



# Precious Metals News

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## A Message from IPMI® Chairman Jon Potts



Good evening and welcome to the 40th Annual International Precious Metals Institute Conference.

Before I get started, I want to thank my wife, Tina, who has been there for me since 1976 – right about the time IPMI started. Also, thanks to my daughter, Courtney, who many of you have met -- she inspires me every day; and my son, Chase, who some of you have met – he has become a man that

I look up to.

I also want to thank our staff: JP, Alan, Sandra and Nate for their outstanding job running the institute and creating such a great conference for us.

1976 was an important year -- it was the year the Institute was founded. Being here in Phoenix during the NBA playoffs, it also reminds me that 1976 was the year of the greatest NBA game of all time when the Boston Celtics beat Phoenix Suns 128–126 in triple overtime of the last game of the finals. In 1976, Rocky was the number one film of the year, and ABBA's "Dancing Queen" and Queen's "Bohemian Rhapsody" were the top songs. And, of course, it was the United States Bicentennial and Jimmy Carter was elected president. Something a little more relevant to us in the room – in 1976 the average gold price was around \$125, silver was \$4.35, and the average platinum price was \$168. And perhaps most importantly, US autocat

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## A Message from IPMI® President JP Rosso

First, I want to thank all of you who attended IPMI's 40th Annual international conference at the JW Marriott Desert Ridge Resort & Spa in Phoenix, AZ.

Next, I want to thank all of our sponsors, corporate and individual, for their extra support of the IPMI as expressed through purchase of one of the sponsorships we developed or your cash donation. Many don't realize it, but the IPMI is a **501(c)3 non-profit charitable organization**. As such we rely on our members to attend our conference (this conference accounts for > 60% of our entire annual revenue) and the additional sponsorships help out tremendously. So again, I thank you all.

I want to recognize the IPMI staff, Sandra Arrants, Alan Kaye, Nate Bordelon and volunteer spouse, Joann Kaye. They work very, very hard to insure that all your needs are met so that you all have a wonderful conference.

On a personal note, I find myself quite nostalgic tonight. That lovely tall blond woman you encountered in the IPMI registration office (and who is my 'date' tonight) is my daughter, Christine. She lives in Phoenix and wanted to take her weekend to see 'dear old dad,' and volunteered to help out in the Registration. The nostalgia comes because in 1997, when I was completing my year as Chairman of the IPMI, she was my 'date' for the entire San Francisco conference. She



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## IPMI® 40th Conference

The IPMI 40th Conference was deemed a success! Held in the scenic Sonoran Desert at the beautiful Desert Ridge JW Marriott, for four days there was something for everyone. For starters there was an AML Short course held on Saturday taught by Mike Riess. Starting on Sunday, there was a varied Technical Program each morning that saw delegates attending sessions with wide ranging topics from Analytics to Mining to Regulations and Risk. A Trade Show Hall was the scene of many exhibitors showcasing their products and services to the delegates and their guests where they could find the latest on computer software for precious metals, smelting furnaces, and recycling services to name a few. And for those who liked to browse, there was a Silent Auction held every day featuring items such as a Willy Nelson signed guitar, an art deco Beatles poster, uniquely designed jewelry pieces, and at least one autographed NFL helmet. Also, for the discerning shoppers, IPMI introduced their new

store that offered mugs, lapel pins, silver coins and polo shirts. On Sunday at the Republic Metals Luncheon, Keynote Speaker Ron Alber captivated the audience with tales of treasurers to be found on sunken ships in the Gulf of Mexico. Corporate Sponsored Receptions were held in the evenings. They featured an Old West Town where one could pan for gold, a Casino where one could possibly - with the aid of fake money - win some silver, as well as others that were a mint of gourmet delights. The conference concluded with the Closing Dessert Reception that immediately followed the Awards Banquet where three Premier Awards were given to notable career and theoretical achievement in the precious metals industry and ten Student Awards for students in the field of precious metals. Overall nearly 600 delegates and guests enjoyed all the conference had to offer. IPMI thanks its many sponsors for the support of the 40th Annual Conference.

# 40th Conference Awards and Recognition Recipients



Alan Kaye presents Alice Chang the Bright Futures Award. This award is sponsored by the Gero Family trust



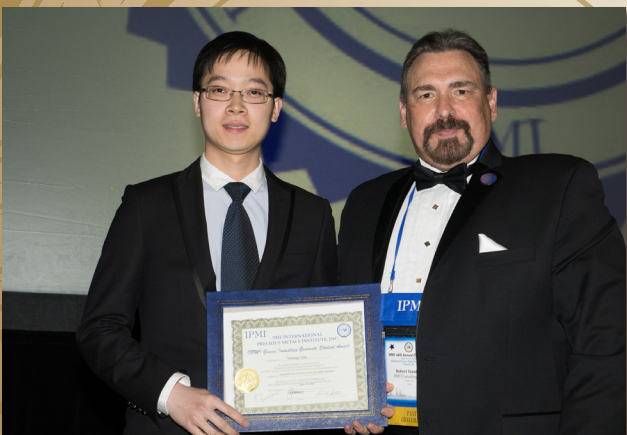
Maria Flytzani-Stephanopoulos receives the Carol Tyler Award



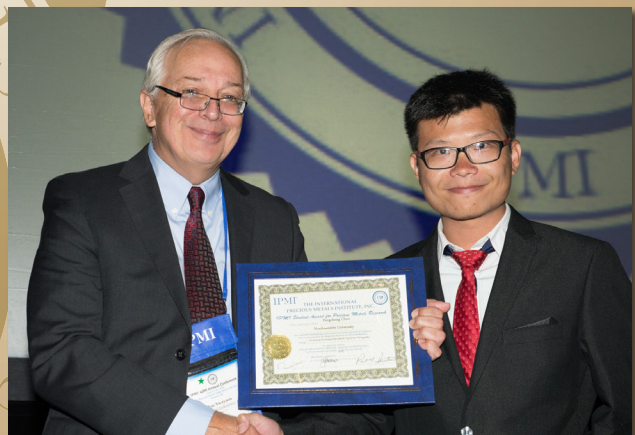
Yuying Song, Colt Refining Award winner with Nancy and Harvey Gottlieb



Anish Dasgupta accepting the Johnson Matthey award



Pengcheng Chen receives IPMI Student Award



Pictured with Don Swaynos, Yuxiang Chen wins Gemini Award



# 40th Conference Awards and Recognition Recipients



Professor Stephen Buchwald is presented the IPMI Jun-ichiro Tanaka Distinguished Achievement Award by Frank Tanaka. The Award is Sponsored by the Tanaka Memorial Foundation



Brian Conn receiving the NY Chapter Student Award



Adrian Aca receives the Metalor Student Award from Larry Drummond



Brad Cooks congratulates David Primer on the Ron Bleggi Sabin Student Award



Jonathan Potts Presenting Past Chairman Award to Robert Bullen-Smith



Sarah Nathan receives the Republic Metals Richard Rubin Memorial Award

# Conference Technical Program Summaries

**Session A** on Sunday was moderated by Miguel Perez-Santalla of Heraeus and the focus of the session, organized by the Silver Users Association, was of course Silver. Miguel started things off by discussing the future plans and goals of the Silver Users Association. Next Philip Newman of Metals Focus discussed ***The Prospects for Silver and Gold Prices: Risks and Opportunities***. He shared that for silver and gold, 2016 has seen a marked turn-around in prices from the bear market of the past three years. The change in investor sentiment and price recovery this year strongly suggests that we have entered a new bull market. In this presentation, he looked at some of the risks that could potentially derail the recovery for both silver and gold, and how likely these are to materialise and what the future may hold for each metal. Next, Josh Phair of Scottsdale Mint presented ***Threat to the Physical Market: Dealing with and Adjusting to the World of Counterfeiting***. He spoke of the internet era of trade, along with the increased quality of counterfeit goods, that has made the fight against fraud an everyday battle. Not only must companies dealing with Gold/Silver bars & coins protect their brands, but some mints are developing new and exciting technology to protect and enhance confidence in the physical market. John Maguire of Maguire Refining rounded out the session with ***Decline of Precious Metals in Dentistry*** saying that there have been a number of reasons for the decline in the use of precious metals in dentistry including outsourcing, alternative metals, metal substitution, high precious metal market prices, the development of porcelain and other metal-free restorations and that now the digital age metal is further accelerating the decline in the use of gold and palladium in dentistry. This decline will continue to impact some sectors of the refining industry. However, gold remains the top choice for dental practitioners in regards to posterior molar restorations.

**Session B** on Sunday also, was a session devoted to Mining. The first speaker and also the moderator was Dr. Corby Anderson of Colorado School of Mines. His interesting and historical discussion was on ***The Cornish Mining Legacy: Technology, Chorals, Pasties and Wrestling***. When it comes to underground mining, the miners of Cornwall dominated the world with their skills. As they roamed the world from mining camp to mining camp, they spread their technology and culture as well. This presentation provided a snapshot of the Cornish miners based on the recent venture of Dr. Corby Anderson to Cornwall. Chris Jones of Gannon and Scott also gave a historical narrative, his on ***Snapshot of Early Gold & Silver Mining History of Arizona (Part Two)***. He discussed a smaller mining concern only about ten miles north of here, just outside of Cave Creek. The Gold Reef Mine is like so many other worked out mines in common throughout the Southwestern US. What does make this one somewhat unique today is the 10 stamp mill that was recovered from the site. Several years ago, a small group of volunteers associated with the Cave Creek Museum relocated and refurbished this mill back to a fully operational state. He shared what is believed to be the only operational stamp mill left from this era of mining in North America and possibly the world. Most of us realize where our valuable natural resources come from and the immense effort and supply chains associated with them. But what about in those early

days, before the modern mega-machines of today existed.

The theme of **Session C**, on Sunday as well was on trends and developments in business. Regine Albrecht of BASIQ was the moderator. Bodo Albrecht's discussion was on ***Metal Megatrends: New Applications for Precious Metals in 2017***. This presentation took the audience on a journey into the near and mid-term future of "metal megatrends", shed a light on individual applications and markets, and forecast likely developments that will alter the consumption of precious metals in either direction: growth or decline and with the questions asked . . . . Where is our industry headed in the near future? What are the market drivers? What are the key regions? What are the threats to market growth? On the topic of future trends also, Jonathan Butler of Mitsubishi presented ***Disinflation and Demographics: Challenges and Opportunities for Precious Metals in 2016 and Beyond***. Mike Riess of Materials Management spoke about ***Optimizing Profits from Assay Exchanges***. He told the audience that assay exchanges are simple to execute but fraught with technical and financial tensions. Uncertainties are inherent to the process, and in any given year, hundreds of thousands of dollars can hang in the balance. A model that incorporates Monte Carlo simulation and non-cooperative game theory helps refiners and customers alike minimize assay-exchange metal losses and umpire fees—and increase profits. Next, David Vose of Vose Software gave the last presentation in the session with ***An Introduction to the Benefits of Quantitative Risk Analysis in the Precious Metals Industry***. His presentation introduced some simple techniques in common use across many industries for quantitatively assessing such risk and uncertainty, and demonstrate how they can be used to create a competitive advantage through better risk management.

**Session D** was moderated by Sascha Biehl of MAIREC and its whole focus was on new technology. Charlie Fink of Inductotherm gave a presentation on ***Inductotherm Technology***. Talking about Inductotherm he shared the advantages of using induction technology for precious metals melting. Whether you recycle, melt, alloy, refine, process or cast the full range of precious metals, including the platinum group metals, Inductotherm builds the ideal melting system for your application. As the worldwide leader, there is a complete line of clean and efficient electric induction furnaces and power supplies. This includes our VIP® and VIP-I® induction power supplies; the versatile Mini-Melt® crucible lined furnace; and a wide variety of lift-swing and push-out removable crucible furnaces. For melting large quantities of precious metals, the Dura-Line® and Small Steel Shell furnaces are available for customers who process tons of metal at a time. Serge Gambis of Green Technology & Finance LLP presented ***Acidless Separation, a DISRUPTIVE innovation Green pre-refining tool, allowing to separate silver from gold, copper and other metals with remarkable results including faster turn-around and savings on OPEX*** that offers a real green technology, a serious alternative to Miller, an option to get away from the danger and demanding regulations relative to the use of chlorine. Chlorine which can only become more restricted and difficult with time passing by and a way to improve efficiency and safety. Then, Stephen Golden of Clean Diesel Technologies discussed

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# Conference Technical Program Summaries

***New Materials Technology to Enhance Performance with Low Platinum Group Metal Loads: The Catalytic Converter of the Future.*** With this in mind, he shared that a major user of PGMs is the emission control catalyst market. Emission regulations are getting tighter and markets are expanding – putting upward pressure on PGM use and further, from this sector some of it's (CDT)own catalyst technology developments and those from the broader market that may have a major impact on PGM use (type and amount) per vehicle. Particular attention will be given to the interplay between tighter emission standards, more rigorous “real-world” enforcement and catalyst technology using Platinum Group Metals. Then, Federico Padrono Martini of IKOI presented ***FLAMELESS TUNNEL Induction System: A green technology that major Companies decided to have for production of Splendid casted bars & commemorative coins with a “High cost reduction” and High level of safety” – Complete plant.*** He expanded on this with: a) Production capacity and quality of Gold & Silver bars, Good delivery and any required shapes b) Patented Process description with all advantages and LBMA dip samples ; c) Example of complete production process with an output of 120 kilo bar/hour and discussed the splendid top quality of this consolidated technology and referring one example of our complete automatic production process realized, from silver/gold grains to the complete finished bar: from 1 Oz up to Kilo, 100 Oz ready for packaging without no human intervention. A very last minute addition to the session was by Liu Weiping who talked of ***The Research and Application of Platinum Based Precious Metals New Material.***

There were three very full sessions on Monday. The first **Session E**, moderated by the first presenter, Erica Rannestad of Thomson Reuters and its topic was multi faceted on estimations regulations and risks. Erica presented ***The Changing Landscape of Precious Metals Physical Investment in the U.S.*** in which she discussed that since the financial crisis, precious metals investment has grown in many unexpected ways. and from precious metals investment in IRAs to the unprecedented growth in privately minted coin demand to increasing storage options to state-level tax and legislative changes – the precious metals investment landscape is more robust and active than ever. Neil Meader of Metals Focus, on nearly the same theme, took the approach of ***Outlook for the PGM Market.*** Neil spoke of how the PGMs saw healthy gains over 2016's opening months but how solid are these prices and assessed whether this strength is merely down to the shadowing of an improved gold market or to developments within the PGM markets. For platinum, the key issues addressed includee the extent to which autocatalyst demand has managed to shrug off dieselgate, whether the Chinese jewellery market is finally coming back to life and how likely are supply shocks from industrial action in South Africa. The main point of the discussion on palladium was an analysis of whether another hefty deficit in 2016 means a strong rally is almost inevitable or if ongoing caution towards China actually suggests a bearish outlook. Vanessa Tanaka with Cadwalader Wickersham and Taft then shared with the audience ***A Critical Review of Risks Associated with Leasing and Trading Precious Metals.*** Against a backdrop of stringent regulations, declining commodity prices and

potentially tightening financial conditions, leasing and trading precious metals introduces certain heightened risks compared to the trading of other physical commodities. Banks and other liquidity providers provide secured and unsecured sources of financing through a variety of trading and lease structures, including leases, commodity repurchase agreements, intermediation arrangements, buy/sell transactions, and the related storage arrangements, each of which presents challenges and benefits. To further complicate, the various legal, credit, and practical risks associated with precious metals will vary, depending on the type of transaction and form of precious metal at various points during the transaction and she went thru a walk-thru of various scenarios of risks involved in leasing and trading metals. Brian Ledgerwood of the US Department of Trade was next at the podium with a ***TTIP Update.*** Next were a series of lectures from three from the insurance industry, the first was Barry Vickery of JLT Specialty whose discussion was entitled ***Identifying Risks Associated to the Metal Business.*** Barry expanded on this with three key points: Identify Risks , Managing risk and Transferring of risks. Paul Parkinson of Lockton was next and he was followed by Simon Codrington of Hugh Wood who asked ***Are you Exposed?*** He gave a review of the considerations to be taken when purchasing your suite of insurance policies and the pitfalls or compliance errors often encountered. Also addressing some of the issues faced by multinational and multistate clients and how to ensure that these have been addressed to the best advantage of the purchaser.

**Session F** was centered on Analysis and Zachary Henneman of BASF was the moderator. He started things by presenting ***Particle Size Effect on PGM Concentration in Automobile Catalyst Milled Power Samples.*** Next, Mark Caffarey of Umicore discussed ***The Importance of Accurate Sampling*** in which he shared that given the low available value in the spent automotive catalyst recycling business for processors, smelters and refiners it is a necessity to have an accurate sampling methodology and an exact assaying facility at your disposal and that key requirements to be successful in the spent automotive catalyst recycling business are to be an ethical and transparent actor with a reliable sampling and assaying and the use of the Best Available Technology (BAT) for metal recovery.Using BATs, over 95% of PGMs can be recovered from a spent automotive catalyst. John Bruno of Key Engineering offered an automotive slant to the audience with ***Sampling of Automotive Catalyst through Visual Analogies.*** It was a discussion of sampling theory as it relates to automotive catalyst through visual analogies. Vinicius Margatho of Lorene took to the podium next with ***The Use of Microwave Digestion for Gold Determination in Electronic Scrap by ICP OES.*** Vinicius presented that the Classical Fire Assay collection technique has been applied for the determination of Au in electronic scraps and other materials and it is the most widespread method to determining gold and silver in the absence of interferences; can be used for a large amount of sample and, in general, presents good accuracy. However, Fire Assay has disadvantages like susceptibility to systematic errors due to the large number of steps, so it depends on the experience and skill of the analyst, it also can be considered

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# Conference Technical Program Summaries

a dirty method due to the large amount of chemical used and waste generated. Considering the problems related to the Fire Assay for routine analysis, the objective of this work is to propose a method for determination of Au in electronic scraps based on ICP OES which presents good analytical frequency, sensitivity, reproductibility, and reliability for quality control.

**Session G's** theme was Metals and Minerals: A Conflicting Industry. Michael Littenberg of Ropes and Gray was the moderator and the first presented with a **Conflict Minerals** discussion. Michelle Lee of Qualcomm was the second presenter with **Engaging in Responsible Supply Chains: Due Diligence for Conflict Minerals**. She gave an overview of how to conduct due diligence in order to create responsible supply chains specifically with regards to conflict minerals. The presentation covers the basics of conflict minerals, and dives into a cross-industry initiative to promote collaborative due diligence efforts to address current and pending legislation. Anne Marie Fleury of the Responsible Jewellery Council, keeping with the session theme, told the audience about the **Gold Standard in Responsibility for the Jewellery Supply Chain - A Decade On**. Next was a talk about **Homeland Security Investigations (HSI) Strategy: Trade Based Money Laundering** from Steve Crogan of Blue Water Risk Management. and last in the session but certainly not least was a riveting discussion given by Jonathan Schmidt of Ropes and Gray entitled **Foreign Corrupt Practices Act and Human Trafficking**.

There were four sessions on Tuesday. **Session H**, moderated by veteran moderator Theo Keuter of Platinor and Europe Chapter President, was all about the happenings in the metals world in Europe. The first discussion was given by Lee Hockey of Johnson Matthey who gave a narrative on the goings on of the Europe Chapter of IPMI. Next, Erik Norland of CME Group talked of the **Macro and Micro Economics of Precious Metals**. Erik expanded on this subject with a series of questions:

- Will the U.S. rate environment continue to support gold?
- Will current prices incentivize gold mines to boost production?
- How will silver and other precious metals influence gold?
- Is gold attractive as an investment versus stocks and bonds?
- How will demand in China and India evolve for gold?

Jonathan Jodry was next with **Fake Coins and Bars - 2 Complimentary Approaches to Detect Them** and then Melanie Wells of Metals Registration then directed her presentation on **The Good, The Bad, The Unexpected. What is Good Delivery Accreditation and Why Do It?** She gave an explanation on: What is Good Delivery Accreditation- The benefits of holding Good Delivery Accreditation- The key process steps to achieve Good Delivery Accreditation- why getting Good Delivery Accreditation right first time will save you time, money and headaches. The next presentation was from Valcambi and it was entitled **Tools and Information Leading to Customer Satisfaction**. Rounding out the session was Oscar Wehtje of the London Metal Exchange who talked of the Exchange's **Developments for Precious Metals including how LME Bullion (the Platinum and Palladium Auction) Operates**.

**Session I** was moderated by the awards Chairman, Dr. Robert Ianniello and it was entirely focused on the 2016 IPMI Student Award Winners Research. Subjects ranged from alloy catalysts to chiral ligands and from biomedical applications to ruthenium metathesis catalysts. In all, nine of the ten student award winners shared their impressive research and truly showed they are part of the hope for tomorrow in the metals field.

**Session J** had topics that ranged from recovery to research to refining and oxidation. Tim Johnson of Tetronics was the moderator. His presentation was **Emerging Trends in the Recovery of PGM's using DC Plasma Smelting**. He told the audience that after many years of almost unbroken growth in the amount of Platinum Group Metals (PGMs) being recovered from secondary sources, 2015 saw a significant drop in PGM recycling as a result of persistent weakness in PGM prices and an increase in primary production after several weaker years. During the first half of 2016 a strengthening of the PGM prices and the running down of stockpiles has resulted in some early evidence of a widely-predicted but probably fairly gradual bounce back in PGM recycling rates after these previous lows. Meanwhile, the amount of e-waste produced globally is expected to almost double in the next 10 years and the wider adoption of tougher environmental regulation will increase the proportion of that total which finds its way into formal recycling schemes also looks set to increase. Together the factors are expected to increase the amount of e-waste available for the extraction of gold and other PMs from c.400,000 metric tonnes in 2012 to nearly 2 million metric tonnes in 2025. Thorsten Koras of Koras GmbH presented **Gold Refining without Aqua Regia-Green Technology**. Also in the session Steve Izatt of IBC Advanced Technologies delivered **Processing of Spent Automotive Catalysts Using SuperLig® Molecular Recognition Technology** in which he stated there is a rapid growth in the global use of automotive catalytic converters. This growth is fueled by increasing affluence of a growing world population, especially in developing countries and implementation worldwide of stricter regulations governing toxic emissions from vehicles using fossil fuels. Further, he palladium, platinum, and rhodium used in the catalytic converters become an 'urban mine' when the vehicles come to their end-of-life state. Molecular Recognition Technology (MRT) SuperLig® products provide a green chemistry tested method for the selective recovery of these valuable precious metal resources from spent automotive catalysts. A description is given of the processing of spent automotive catalysts in China using MRT. Corby Anderson took to the podium next with **Iron Phase Control During Pressure Leaching at Elevated Temperature**. This presentation was last and it outlined that Iron is a common contaminant encountered in most metal recovery operations, and particularly hydrometallurgical processes. For example, the Hematite Process uses autoclaves to precipitate iron oxide out of the leaching solution, while other metals are solubilized for further hydrometallurgical processing. In some cases, Basic Iron Sulfate (BIS) forms in place of hematite. The presence of BIS is unwanted in the autoclave discharge because it diminishes recovery of precious metals and causes environmental matters. The focus of this presentation is on the various iron phases

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# Conference Technical Program Summaries

forming during the pressure oxidation of sulfates. Artificial leaching solutions were produced from  $\text{CuSO}_4$ ,  $\text{FeSO}_4$  and  $\text{H}_2\text{SO}_4$  in an attempt to recreate the matrix composition and conditions used for copper sulfides autoclaving. The following factors were investigated in order to determine which conditions hinder the formation of BIS: initial free acidity (5 – 98 g/L), initial copper concentration (12.7 – 63.5 g/L), initial iron concentration (16.7 - 30.7 g/L) and initial iron oxidation state.

There were three presentation in **Session K** on Tuesday and the session was moderated by Chris Jones of Gannon & Scott. The session theme was New Materials and Furnacing. Luca Fiorni of Tera Automation gave **T-Line: A New Approach for the Refinery of Automatic Production** where he spoke of T-Line, “T” as Tera and “Line” as line production, is a new concept of production usually involved in industries with a high fabrication such as automotive, packing and paper making industry. T-Line has the purpose to avoid the labor work and increase the capacity to manufacture more as for the quality and quantity. Nowadays, Tera Automation offers this innovative approach customizing each project in modular and upgradable unit for a specific production of goldsmiths’ wares. Starting from a gold sponge, T-Line can realize the final gold ingot with a perfect surface stamped, numbered, and packed. The bullion mak-

ing is just a part of the application that T-line concept can operate in the refinery industry. the same concept can be adopted by several application as smelting production, minting bars or coins, grain production, precious metal solution and salt.

Then Roberto Guidali of Italmimpianti Orafi presented **New Compact Rotary Converter to Recovery Precious Metals from Ashes, Slage, Metals, Sludges and E-waste**. Guidali enlightened his audience that the small-medium sizes compact rotary converter offering a concrete number of advantages and main technical features of processing such as:

- Compact construction for simple installation and set up
  - Very Efficient recovery of gold from refining/jewelry ashes with only 20-20 g/T of losses
  - Easy loading operations both for batch or continuous use
  - Highly efficient process management
  - Quick and precise pouring operations
  - High heat and mass transfer rates for rapid processing
  - Thermal efficiency up to 60-70 %
- and more!

Added to the session was Alexei Kornienko of Krastsvetmet whose presentation was entitled **Cost-Effective Platinum Recovery Solution**.



## A Special Thank You for the generous donations provided by the following companies in sponsoring the 40th Conference

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TCA  
Techemet LP  
TMC Metal Group  
Toronto-Dominion Bank  
Transvalue  
Umicore





# IPMI 40th Conference 2016



Delegates receiving their welcome packets at registration



Metalor Crew sports a Mighty Welcome to their Reception



Metalor crew member welcomes Hardy, Doris and Carlos from Atomic Gold to their reception



Republic Metals team welcomes delegates to their hosted luncheon



IPMI President JP Rosso with Keynote Speaker Ron Alber



Morning Technical Session in progress



Heraeus Crew at their Rootin' Tootin' Reception



Pat Gannon and Bill Tierney of Computer Associates display their services to a delegate



# IPMI 40th Conference 2016



Sandra shows off the IPMI store to Danuta Kenwright



Father and Son, Alan and Chris Kaye at the Gannon & Scott Pool Party



Happy Bidding, Larry Fell



Francesco and Alberto Ricciardi hoping their bid will win



IPMI President with session speaker Erik Norland



John King, left, and Peg Jones, far right, greet delegates at the Gannon and Scott Pool Party



Crew from Element betting on a fun evening



Tournament players give a 'Thumbs Up' for surviving the Arizona heat



# IPMI 40th Conference 2016



The Rossos and Steve Gardner, right



The Family Combe



The Arinez family with Alejandro Esponda



Tony Ramanjalam and Cristina Sagredo



Left to right, Fred Saada, Larry Drummond, and Brad Cook



Paul Parkinson, Nancy Gottlieb, Steve Gardner, and Jon Potts stop to chat



IPMI 2016 Student Award winners enjoying the conference



# IPMI 40th Conference 2016



Cheers! Tim and Claire Johnson with Federico Padrono Martini



Charlie and Becky Fink



Cedric Kelly, Danish and Saamir Mir, and Adam Shine



Bob and Karen Ianniello



Christine Rosso joins her Dad at the Awards Banquet



Newly minted Chairman Jon Potts and his wife Tina with Brent Vesa, right



Linda and Lee Miller, left, and Thomas and Susan Hensel enjoying the NY Chapter and Hindustan Platinum sponsored Closing Reception



Anish Dasgupta, center, thanks Vishwash and Abhay Choksi for co-hosting the Closing Reception



## Chairman's Message, continued from page 1

production came into full-swing, and the first, big bull market in precious metals began.

It was the year IPMI held its very first conference. It was a one-day affair. A luncheon, with just five papers and only a small number of attendees -- it was considered a spectacular success.

This year we have around 50 papers, and 550 attendees. We have distinguished achievement awards and student awards. We have IPMI Chapters in New England, New York, the Midwest, and now in Europe.

This past year we've weighed in on the Transatlantic Trade and Investment Partnership (TTIP), the Trans-Pacific Partnership (TTP), NOx abatement legislation, conflict minerals compliance, EPA ozone limits, and other important issues.

Thanks to Robert's leadership, we've created an Environmental, Health & Safety Committee that has already conducted two meetings. We've put on auto catalyst and sampling seminars.

This past year we supported an exhibit at the Museum of American Finance in New York City entitled "Worth Its Weight: Gold from the Ground Up."

We've really come a long way. If we thought 5 papers and a handful of attendees was "spectacular," this year's accomplishments are truly remarkable. A lot of credit for this success needs to go out to our current and past executive committee members, officers and directors that have guided the organization over the years.

Moving forward, we will continue to be the industry's premier venue to present and discuss major issues facing our industry. We will continue to provide awards and scholarships. We will continue to provide conferences, seminars and other educational events. And our conferences and meetings will continue to offer outstanding networking opportunities.

We also know that the industry is facing some tougher times and, therefore, we are working hard to provide members with value while we watch costs and focus on internal controls; all to ensure that we have another successful 40 years.

I'd like to wrap up by saying that I am very proud of this organization, I am very proud to have been a member of this organization for so many years, and I look forward to serving as your Chairman.

I wish you all good health, happiness and success! Thank you.

## President's Message, continued from page 1

was 13. Where on earth did 19 years go?

In further reflection I look out at this room and am amazed at how many people here tonight I have come to know since I joined the IPMI back in 1982. The ability to meet such wonderfully bright, intelligent and interesting people, from all sectors of the industry and to forge relationships, both professional & personal, is to me, one of the best and most enduring values of the IPMI and one which I cherish the most. It's a place where a young man of 28 (me), who could barely spell 'platinum' or 'ruthenium', could be introduced to men like Jack Gannon and George Benvegno: men who were always very generous with their smiles and their time and happy to answer questions, assisting a young man in acquiring the knowledge necessary to take a place in this industry. Thank you, both; you will be sorely missed.

Which brings me to an announcement: I have been contacted by Ron Davies of Ames Goldsmith, George's long-time friend and business partner. Mr. Davies is establishing the "George Benvegno Memorial Scholarship" award. He has already funded the scholarship for the 2017 award year. It is Ron's intent to insure that this scholarship continues for many decades into the future by funding the scholarship through the establishment of the first endowment in IPMI's 40 year history! IPMI's general counsel and I will be assembling the framework and traveling to Glens Falls next month to start structuring the endowment. I hope that this first endowed scholarship will be the catalyst for more to come.

I'd like to start our "year in review" by taking a look back to 2013, the first conference I organized since becoming IPMI's president and the last time we were here in Phoenix.

- In June 2013 we launched the very first IPMI video. Today, 3 years later, the IPMI has produced 46 videos, which have exceeded 250,000 views. And we have 1,909 other sites linked to ours, insuring they are always up to date on our latest production.

- In June 2013 (and for many years before), the IPMI had 1 event: the annual conference. Let's look at the last 12 months:
- June 2015: 39th Annual Int'l Conference in San Antonio
- Sept 2015: the 3rd Annual IPMI NY Platinum dinner
- November 2015: the Risk Management Seminar in Frankfurt Germany (the 1st major IPMI event in Europe since 1987)
- November 2015: the opening of the joint IPMI/Museum of American Finance exhibit on Gold. Running through the end of Dec 2016.
- April 2016: the Auto Catalyst Technology Seminar in Atlanta (the 1st major IPMI seminar in the US in > 20 years)
- May 2016: the 2nd annual IPMI Europe Chapter Wine tasting in conjunction with Platinum week in London (the chapter was the first outside north America and the first new chapter formed since the Metro NY chapter was formed by IPMI Past Chairman Alan Kaye in 1990)
- June 2016: the 40th annual Int'l conference.
- 7 meaningful IPMI events, bringing value to its members over the course of the past 12 months

My thanks to you, the members, for enthusiastically attending these events.

In planning for this year's awards banquet, it occurred to me that there are probably a number of people here tonight who have no idea who, Carol Tyler, Henry J. Albert, or Jun-ichiro Tanaka were. So thanks to the sponsorship of their companies: BRM Insurance, BASF, and Tanaka, the IPMI has produced videos to be shown each year, before the award is given, so that you will all get to know the people who the awards honor.

Now, the annual "YEAR IN REVIEW" video produced and provided to us by IPMI Patron Member, Kitco. This year's video is tongue-in-cheek look at a particular industry segment, GOLD, over the past year. I hope you all enjoy it. Thank you.



## Agosi Celebrates 125th Anniversary

On June 3, 2016, many guests were welcomed to a festive event on the company's premises in Pforzheim, Germany.

Looking back on 125 successful years, Agosi can be proud of the company's achievements. In 1891, eleven Pforzheim jewellery manufacturers decided to establish an independent refinery for precious metals bearing production scrap. What the founding fathers had in mind was a customer-owned facility, therefore the model of a joint-stock company obviously was the most suitable way to achieve this first basic step. In the following years, Allgemeine Gold- und Silberscheideanstalt AG (Agosi) implemented the newly patented Dietzel technology for the electrochemical treatment plus Moebius equipment to complete the technical set up of its refining processes. Right from the start, Agosi headed for big volumes of refining material - indeed one of the reasons for its formation was the then fashionable novelty of 'double' jewellery, where a layer of gold alloy is adhered to a base metal sheet, thus allowing the mass production of comparatively cheap jewellery. Mass production results in greater amounts of scraps from stamping and Agosi, as a pioneer in this field, was technically well equipped to treat and refine this new double compound material, as well as jewellery scrap from silver, which had also gained a fair share of the jewellery market. Agosi's early beginnings already mirror its overall programme: to serve the precious metal cycle by recovering precious metals that had already been used in various products and by re-introducing them into the manufacturing processes as fine metals or semi-finished products, a true secondary raw materials approach.

To this day, Agosi has kept up with the ever faster pace of technological development in all the precious metal consuming industries. It is not only the ongoing improvement of refining processes that has ranked Agosi amongst Europe's major refineries, but also the company's ability to integrate new production methods for the ever changing facets of semi-finished precious metal products that are required by a huge variety of applications ranging from the automotive to the electrotechnical or the engineering lines of business. The classic portfolio of strips, sheets, blanks, wires, rods and tubes

is complemented by highly specialized turned, milled or EDM parts, made individually according to customer specifications.

A further milestone is marked by Agosi's introduction of continuously cast Good Delivery Silver Bars with the LBMA in 2012. When Agosi was granted accreditation by the LBMA for its gold and silver bars in 1989 and again in 2008, expensive manual casting was still used. As a large-scale manufacturer of silver products, Agosi had experience of an extremely efficient continuous-casting facility, with machinery for cutting processes, a well-trained staff and all the know-how needed. The new technique was presented to the LBMA and approved – a first in the LBMA's history.

When Umicore, Belgium, became the major shareholder of Agosi in 2003, its core concept of the precious metal cycle fitted perfectly into the Umicore principle of creating "materials for a better life." At the core of the Umicore Business Unit Jewellery & Industrial Metals (BU JIM), Agosi is home to the unit's headquarters. In this function Agosi also coordinates the activities of the Umicore subsidiaries in Toronto/Canada and Sao Paulo and Manaus/Brazil. Being a part of Umicore, Agosi has direct access to its affiliates world-wide. Nowadays Allgemeine Gold- und Silberscheideanstalt AG is a group of companies offering the full range of services for the precious metals cycle around the globe. Agosi has subsidiaries in Pforzheim, Vienna, Amsterdam, Bangkok and Schwaebisch Gmuend. Direct sales offices are in Switzerland, France and the United Kingdom. At its RJC-CoC certified sites in Pforzheim, Bangkok and Vienna, Agosi can offer CoC-conform, responsibly produced precious metals of conflict-free and certified origin.

All in all, the company's development has proven that the original plan, dating back to 1891, is not only well on track but also well beyond the vision that the founding fathers may have had. Surely, they would be proud to see what has become of their initiative: a sound and well-balanced employer, a staff of 400 at the Pforzheim location alone, a renowned company that combines commercial success with social responsibility and commitment to environmental protection.



## Williams Gold & Silver Opens in Las Vegas

Now open for business, Williams Gold & Silver, LLC is located at 3638 East Sunset Road, Suite 100, Las Vegas, Nevada. Backed by over 30 years of industry experience in precious metals, Williams Gold & Silver provides professional refining services nationwide, to the trade only, including but not limited to gold, silver, platinum, sweeps, polishings and dental products. With a focus on pawnbrokers, jewelers, coin and antique dealers throughout the United States, Williams Gold & Silver delivers expert support to wholesale customers whenever they want to sell, swap or buy precious metals including bullion bars and coins, and diamond specialty services.

Owner, David Williams noted, "We are excited to welcome customers to do business with us by phone or at our new location. I promise to provide the highest level of service to every client that we serve. I will work directly with you to insure the care your business requires."

David Williams' customer service promise is the reason many clients have worked with him for decades. "Dave has always delivered 'first class service.' He is honest, easy to work with, and I trust him blindly – in this business, that means something!" said Charlie Mammoser of Northern California Coin Exchange.

San Rafael Rare Coin Co.'s Roger Tobin, has been doing business with David Williams for nearly 25 years. Tobin described Dave Wil-

liams in three words: "Straight Arrow Guy. Dave is upfront with everything and crystal clear in how each transaction will be handled. He is big on customer service and constantly followed-up on the details. The reason I've stuck with Dave all these years is that he treats everyone like they are his most important customer. We're all high rollers to Dave and it certainly is a lot nicer working with someone across the table than getting lost in a big company," noted Tobin.

Williams Gold & Silver is your trusted precious metals specialists providing precious metals wholesale refining services (including bullion bars, coins and diamond specialty services) to pawnbrokers, jewelers, dealers and collectors. With over 30 years of industry experience, Dave Williams and his team deliver the gold standard in service for the sale, swap or purchase of precious metals. Williams Gold & Silver promises to handle your metal with a level of personal care and professional integrity that is unmatched. Williams Gold & Silver delivers accurate valuations, competitive pay rates and convenient shipping options every time. Rest assured, your precious metals are safe with us. For more information, call David Williams at (702) 485-1414 or visit us at [www.williamsgoldandsilver.com](http://www.williamsgoldandsilver.com)



## The IPMI® Store Expands Merchandise

The IPMI Store has expanded! Now, not only are we selling Proceedings of IPMI Conferences and technical books, we are offering IPMI coffee mugs, lapel pins, Reebok shirts with the IPMI logo and silver coins. Check out our new wares on the online IPMI Store at [www.ipmi.org](http://www.ipmi.org).





## In Memoriam: George Benvegno

It is with deep sadness that IPMI discloses that George Benvegno, long time IPMI Board Member passed away on May 26. The President of Colonial Metals, an active IPMI member and participant on the Awards Committee, George and his wife Mary have been familiar, friendly faces at the IPMI Conferences for many years. He could always be counted on for his quick wit, easy smile and kind word. IPMI sends its condolences to his wife Mary and son, George Jr.

For those who wish, contributions can be made to Immaculate Conception/St. Jude Church or to Mount Aviat Academy Inc. care of Hicks Home for Funerals, 103 W. Stockton Street, Elkton, MD 21921.



## New Student Award for 2017

In 2017, there will be a new student award, **The George Benvegno Memorial Student Award**. It will be jointly sponsored by Colonial Metals and Ames Goldsmith and will be annually presented to a graduate student in precious metals research. Colonial Metals,

Ames Goldsmith and the Benvegno family, in particular, wishes to honor George in this way since the Institute meant so much to and was greatly supported by George.

## A 40th Anniversary Look Back to the Origins of the IPMI®

The actual beginnings of IPMI were quite intermittent and originated back in 1970. Three learned gentlemen, Ray Vines, Edmund Wise and John Nielson conducted a graduate course in Noble Metals Metallurgy at the former School of Engineering and Science of New York University. As it turned out it Mr. Wise did not give his lecture but Mr. Nielson did as did Charles Coxe of Handy and Harman. And thus did Mr. Henry J. Albert. Albert's presentation centered on Platinum and Coxe gave his lecture on silver while Nielson concentrated on gold. Very soon afterward Vines, Wise and Nielsen sat down one evening and proposed a precious metals institute at New York University.

But within a year there were rumors that New York University School of Engineering was going to close and the idea of the institute was disbanded. A while later, in 1973, a merger developed between the New York School of Engineering and Brooklyn Polytechnic thus providing a path for a Noble Metals course and also the plan of the institute. Ray Vines and John Nielson organized a steering committee of about twelve individuals. The first group met on March 5 1974 at the Harvard Club. Those at this meeting:

Henry J Albert of Engelhard  
John Ruth of American Market

Dewitt Alexandre of Engelhard  
Teuvo Santala of Texas Instruments  
George Bugliarello of New York Polytechnic  
Joseph Tuccillo of Jelenko  
Donald Corrigan of Handy and Harman  
Ray Vines  
Albert Hess of Victor Settings  
Sheldon Weining of Materials Research  
John Nielson of New York Polytechnic  
Stanley Wilson of Sel-Rex

The next meeting took place in Sept. 1974, with further plans to hold a technical Conference in June of 1975. The group added: Allen Abrahams, Myron Browning, Richard Davies, James Hunter and Paul Milner to their committee. Unfortunately Ray Vines became ill, the conference had to be called off, and the Institute idea became dormant.

By Oct. of 1975, the committee had regrouped with a meeting at the Yale Club and added even more to the growing committee: Gwynne Edson, George Frankovich, Juergen Furman, Dave Lundy, Roger Runck, Robert Steinmetz and Al Weisberg. At this time a ten-

[continued on next page](#)

## Origins, continued from page 15

tative by laws and a charter were initiated but not yet legalized. Just after this Peter Costas became the Institute's attorney and he proceeded to obtain legal status for the charter. By December of 1975, Peter Costas had become the charter's attorney and he proceeded to obtain legal status. Just after that the Membership and Activities Planning Committees took shape and the Institute began its first steps towards having an actual membership roster, and then the very first Technical Conference. Its first officers were: Roger Runck - President; Richard Davies - Vice President; Robert Steinmetz - Executive Secretary; John Nielsen - Executive Director.

The first Membership Meeting was held November 18, 1976, at the Princeton Club with Al Weisberg as the first treasurer who collected dues. 50 members attended and Dr. Christof Raub was the keynote speaker.

The first Newsletter was published in January of 1977, and the first conference was held May 19, 1977, at the World Trade Center, where five technical papers were presented and 146 people were in attendance.

IPMI was on its way and we have made great strides in the last 40 years with over 1200 members strong, 34 board members, and 4 chapters worldwide. Conference attendance now averages 700 with 45 technical papers presented.



1976, the first year

## IPMI® Welcomes New Sustaining Member

**Zarmehr Stone (Parsis Gold)**  
Mashhad, Iran

## IPMI® Welcomes New Patron Members

**HVF Precious Metals**  
Tucson, Arizona

**Noble Metal Services**  
Cranston, RI

## IPMI® Calendar

<b>2016</b>	Sept. 15	4 <sup>th</sup> Annual IPMI Platinum Dinner New York Palace Hotel, New York NY
<b>2017</b>	June 10-13	41 <sup>st</sup> Annual Conference JW Marriott Grande Lakes, Orlando FL
<b>2018</b>	June 9-12	42 <sup>nd</sup> Annual Conference JW Marriott San Antonio Hill Country, San Antonio TX

### 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

*Editorial note: The IPMI Precious Metal News is distributed at the end of each calendar year quarter, with the exception of the second quarter newsletter that is issued for conference distribution. There is an additional post conference newsletter issued in August.*