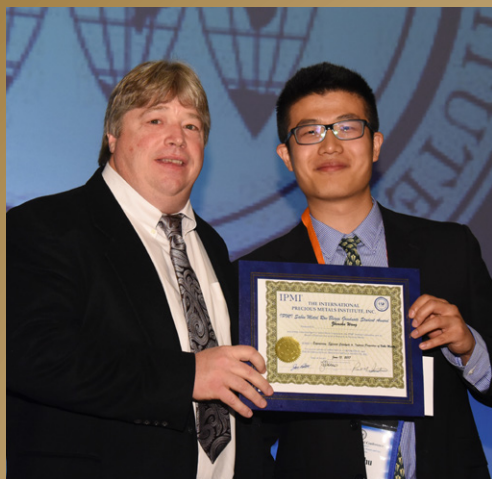
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41st Conference Awards and Recognition Recipients



IPMI Sabin Metal Corporation Ron Bleggi Student Award presented by Jim Barret, Sabin Metal to Zhenshu Wang



IPMI Gemini Industries Graduate Student Award presented by John Larch, Gemini Industries to Tracie McGinnity



IPMI Student Award presented by Dr. Robert Ianniello, Chairman of the Awards Committee to Anna Wuttig



IPMI Student Award presented by Dr. Robert Ianniello, Chairman of the Awards Committee to Christine Laramy



IPMI Student Award presented by Dr. Robert Ianniello, Chairman of the Awards Committee to Johannes B. Ernst



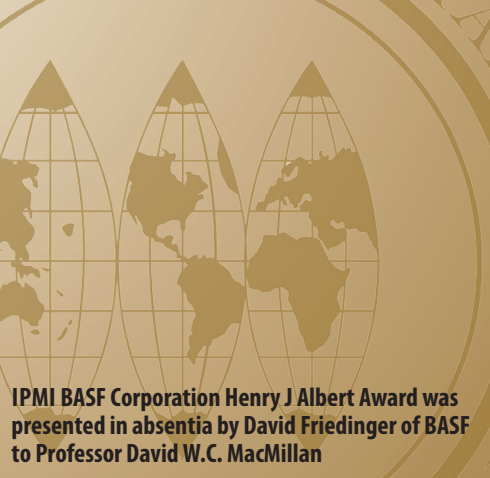
IPMI Faculty Advisor Award to Professor Frank Glorius, presented by Dr. Robert Ianniello, Chairman of the Awards Committee



IPMI Carol Tyler Award presented by Dr. Robert Ianniello to Professor Yu Huang



IPMI Jun-Ichiro Tanaka Distinguished Achievement Award sponsored by the Tanaka Memorial Foundation presented by Satoshi Ichiishi to Dr. Roland Gerner



IPMI BASF Corporation Henry J Albert Award was presented in absentia by David Friedinger of BASF to Professor David W.C. MacMillan

Conference Technical Program Summaries

Session A, the theme of which was **Europe** and moderated by Theo Keuter, got started with an update of the Europe Chapter by Lee Hockey of Mastermelt Group. The second presentation in this Monday morning short session was presented by Zbigniew Milkiewicz. His topic was *Open Innovation in the Precious Metals Industry* in which he described open innovation principle which encourages companies to share their know how. He went on to share case studies. The next presenter was Philip Newman of Metals focus whose presentation was *Where Next for Silver Investment in the World's Largest Marketplace, the US and India*. Wrapping things up was Jonathan Butler of Mitsubishi who spoke of *View from Europe; Economics, Politics and Precious Metals Demand*.

Session B's theme was **PGMs**. It was moderated by Chris Jones. The first paper was given by Beresford Clarke of SFA Oxford. His presentation was entitled *The Palladium Market*. It was a review of the history of the palladium market including growth of palladium-rich gasoline car sales worldwide, developments in autocatalyst technologies, substitution, other industrial end uses, inelastic primary supply, potential new mine projects, recycling, stock levels, investment and price performance. Ultimately, the presentation will provide a solid understanding of the potential trends and price trajectory of palladium in the future. Next up was David Jollie of Anglo Platinum who spoke of *Platinum Group Metals and the Automotive Sector-Risks and Opportunities*. The third speaker was Bart Melek of TD Securities. Bart's talk was *Monetary Policy Normalization Does Not Spell Trouble for the Precious Metals Complex in Times of Synchronized Growth*. Johann Wieb of Thomson Reuters delivered *The Diverging Prospects of Platinum and Palladium*. He shared that platinum has been under some pressure given its challenging prospects lately but palladium has witnessed some growth. He asked the audience if these market trends were sustainable and advised that one might have to get used to this new normal. The last paper in the session was presented by ShaoWu Zhu of Sino Platinum. The paper was entitled *Platinum Group Metals in China*. He gave a brief history about the development of the PGM industry in China, informing the audience that sustainable development of the pgm industry in China includes related industries such as automotive, petrochemical and medicine.

Session C was about **Insurance Matters** and was moderated by Sue Strachan. Barry Vickery and Mike Musial of JLT Specialty gave a presentation regarding *Presenting Your Risk Effectively*. Overviews and key elements discussed were: insurance application, branding your firm, creating relationships, third party arrangements, and insurance purchase.

Session D, Scrap Mining and Economics, was a full session and moderated by Caelen Anderson. Hao Cui of Colorado School of Mines gave the first presentation, *A Review of the Hydrometallurgical Treatment of Electronic Scrap*, a study with an up to date review of recycling of printed circuit boards (PCBs), specifically in hydrometallurgical treatment. He further stated that the efficient recycling of the PCBs is of importance, particularly to economic and environmental perspectives. Next, Corby Anderson, also of Colorado School of Mines, presented *Global Mining Capital Estimation and Project Execution Failure*. He discussed that during the Super Cycle there were instances of Capital destruction and after a respite there is renewed global activity but the underlying critical aspects and technical demographics that caused the destruction still remain. Then, Caelen Anderson of Haile Mine gave a report on *Haile Gold Mine Startup*. He shared that the Haile mine process plant began in late 2016, and that the mill is designed to treat over 6000 tonnes per day with minor upgrades required to treat over 8000 tones per day. He described the plant optimization and presented a commissioning strategy modelled after the OceanGold's Didpio Operation. Dave Shuck of Stillwater Mining rounded out the session with *Sibayne's Stillwater Operations - Long Term PGM Producer*. He gave an overview of Sibayne's Stillwater operations in Montana that included the Stillwater Mine, East Boulder Mine, processing facilities and recycling business.

Session E, Part 1 was all about **Regulations and Environmental Health Safety**. Moderated by Larry Drummond, the session began with a presentation developed by Brian Ledgerwood of the US Department of Trade, *Global Market Briefing of Trade in Precious Metals*. This was a briefing on global precious metals trade, identifying export opportunities and discussing ways that the government of the US can partner with you. Then, Chris Bryant of Begeson and Campbell presented *Washington Regulatory Update*. Next Peter Quinter's presentation given by Bob Beccera, was entitled *Staying Out of Trouble and Keeping the Feds Away from Your Import Shipments*. This presentation spoke of implementing anti-money laundering (AML) policies and procedures that are critical to "Know Your Customer." Properly declaring to CBP the country of origin, exporter, tariff classification, and the value of the imported precious metal is critical, as is maintaining records for the purchase and payment of each transaction. There are best practices for companies and their executives whenever confronted by law enforcement with an inquiry or investigation for alleged fraud, money laundering, or smuggling regarding the sourcing, importation, or transportation of precious

continued on page 9



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Conference Technical Program Summaries

metals. J Rao of Republic Metals then described *Republic Metals Corporation: How We Achieved Compliance*.

Session E, Part 2 was a panel discussion **AML, KYC and Conflict Minerals: Current Issues**. Panelists for this were Jason Rubin of Republic Metals, Mike Riess of Materials Management, Jed Silversmith of Blank Rhome, and Joseph Poluka of Blank Rhome. This panel focused on emerging issues related to money laundering and also topics included risks in receipt of metals used in a crime, the Bank Secrecy Act, the Foreign Corrupt Practices Act, OFAC compliance and the current status of Conflict Mineral Rules.

Session F was focused on **Sampling and Analysing**. Dejan Savic of BASF was the first speaker and his presentation was entitled *Determination of Precious Metal Element Content in Automobile Catalysts by Inductively Coupled Plasma-Mass Spectrometry*. He discussed Alkali fusion followed by co-precipitation with tellurium and analysis by inductively coupled plasma – optical emission spectroscopy (ICP-OES). This is a widely used method for the measurement of precious metals (PM), and although it demonstrates high accuracy and precision, the sample preparation procedure is labor intensive and requires significant analyst training. In this work, they are addressing the demand for a faster and more sensitive measurement method that maintains the same or better precision and accuracy. Zachary Henneman, also of BASF, took the podium next with *Development of a Semi-Quantitative Method for the Determination of Silicon Carbide in Recycled Automotive Catalyst Feedstocks*. The presence of silicon carbide (SiC) from DOC incorporation into TWC lots presents a unique challenge to refiners using pyrometallurgical extraction, because excess amounts of SiC change the chemical and physical properties of the furnace slag and the resulting change in operating conditions cause excess wear on refractory ceramics. In order to minimize the potential for these affects, they have developed a semi-quantitative method for determining the SiC content in recycled automotive catalyst materials. Next, Dale Johnson of Greene Lyon Group presented *Stripping Low Concentration Precious Metals from Base Metal Substrate*. His presentation describes a new technology that enables refiners to process low concentration plated base metals in-house by selective dissolution of the precious metal component and compares this approach to smelting and to other chemical and electrochemical refining processes on the basis of effectiveness, processing cycle times, costs and sustainability. Roberto Guidali of Italmimpianti Orafi shared *New Green Approach to the Treatment of Populated PCBs*. This approach combines a first mechanical phase for the separation of the organic fractions and the smelting of the metal rich materials obtained and precious and nonprecious

metals recovery and refining. He further stated the processing is structured in two different phases and went on to describe the different phases: mechanical and pyrometallurgical/chemical. Juergen Antrekowitsch of Christian Doppler Laboratory delivered *Silver and Gold Recovery from Metallurgical Dumps*. He emphasized that by combining special mineral processing techniques with advanced pyrometallurgical treatment a multi-metal recycling could be obtained and he introduced the potential for precious metals recovery out by products and gave a short overview about the recycling concept. Ine De Raedt of Umicore was next who presented *Proficiency Testing at Umicore*. The presentation included their procedure of Round Robin testing at Umicore, stressing that participation and organization of proficiency as an essential part of the quality control program in the lab at Umicore. Mike Mooiman then presented *Radioactive Elements in Precious Metal Processing*. He gave a review of the background and origins of radioactive elements in refining feedstocks with approaches to handling radioactivity in precious metal feedstocks examined with a detail of the chemistry of the radioactive elements. Tina McSweeney of Agilent Technologies then presented *Optimize Your Workflow for Precious Metals Analysis with Microwave Plasma Atomic Emission Spectrometry and Inductively Coupled Plasma Optical Emission Spectrometry*. The presentation provided an overview of the technologies and presented examples of the accuracy obtained with precious metal samples as well as options and accessories for increasing productivity. *Gold and Silver Analysis by Fire Assaying using Copper as a Collector* was presented by Gustavo Munoz of Univesidad San Francisco de Quito. Fire assay is a well-known analytical technique widely used for content determination of gold, silver, and PGM in ores, concentrates, slags, and other metallurgical products. Traditional fire assay for gold ores and concentrates require roasting of the material prior to fusion, and the use of lead oxide as a collector of the precious metals. This paper presents the results of using copper, as Cu and Cu(OH)₂, as a collector for gold and silver.

Session C, moderated by Regine Albrecht, was centered on **New Business Trends**. Bodo Albrecht of Sabin Metal Corp., was first. His presentation, *Metal Megatrends: New Applications for Precious Metals in 2018*, took the audience on a journey into the near and semi near future of “metal megatrends,” to shed some light on new applications, markets or forecasted likely developments that could possibly alter the consumption of precious metals in a growth or decline sway. Doug Sherrod of CPM Group then advised *Preparing Your Precious Metals Scrap Processing Company for Sale*. Whether

[continued on page 11](#)

LOOK FOR GLOBAL CHALLENGES AND OFFER SOLUTIONS

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Conference Technical Program Summaries

a prospective buyer is industry savvy or contemplating a first-time investment in this sector, such investors are likely to require information about the company being sold that may or may not have been prepared or even thought about by the owners. This presentation covered broad aspects of the process starting with the decision to sell, the composition of the transaction team, specific company issues critical to a successful presentation, and portrayal of the business being sold to potential investors. Sergey Medvedev of Plaurum Group next presented *Plaurum: Bridging the East and West in Precious Metals*. He explained that PLaurum was founded in 2016 on the basis of JSC EZOCM and Safina, a.s. and currently the group unites production facilities in Russia, the USA, Central Europe, China and sales offices in US, EU and other countries. Historically, technologies and approaches to engineering, manufacturing and management of PLaurum companies developed in parallel, and now they are united to enrich and complement each other. Bridging the East and the West of precious metals the group is ready to take a new crucial step in the global market to receive the most competitive solutions. In the presentation he opens and describes these challenges and synergies. Federico Padrono Martini of IKOI presented twice in this session. First with, *Presentation of the First Results from R & D Activities of a New System for the Production of Minted Coins and Ingots Starting from Casted Blanks Produced by Flameless Tunnel®*. His overview of this new venture included an introduction of IKOI, the Flameless Tunnel® technology, casted blanks and the experimental results. Next he presented on behalf of ALS with *A Report After One Year of Experimentation and Real Production*.

Session H was focused on **New Technology**. Moderated by Steve Izatt, he was first at the podium with *Recovery from Low Grade Resources of Platinum Group Metals and Gold using Molecular Recognition Technology*. He shared that efficient recovery of low grade platinum group metal (PGM) and gold resources are needed to avoid loss to the commons and that such resources are found in various industries such as plating, metals refining, spent catalyst recycling and others. Molecular Recognition Technology (MRT) provides a commercially tested, simple, rapid, green chemistry means to selectively separate and recover individual PGM and Au from these sources using SuperLig® products. Luca Fiorini of Tera Automation was next. His paper was entitled *Precious Metal Industry Switches to Industry 4.0*. Talking about this innovation, he shared that due to its unique background in automation Tera has become a reference point in guiding the PMI through the new Cyber-physics requirements of **Industry 4.0**. This innovation in bullion manufacturing is reflected in Tera's T-Line, a fully automated modular system of ingot

production, introduced at IPMI last year. By looking at the T-Finishing module that completes a T-Line, we can appreciate the dramatic impact **Industry 4.0** has made on our field. This module is the automated system for the final finishing of the cast bars. He further spoke of another example of the impact **Industry 4.0** has made is the T-Robomint. It is a totally automated system created to manage the minting of bars and coins to produce a 'proof quality' surface. Charlie Fink of Inductotherm was next with *Induction Furnace Technology for Melting, Refining and More*. His presentation focused on the advantages of using induction technology for precious metals melting and the various types and features of furnaces used in precious metals refining operation. A very full program, the next in the line-up was Corby Anderson whose talk was *Alkaline Sulfide Gold Electrochemistry Using the Rotating Electrochemical Quartz Crystal Microbalance*. He spoke of this technology's use to better understand the fundamental electrochemical and electrokinetic principals in the alkaline sulfide gold leaching system. Alexey Kornienko then gave a talk on *Ruthenium Extraction. Intensifying the Efficiency*. Solvent extraction using TBP ensures high recovery of ruthenium. He further explained that to optimize the technology of extracting ruthenium they changed the composition of wash solutions and carried out the re-extraction with a solution of sodium carbonate. The result increased the selectivity of the process and stabilized the acid-alkaline balance of the extractor. The next presentation was entitled *Electric Arc Smelting, the Leap up the Supply Chain, from Value Extracted to Value Added: Tested Knowledge, New Horizons* and it was presented by Rainer Wegner. He charged that in a fast moving market business must adapt and diversify and that the best way to do so is to rely on roots and using honed skills, and that their company ReMetall Deutschland has jumped up the supply chain to go into the smelting business with acquisition of an electric arc furnace.

Session I, Student Research was moderated by the Awards Chair, Robert Ianniello. These students presented:

Johannes Ernst, Westfälische Wilhelms Universität - *Modification of Heterogeneous Precious Metal Catalysts with N-Heterocyclic Carbenes as Ligands*

Anna Wuttig, MIT - *Precious Metals as Electrocatalysts for CO₂-to Fuels Conversion*

Christine Laramy, Northwestern - *New Method to Standardize the Electron Microscopy Characterization of Nanostructures with the Use of Gold*

continued on page 13



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Conference Technical Program Summaries

Tracie McGinnity, University of Notre Dame - *Investigating Nanoparticle Imaging Probes for Molecular Imaging with Computed Tomography and Photo Counting Spectral CT*

Zhenshu Wang, MIT - *Engineering More Efficient Catalysts for Improvement on the Properties of Noble Metals*

Tyler Finamore, University of Note Dame - *Gold Nanoparticles as a New Diagnostic Tool to Measure Scaffold Degradation*

Rong Ye, University of California, Berkeley - *Development of Highly Active and Recyclable Dendrimer-Encapsulated Precious Metal Nanocatalysts with Tunable Product Selectivity*

Megan Moyer, Colorado School of Mines - *A Tandem Catalytic System Comprised of Gold Nanoparticles and Alcohol Dehydrogenase Enzyme Tethered to Mesoporous Silica Support for One-pot Oxidative Esterification of Allyl Alcohol*

Javier Grajeda, University of North Carolina - *Improve Performance of Precious Metal Catalysts by Designing Ligands to Interact Cooperatively with Base Metal Cations During Organometallic Catalysis*

Qingyuan Lin, Northwestern - *Multicomponent Gold Nanoparticle Superlattices Programmed by DNA*

Bezhad Vaziri Hassas, University of Utah - *Fundamental Surface Chemistry Aspects of Auriferous Pyrite Flotation with Carbon Dioxide and Nitron*

Kai Wan, University of Toronto - *Developing Ruthenium Asymmetric Hydrogenation Catalysts for Ketone and Imine Reduction and Hydrogenation Catalysts for Ester and Carbon Dioxide Hydrogenation using Chiral Amino Substituted N-heterocyclic Carbene Ligands*

Hao Cui, Colorado School of Mines - *Recovery of Precious Metals from Printed Circuit Boards*

Session J was all about **Auto Catalysts**. There were three presenters in this session. The first was Patrick Meyer of BASF. His presentation was called *Product Stewardship of Automotive Catalytic Converter Recycling: Controlling Risks Throughout the Supply Chain*. He said the supply chain is complex and that in such a process communicating, understanding and controlling risks is very challenging. His paper proposes that an industry supported Product Stewardship Program is needed. The second presenter, Oliver Krestin, Hensel Recycling, who was also the moderator, entitled his presentation *Challenges and Opportunities for Autocat Recyclers in Europe*. He gave a recyclers view on the daily challenges and opportunities for spent automotive catalyst in Europe. Mark Caffarey of Umicore rounded out the session with *Increasing Complexity in Autocat Recycling*. He shared that the increasing functionality of automotive emission systems to meet stricter clean air regulations has led to more com-

plexity for spent automotive catalyst recycling. There are two trends driving this: use of alternative substrate materials and declining platinum group metals in automotive catalysts as a whole due to thrifting and alternative technologies. He continued that Umicore has made strides to expand its capacity on intake materials and is equipped to provide sampling and refining services for all types of autocat material.

Session K was on **Security** and was a closed session. Presentations included *Packaging Risks* by Ben Van Kerkwijk of Brinks, *Packaging Risks and Vulnerabilities* by Allan Finn of Malca Amit, *Industry Perspective and Counter Measures for Counterfeiting and Minted Coins* by Jon Potts of FidelityTrade, *Real World Risks of Cyber Attacks on Metals in Transit* by Bodo Albrecht of Sabin, *Newly Formed Anti-Counterfeiting Task Force's Take on Counterfeits* by Kathy McFadden and Beth Deisher of Industry Council for Tangible Assets.

Session L, a session focused on **Economics**, was moderated by Jonathan Butler of Mitsubishi. His paper was called *Precious Metals and Trumponomics*. He explored the current and future impact of Trump's economic policies on precious metals demand and investor behavior towards these metals following the first 100 days in office. Next, Neil Meador of Metals Focus presented *Boom or Bust? How Precious Metals Scrap Could Behave if Prices Soar or Slump*. Following him was Michael Mooiman of Argo Advisors/Franklin Pierce University who gave *Global Challenges, Responses and Prospects in the Precious Metal Industry*. He discussed issues of increased demand, decreasing grades, increasing prices, increasing production costs and deleterious byproducts as well as geopolitics, labor unrest, public perception, illegal mining and sustainability.



IPMI 41st Annual Conference

The IPMI 41st Annual Conference was held June 10-13 at the spacious and scenic JW Marriott Grande Lakes Hotel and Resort. More than 560 delegates and guests enjoyed three days and four nights filled with informative technical sessions (please see sessions summary starting on page 7 for details) and entertaining social events. Session with topics such as analytics, regulations, business

trends and new technology filled meeting rooms each morning while afternoons were spent networking or visiting the vendors at the Exhibit Hall. IPMI thanks its corporate sponsors for their evening social events to round out the delegates very jam-packed days.

IPMI's 42nd Annual Conference will be held June 9-12, 2018 at the JW Marriot San Antonio Hill Country Resort.



Chairman Bodo Albrecht



Alan and Joann Kaye at the Tanaka Reception



George Gero and Miquel Perez Santalla in deep conversation



Chris and Joann working the registration desk



Fred Saada with Gale Gero and Mira Cahn



A Raffle for one of a kind jewelry was awarded to two lucky delegates



This fun party brought to you by Gannon and Scott

IPMI 41st Annual Conference



Sascha Biehl accepting the Patron Member plaque for affinia Metals



Dora Mayorga and Doris Ortiz taking in all the fun



Students enjoying an IPMI event



More delegates having a great time



Hitoshi Kosai and Satoshi Ichiisi welcoming guests to the Tanaka Reception



What is Josh Husvar telling this delegate?



SAC Meeting



Students Enjoying the Gannon Party



This group is all smiles at one of the evening social events

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- Computer Associates
- Dillon Gage
- Gannon & Scott, Inc.
- Hensel Recycling
- Heraeus
- Hindustan Platinum Private Ltd.
- Johnson Matthey
- Kitco
- Krastsvetmet
- Ledoux and Company
- Loomis International
- MAIREC Edelmetallgesellschaft mbH
- Mastermelt Group of Companies
- Mercury Refining
- Multimetco
- IPMI Metro NY Chapter
- IPMI New England Chapter
- PAMP
- QML
- Sabin Metal Corp.
- Stillwater Mining Company
- Royal Canadian Mint
- Republic Metals Corporation
- Tanaka Kikinzoku Kogyo
- TCA SpA
- TD Securities
- Techemet LP
- Transvalue Inc.
- Umicore Precious Metals
- WFI



IPMI 41st Annual Conference

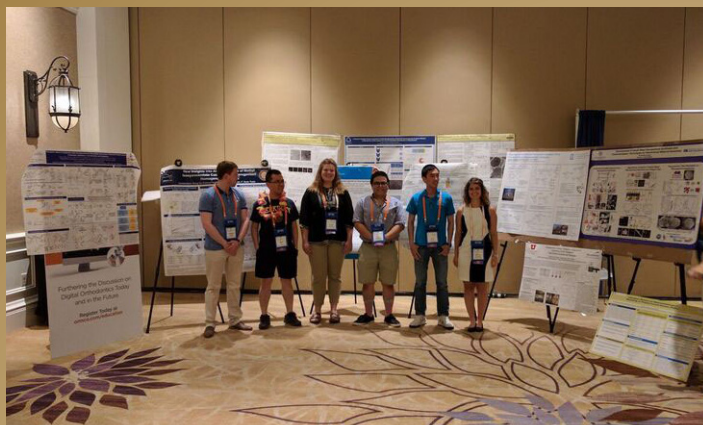
Exhibit Hall at the 41st Conference a Success!

IPMI wishes to thank its many Booth Exhibitors for making the Exhibit Hall at the 41st Conference a Success!

A great line up that included, computer software, furnaces, precious metal refining services, and precious metal technologies. There was something for everyone!

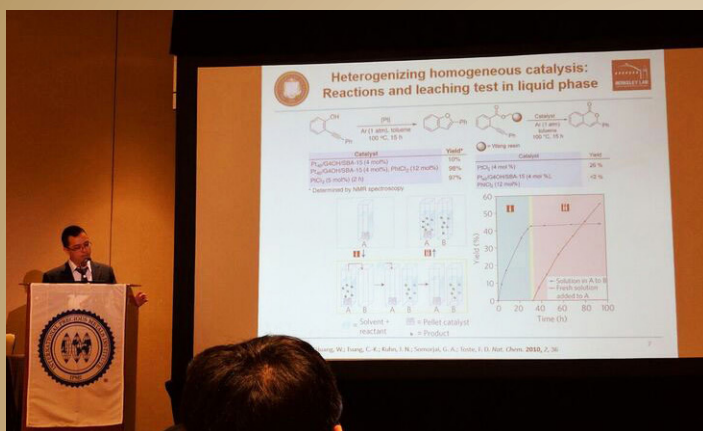


IPMI 41st Annual Conference



Program for our Student Award Winners

IPMI wishes to thank the tirelessly working volunteer Student Ombudsmen, Regine Albrecht, and Ladene Naujokas who along with Algis Naujokas, and Award Chair Dr. Robert Ianniello coordinated, planned and executed a well thought out program for our Student Award Winners. Planning since last fall with numerous phone calls and initiatives, this group orchestrated the first Student Meet and Greet in which the 2017 Student Award Winners had an informal social with corporate student award sponsors and other industry leaders. Vic, Emily and Melinda Combe of Empire International, and Robert Ianniello greeted and gave advice to the students while Regine and Ladene instructed the students on the 'when and where' of the conference program including the new Student Research Poster Presentations that appeared in their very own booth at the Exhibit Hall.





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PLAURUM is a new global brand in the precious metals market.

PLAURUM has been created by the combined efforts of two major producers, EZOCM and SAFINA, both well-known in the PGMs industry for more than 100 years.

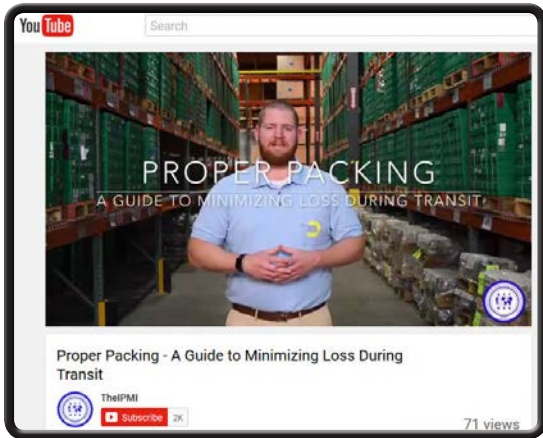
PLAURUM group incorporates R&D centers, production facilities and sales offices in Russia and neighboring countries, the USA, Central Europe and China.

Combination of modern production methods, management, scientific research and innovative technologies ensures the synergy of the two companies.

PLAURUM OFFERS TO ITS PARTNERS

- ◆ recovering and refining of precious metals (from catalysts, industrial waste, tailings, scrap and ore);
- ◆ services on purchasing, processing, refining of raw materials and refined PGMs supply;
- ◆ manufacturing of industrial items, including development of new products and advanced materials for high-tech industries such as medical, electronics, chemistry, auto components, solar energy, aerospace;
- ◆ engineering services on development of new technologies and products;
- ◆ analysis of different types of raw materials and other materials containing precious metals;
- ◆ wide range of services for non-ferrous and rare-earth metals.

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New Packing Video Guide

IPMI is happy to announce another new video: “Proper Packing: A Guide to Minimizing Loss During Transit.” This video was conceived and produced by IPMI Patron Member, Fidelitrade. It covers a broad variety of precious metals which are routinely shipped. It includes security tips, packaging materials tips, and other key items of interest. It may viewed on the IPMI website, The IPMI YouTube Channel, IPMI’s Linked In group, Twitter & IPMI’s Facebook page. Thank you, Fidelitrade, for sharing this informative video through the IPMI.

AML Advisor

Forewarned is Forearmed

By Mike Riess, Materials Management

Three US-based salespersons that allegedly bought \$3.6 billion of gold-bearing refining materials in Latin America were indicted on March 23, 2017 on a single criminal count: money laundering.

Money laundering is moving money (or metal) to hide its criminal source. Ignoring criminal derivation is willful blindness, which carries the same penalties as direct involvement—and the penalties are severe. *

To avoid being caught up in a money-laundering scheme, a number of US refiners and pre-processors have blanket policies against buying gold from certain known high-risk regions—such as central or western Africa. However, profitability of refining domestic materials is marginal, so US and European refiners must import. But from where?

Roughly three quarters of US gold imports and about two thirds of Canada’s are from Latin America. Much is from legitimate mines—but a good deal is mined illegally. “Illegal” refers to the conditions under which some of the gold is mined and shipped, e.g., slavery, human trafficking, child labor and environmental abuse. They go hand-in-glove with smuggling to hide the gold’s origin and to avoid taxes and export duties.

In a number of Amazon Basin countries, small and artisan gold miners account for more than three-quarters of production. They have proven especially vulnerable to criminal infiltration. In addition to Latin American criminal enterprises, transnational organized crime from Mexico, Italy, China and Russia, as well as paramilitary

groups such as Shining Path and FARC have seconded large swaths of land traditionally worked by small and artisan miners.

Typically, artisan miners sell to aggregators who consolidate small lots for export—just as they have for decades. However, today, some aggregators have become fronts masking organized crime in the interior. They use false documents showing gold originated at legitimate mines or smuggle it to neighboring countries for export.

Corruption and jurisdictional questions often undermine enforcing laws against human rights and customs violations. Violating these laws is a predicate crime for money laundering in most countries. So even if circumvented at the origins, the laws can be enforced at the destination.

Certainly, it is possible to buy gold legitimately in Latin America—but it takes experience, strong customer due diligence and extraordinary antennae to avoid tripping the wires in this money laundering minefield.

** Title 18, United States Code, Sections 1956(h) and 1956(a)(2)(a)
(2) Whoever transports, transmits, or transfers...a monetary instrument or funds from a place ... outside the United States...(B) knowing that the monetary instrument or funds involved ...represent the proceeds of some form of unlawful activity and knowing that such transportation, transmission, or transfer is designed...(i) to conceal or disguise the nature, the location, the source, the ownership, or the control of the proceeds of specified unlawful activity...shall be sentenced to a fine of not more than \$500,000 or twice the value of the monetary instrument or funds involved in the transportation, transmission, or transfer, whichever is greater, or imprisonment for not more than twenty years, or both.*

Mark Your Calendar!

Metro New York Fall Seminar Wednesday September 13, 2017

The Event Venue:
Museum of American Finance
48 Wall Street, New York
(212) 908-4110.
(2:00PM – 4:00PM)
www.moaf.org.

The Reception:
The Bailey Pub and Brasserie
52 Williams Street, New York
(212) 859-2200
(4:00PM – 6:00PM)
www.thebaileynyc.com

New Patron and Sustaining Members for 2017-18

New Patron Members



New Sustaining Members



Eagle Tech Recycling

Material Sampling Technologies

SCMI US Inc

IPMI® Calendar

2017	Sept 4-5	<i>Advanced Practices for Precious Metals in Jewelry Seminar • Bangkok, Thailand</i>
	Sept 13	Metro NY Chapter Seminar and Cocktails • Museum of American Finance
	Sept 14	5th Annual IPMI Platinum Dinner • New York Palace Hotel, New York NY
	Nov 13-14	Europe Chapter Seminar • Prague, Czech Republic
2018	June 9-12	42nd Annual Conference • JW Marriott San Antonio Hill Country, San Antonio TX
	Sept 13	6th Annual IPMI Platinum Dinner • New York Palace Hotel, New York NY