Premier Awards Winners Announced

Professor Molander has held many visiting professorships, among them: Univesité de Paris-Sud, Universidade Federal da Paraíba, Universidad Nacional del Litoral and the Institute of Organo-metallic Chemistry, Russian Academy of Sciences.

Professor Molander has also held the Chair position at the Philadelphia Organic Chemists Club and the American Chemical Society and was the Executive Director of the 37th National Organic Symposium as well as Associate Editor of Organic Letters and Comprehensive Organic Functional Group. He has been on several committees: American Chemical Society National Awards Selection, 46th World Chemistry Congress, Chemical Heritage Foundation Ullyot Scholarship and Lectureship and French-American Chemical Society.

The IPMI Award Committee is pleased to announce that the 2020 IPMI Henry J Albert Award, sponsored by BASF Corporation, has been awarded to Prof. Michael P. Doyle, University of Texas at San Antonio for his pioneering work in rhodium catalyst reactions, which have now become the basis for industrial processes and a renaissance in the development of versatile new rhodium catalyzed transformations of organic molecules.

continued on page 2
Michael P. (Mike) Doyle, since 2014 the Rita and John Feik Distinguished University Chair in Medicinal Chemistry at the University of Texas at San Antonio, is a graduate of the College of St. Thomas and Iowa State University, has had prior academic appointments at undergraduate institutions (Hope College and Trinity University) and graduate universities (University of Arizona and University of Maryland), as well as being Vice President, then President, of a science foundation (Research Corporation).

Doyle has been called the “guru of undergraduate research” (Rebecca Rawls, “An Undergraduate Champion”, C&EN, Vol. 80, September 30, 2002, pg. 30-31) in recognition of his role in developing student careers in the chemical sciences through research. More than 170 undergraduate students are coauthors of at least one publication with him, and there are several with five or more publications. At Maryland he was Chair of the Department of Chemistry and Biochemistry for ten years, during which time he led his department to be a recognized center for diversity in the preparation of underrepresented minorities for the Ph.D. degree in chemistry and biochemistry (Lauren K. Wolf, “Blueprint for Boosting Diversity”, C&EN, Vol. 89, December 19, 2011, pg. 41-42).

His research contributions have focused on nitrogen chemistry, from diazonium salts in the 1970’s to the chemistry and biochemistry of nitrogen oxides and nitrites in the 1980’s, to diazo chemistry and dirhodium(II) catalysis for metal carbene formation beginning in the 1980’s and asymmetric catalysis in the 1990’s. He and his students are credited with the Doyle-Kirmse reaction, which in its original scope an allyl sulfide reacts with a diazo compound to form the homoallyl sulfide compound via an ylide intermediate, and the Uemura-Doyle rhodium(II) catalyzed allylic oxidation reaction by tert-butyl hydroperoxide. Chiral dirhodium(II) carboxamidate catalysts (the “Doyle catalysts”) were the first highly enantioselective dirhodium(II) catalysts used for asymmetric metal carbene reactions.

The author of nearly 400 peer-reviewed publications, 11 books, 11 patents, and 25 book chapters, Doyle is the recipient of the 1988 American Chemical Society (ACS) Award for Research at an Undergraduate Institution, the 1995 James Flack Norris Award for Outstanding Achievements in the Teaching of Chemistry sponsored by the Northeastern Section of the ACS and the 2002 George C. Pimentel Award in Chemical Education from the ACS. He is a Fellow of the American Chemical Society, the American Association for the Advancement of Science, and the Royal Society of Chemistry, and he is the recipient of numerous awards for his research, including the 2014 Hillebrand Award from the Chemical Society of Washington, a 2006 Arthur C. Cope Senior Scholar Award from the American Chemical Society, and a 2003 Merit Award from the National Institutes of Health.

The IPMI Henry J. Albert Award sponsored by BASF Corporation recognizes and encourages outstanding theoretical and experimental contributions to the science and technology of precious metals.

The IPMI Award Committee is pleased to announce that the 2020 IPMI Carol Tyler Award, sponsored by BRM Services, has been awarded to Margaret Gannon-Jones, Gannon and Scott, for her broad-based leadership in the technological, operational and business aspects of managing the company. Margaret has been since 1990 part of Gannon and Scott, a globally recognized refiner of precious metals; beginning as a lab technician, she has methodically risen through various technical and business responsibilities to the position of President and then Chairman of the company. She is one of the few (perhaps only) women that own and operated a major precious metals refining company.

Margaret Gannon-Jones, who more commonly goes by Peg, has been in the Precious Metal Refining Business for over 30 years and is the owner and Chairman of the Gannon & Scott group of companies. Representing the fourth generation, Peg joined the now century old family business after a short career in the Medical Field. She earned a BS in Clinical Chemistry from the University of Rhode Island and then her Masters (MEd) in Human Resources and Organizational Behavior from continued on page 3
Award Winners, continued from page 2

Boston University. Later she completing a program of study on Modern Industrial Spectroscopy at Arizona State University. Peg formally joined Gannon & Scott as a chemist where she developed many of the company’s first instrumental methods for metal analysis by ICP. Peg has worked in many areas of the company and was instrumental in the acquisition of the Handy and Harman Refining Group Plant in Phoenix, Arizona, and later relocating to Arizona, assisted in reopening the plant under the Gannon & Scott banner.

Peg went to her first IPMI Annual Conference when she was 14 so it’s fair to say it left a good impression and influenced her decision to make a career in precious metals. Peg has been a proud Member of IPMI for her entire career. She has delivered papers at the Annual Conference and has been active in the New England Chapter, Analytical Council and Security Council.

The IPMI Carol Tyler Award recognizes the achievement of a woman in the field of precious metals be it industry or academia, or it can be presented to a student in precious metals research.
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Europe Chapter of the IPMI
Lisbon Seminar - November 2019
Precious Metals Products & Technologies

The Europe Chapter Precious Metals Products and Technologies Seminar held at the Lisbon Sheraton in Lisbon, Portugal, Nov 17-19 was a sold out event with over one hundred guests. Starting with a cocktail reception on the evening of November 17, the sessions were held on November 18-19. Check the Europe Chapter website for more info on this event at www.ec-ipmi.org
Neil Meader from Metal Focus opened the conference with a paper on silver technological developments. He presented the four phases of technological development: Invention, Innovation (invention becomes commercially viable), Diffusion (widespread use of the technology) and Obsolescence. For silver, the obvious example of obsolescence being the use of silver in photography (from >6'000 tons in 2001 to around 1'000 tons today. Diffused technologies for silver include electronics, electrical, batteries (silver oxide), … Innovation using silver is interesting, with many emerging technologies – 5G, solar (concentrated solar power), wind turbines, wearables (smart watches), bonding wires, antibacterial applications. The best potential for silver relies in the possible inventions – IoT, induction chargers, cold sintering, inkjet printing. There is a lot of potential but obviously, the associated threats are numerous. In conclusion, innovation is more present for silver than obsolescence.

Peter Varyushin from Nornickel jumped directly to PGM market, which has to discuss the palladium recent price changes! The market has been in backwardation from 2017, driven by market tightness caused by strong ingots demand in China. While the automotive sales are decreasing almost everywhere in 2019 (-10% for China, -12% for India), that metal is still in high demand due to the expected increase of Pd loading for catalytic converters.

The market is very different from Pt and Pd, as seen below:

Still, no substitution of Pd but Pt is foreseen, as Pd has specific properties that can’t be attained by Pt. New developments performed by Norilsk Nickel will allow the Pt and Pd productions to increase by 25% by 2025.

Thomas Stenger from Heraeus discussed the case of platinum, which is quite different from Pd. Clearly, the overall demand is expected to lower over the next years, mostly because of less automotive and jewellery applications. The expected increase of industrial products will not compensate that.

An example of such products fabricated by Heraeus comprises tools for glass making – tubes and components, as well as stirrers and plungers.
Lisbon Seminar, continued from page 6

**Kim De Jonge** explained that **Umicore** employs 240 people in the sampling department, processing 9000 lots per year. Increasing robustness and reducing throughput time are the drivers for automation. Kim focused on the final sample preparation, describing step by step the work done by the robot developed.

An impressive video showed the machine in action, after a 3-5 years project.

Umicore is currently expending such automation for spent automotive catalysts and spent industrial aluminum based catalysts.

After the break, **SICPA Company** was presented by **Vincent Mathier**. This Swiss company is a world leader in the security ink business, and their products are used at high level including in bank notes and passports. Securisation of products can be done via overt features (a security feature that is visible without a specific equipment), covert features (requiring specific hand-held devices) and forensic features (only detectable by forensic experts in a laboratory).

BullionProtect is a mix of overt and covert security, allowing easy validation of ingots bearing that security ink.

This solution is currently used by several LBMA refiners.

**John Fairley** presented the **LPPM – London Platinum and Palladium Association**. Among the new projects handled by the association is the new Compliance program for Pt and Pd Good Delivery refiners, starting 1st January 2020. LPPM and IPMI have also started a joined proficiency program on fine platinum – the first of its kind. This will allow 27 laboratories that already registered comparing their analytical abilities. LPPM is also launching a a Pt and Pd sponge accreditation scheme; such material will not be deliverable to clearers in London, but it expected to create a new industry standard.

**Bill Tierney, CAI Software**, presented a paper on “Where the precious metal is” and “Who owns it”, discussing where precious metal inventory can be found and how it impacts on the financials of a company.

continued on page 8
Par Rosendahl from Arc Metal offered a detailed presentation on the History of Plasma Arc Technologies. From its first industrial application in 1906 for fertilizer production to the first commercial industrial plant in 1984 for recycling flue dust from steel plants, which can be seen below and is still in operation.

Jonathan Butler (Mitsubishi Corp) discussed the Euro 7 regulations. Currently, for diesel, Euro 6-TEMP (2017-19) and Euro 6d (2019-21) allows generating more NOx than the formal limit. This will not be the case for EURO 7 (2023-25), as 80 mg/km for NOx will be strictly enforced and checked in real-life conditions. For those reasons, EURO 7 will lead to more complex catalysts formulations, and overall require more usage of PGM:

Jonathan again underlined that replacement of Pd by Pt is unlikely – this would even require a re-engineering of the exhaust circuit, and catalysts makers are not seeing the Pd/Pt price ratio stay as high as it is today. Substitution of Rh by Pd is also unlikely – while the Rh is now 3 times more expensive than Pd, it is 4—6 times more effective.

Furthermore, while electric vehicles are not using any precious metals for catalysts, hybrid cars are good for PGM demand. With 90% of the Pd used by the car industry, there could be an impact on demand in a couple of years.

<table>
<thead>
<tr>
<th>Key driver</th>
<th>Detail</th>
<th>Result</th>
<th>Impact on PGM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasingly complex catalyst configurations</td>
<td>Greater number of individual catalyst bricks e.g. SCR</td>
<td>Higher loadings to generate the right mixture of gases to allow the catalysts to function under all conditions. More SCRs and filters</td>
<td></td>
</tr>
<tr>
<td>Focus on new regulated pollutants</td>
<td>Tighter control e.g. of ammonia and N2O</td>
<td>Greater use of PGM ammonia slip catalysts</td>
<td></td>
</tr>
<tr>
<td>Conformity Factors</td>
<td>Tighter NOX control in a wider range of scenarios</td>
<td>Greater use of ammonia based SCR</td>
<td></td>
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<tr>
<td>Electrically heated catalysts</td>
<td>Light-off achieved quicker allowing catalyst to perform in wider range of scenarios</td>
<td>Less PGM may be used on heated catalysts however system as a whole may have more bricks</td>
<td></td>
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</tbody>
</table>

continued on page 9
Michelle Lynch from Enabled Future discussed the impact of climate change in our industry. The level of CO2 in air is today at 415 ppm, raising by a 3-4 ppm every year – not to mention the more potent CH4 greenhouse gas emissions. Power-to-X is a technology for electricity conversion, energy storage, and reconversion pathways that utilize surplus electric power. On a smart-city level, power will be effectively transferred for example from a solar panel to a car battery. Such decentralization and power-to-X will shift the PGM demand to new technologies, and create business opportunities.

Steven R. Izatt from IBC Advanced Technologies talked about SuperLig® - MRT systems, which can overcome several bottlenecks in PGM refining processes, typically by recovering individual PGMs at low concentration from waste solutions. This can be applied for spent automotive and petrochemical catalysts, plating baths solutions.

Alexey Kornienko, Krastsvetmet, closed the meeting talking about the issue posed by non-noble metal elements – including deleterious ones. Those elements are often accumulated after many years of material inflow.
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At the forefront of the metals and minerals industry for over 135 years
Legislative and Public Affairs Conference

IPMI Leaders Converge on Washington D.C.

On October 29-30, IPMI members met in Washington D.C. for the annual Legislative & Public Affairs meeting. During the meeting, key White House and Congressional staff educated attendees on policies affecting the U.S. precious metals industry and solicited feedback from members to inform future policy decisions.

Later in the evening, the IPMI was honored to be joined by the family of Scott Smith, who sadly passed away earlier this year, to posthumously award him the 2019 Jack Gannon Industry Leader of the Year Award. Scott was a leader, known throughout the precious metals industry, whose vision, discipline, fearlessness, and compassion, led Pyromet between 1996 and 2017.

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Legislative and Public Affairs Conference Overview

**Tuesday, October 29**

**Mitch Moonier – Vice President, Miller/Wenhold Capitol Strategies; Chris Bryant – Bergeson & Campbell**

An overview of the regulatory challenges facing the precious metals industry, as well as legislation IPMI representatives are lobbying on in Washington D.C.

**Neil Meader, Metals Focus**

A discussion on the global impacts on silver demand caused by certain regulations and legislation.

**Erik Lowe – Senior Policy Analyst for Foreign Investment and Trade Policy, Department of Homeland Security**

Background on the President’s April 3rd Memorandum on Counterfeits and the intelligence DHS received throughout their investigation. At the time of Erik’s presentation, the DHS report was being delivered to President Trump.

**Eli Yokely – Political Reporter, Morning Consult**

A look into current polling data and what it says about the 2020 elections.

**David Ditch – Research Associate, The Heritage Foundation**

The Heritage Foundation recently released their annual plan for reducing government spending and saving taxpayer dollars. Attendees learned first-hand the extent of their plan and how they were going to work to achieve it.

**Sabrina Rodriguez – Reporter, POLITICO**

USMCA discussions have ebbed and flowed in recent months with many people not knowing whether or not a new NAFTA deal will get through Congress. Sabrina joined IPMI to provide intel on where things stand.

**Paul Miller – CEO, Miller-Wenhold Capitol Strategies**

This segment educated attendees on how to accomplish your legislative agenda on Capitol Hill during this period of partisan politics, elections, and the impeachment proceedings.

**Jon Gold – Vice President of Supply Chain and Customs Policy, National Retail Federation**

Prior to joining with the IPMI, the PMANA were members of the Americans For Free Trade coalition, headed by the National Retail Federation. Jon discussed recent tariff exclusions and the impact the President’s trade policy has already had on consumers.

**Amy Bos – Legislative Director, Rep. Jim Sensenbrenner (R-WI)**

Earlier this year, Congressman Sensenbrenner introduced H.R. 1933 Online Sales Simplicity and Small Business Relief Act to address the fallout of the Wayfair decision. His staff discussed his reasoning for introducing the legislation and prospects for it moving forward.

**Nicole Kaeding – National Taxpayers Union**

Nicole provided an update on how the NTU has been addressing the Wayfair decision in statehouses across the country.

**Wednesday, October 30**

**Kyle Hauptman – Economic Policy Counsel, Sen. Tom Cotton (R-AR)**

Earlier this year, Sen. Cotton introduced legislation to reform the country’s anti-money laundering regime. Kyle, who is running point on the Senator’s legislation, discussed the differences between the Senator’s bill and legislation that recently passed in the House of Representatives.

**Julia Ensor – Attorney, Federal Trade Commission**

The FTC’s rejection on recycled precious metals for Made in USA designation continues to hurt the precious metals industry. The FTC joined us to discuss their recent workshop and comment period on reviewing the standard.

**Travis Johnson – International Anti-Counterfeiting Coalition**

A discussion on counterfeits and how the IACC is addressing it on a global scale.

**John Meakem – International Trade Specialist, Department of Commerce**

Earlier this year, the Commerce Department released its report on securing a national critical minerals supply chain – including platinum group metals. John provided background into the department’s investigation, report, and plans for the future.

**Nick Allard – Senior Counsel, Dentons**

Nick capped off the meeting with an overview of previous impeachment processes against sitting Presidents and his own predictions for President Trump.
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Public Affairs Update

U.S. - Australia Critical Mineral Value Chain

The Atlantic Council hosted a talk by Australia's minister for resources and Northern Australia on the security and sustainability of critical minerals, U.S.-Australia interconnectivity across the critical mineral value chain, and diversifying and managing this value chain. You can watch the presentation online at this link: https://atlanticcouncil.org/event/building-partnerships-across-the-critical-mineral-value-chain-an-australian-perspective/

Update: Global Tailings Review Launches Public Consultation

On 15 November 2019, the Global Tailings Review launched a public consultation to collect feedback on a draft international standard for the safer management of tailings. The consultation ends on 31 December 2019.

The Global Tailings review was co-convened with the United Nations Environment Programme (UNEP) and and Principles for Responsible Investment (PRI), to develop a fit-for-purpose international standard for the safer management of tailings facilities following the catastrophic tailings dam collapse at Brumadinho, Brazil on 25 January 2019. While there is still much work to be done before the Standard can be finalised, ICMM's membership is committed to engaging in an open and transparent discussion, and providing feedback through the consultation in order to ensure the final standard is both feasible and effective in meeting our shared goal. All interested people are encouraged to do the same. The consultation is available in seven languages and can be accessed here: globaltailingsreview/consultation

The public consultation is taking place in two parts. Firstly, online via a survey, which is available in seven languages. Secondly, in-country consultations across a range of mining jurisdictions in the northern and southern hemispheres. The Global Tailings Review will provide a consultation report that reflects feedback, key themes, topics and sentiments from different stakeholder groups, as well as how that feedback was processed and addressed in the final version of the Standard, once the Standard is published in 2020. Please join us in adding your voice to the consultation.

Congress Extends Funding Deadline to December 20

On October 12th House Appropriations Chairwoman Nita Lowey (D-NY) and Senate Appropriations Chairman Richard Shelby (R-AL) announced a second continuing resolution to fund the government through December 20 - almost a month after the current funding was set to expire. According to the White House, President Trump will sign the measure, barring any last-minute surprises when it comes up for a vote during the week of November 18.


Virtual Currency Exchanges Are Not “Like Kind”, According to IRS Official

In a speech to members of the American Institute of CPAs, an IRS official said that taxpayers will not be able to claim 'like-kind' exemptions for transactions that occurred prior to 2018. The Section 1031 like-kind exchange provision allows for the deferral of paying capital gains taxes as long as taxpayers reinvest in similar property. However, changes made in 2017 by the Tax Cuts and Jobs Act restrict exchanges to real estate.


Congress Reaches a Critical Juncture for Passing the USMCA

With the impeachment hearings dominating the halls of Congress, House Democrats are working behind the scenes with United States Trade Representative Robert Lighthizer to negotiate a USMCA agreement. While progress has been made between the two parties, Democrats are still concerned with what they see as lax enforcement mechanisms for labor and trade standards. If an agreement can’t be reached before the end of the year, it may put the agreement in jeopardy due to the 2020 elections.


Trump to Make a Decision on Auto Tariffs

President Trump has until midnight on November 14 to make a decision on whether or not to impose tariffs on European auto imports. Sources say the President plans on delaying his decision for another 6 months, but legal experts are unsure whether or not Section 232 of the Trade Expansion Act will allow for the President to delay such a decision unless the Department of Commerce conducts another investigation.

Read more at https://www.reuters.com/article/us-usa-trade-autos/trump-to-make-decision-on-auto-tariffs-one-day-ahead-of-deadline-trump-says-hell-decide-on-auto-tariffs-soon-idUSKBN1XN2BK

President Trump Denies Agreement to Roll Back China Tariffs

On November 8, President Trump denied reports coming out of China claiming he has agreed to an initial plan to roll back tariffs on Chinese imports. U.S. and China negotiators have reached a “phase one” deal, although details are not yet known – including whether or not tariff removal is on the table.


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European Commission Requests Scientific Opinions on Nanoforms of Platinum and Gold

On November 22, 2019, the European Commission (EC) Directorate-General for Internal Market, Industry, Entrepreneurship, and Small- and Medium-Sized Enterprises (SME) requested two scientific opinions from the Scientific Committee on Consumer Safety (SCCS) on nanoforms of platinum and gold:

• Request for a scientific opinion on platinum (nano)-colloidal platinum (nano) (Chemical Abstracts Service (CAS) No. 7440-06-4, EC No. 231-116-1) and acetyl tetrapeptide-17 colloidal platinum (nano) (CAS and EC Nos. not available); and
• Request for a scientific opinion on gold (nano)-colloidal gold (nano) (CAS No. 7440-57-5, EC No. 231-165-9), gold thioethylamino hyaluronic acid (nano) (CAS No. 1360157-34-1, EC No. not available), and acetyl heptapeptide-9, colloidal gold (nano) (CAS and EC Nos. not available).

The request for a scientific opinion on platinum (nano)-colloidal platinum (nano) and acetyl tetrapeptide-17 colloidal platinum (nano) states that the EC received 18 notifications for cosmetic products containing platinum (10 notifications) and colloidal platinum (8 notifications) (CAS No 7440-06-4, EC No. 231-116-1) in nano form. The EC received 13 notifications for cosmetic products containing acetyl tetrapeptide-17 colloidal platinum (CAS and EC Nos. not available) in nano form. The EC states that it has concerns on the use of platinum-colloidal platinum and acetyl tetrapeptide-17 colloidal platinum in nano form because of the potential for nanoparticles to be absorbed dermally or across a mucous membrane and to enter cells.

The request for a scientific opinion on gold (nano)-colloidal gold (nano), gold thioethylamino hyaluronic acid (nano), and acetyl heptapeptide-9, colloidal gold (nano) states that the EC received 236 notifications for cosmetic products containing gold (68 notifications) and colloidal gold (168 notifications) (CAS No. 7440-57-5, EC No. 231-165-9) in nano form. The EC received 11 notifications for cosmetic products containing gold thioethylamino hyaluronic acid (CAS No. 1360157-34-1, EC No. not available) in nano form. The EC received 18 notifications for cosmetic products containing acetyl heptapeptide-9, colloidal gold (CAS and EC Nos. not available) in nano form. The EC states that it has concerns on the use of gold-colloidal gold, gold thioethylamino hyaluronic acid, and acetyl heptapeptide-9, colloidal gold in nano form because of the potential for nanoparticles to be absorbed dermally or across a mucous membrane and to enter cells.

The deadline for each opinion is six months from receipt. SCCS adopted the mandates at its October 30-31, 2019, plenary meeting.
SAC/PRC Meeting
Houston, Texas  February 10-12, 2020
Marriott Hotel at George Bush International Airport

Security and Anti Money Laundering Seminar
February 24-26, 2020
Marriott Hollywood Beach Resort
Hollywood, Florida
44th Conference Call for Papers

The IPMI 44th Conference will be held at the Green Valley Ranch in Henderson (Las Vegas) Nevada June 6-9 2020. Our Technical Program, following the format for 2020, is restructured to allow for a more scientific and informative approach and at this time we are officially submitting a Call for Papers.

• Potential Speakers Must Submit Abstract to IPMI by January 31, 2020
• Abstracts will be Vetted by the Technical Chairs and Selected Speakers Confirmed by March 1, 2020.
• Any papers that are “Marketing Oriented” will be assigned to the New Technology: What's on the Horizon session

Topics for Papers
• Sampling and Analysis
• Hedging/Finance/ Market Analysis
• Environmental/Legal/Regulations/Insurance
• New Technologies

Please submit your abstract including Title by January 31, 2020 to mail@ipmi.org
The U.S. Department of Labor recognized Gannon & Scott with a 2019 “HIRE Vets” Gold Medallion Award for its veteran hiring and retention practices over the past year. Accepting the award for the company are Laboratory Manager Dana Evans (pictured left), and George Lucas, Vice President of Sales and Business Development -- both U.S. Army veterans.

The award was presented by VETS Deputy Assistant Secretary Sam Shellenberger at the Department of Labor in Washington, D.C. Secretary of Labor Eugene Scalia presented the opening remarks, and the keynote speaker was Major General James W. Bierman Jr., U.S. Marine Corps Recruiting Commanding General.

“We are proud to support our Veterans and pleased to be the first in our industry to receive the HIRE VETS Medallion Award; especially if it raises awareness about the importance of hiring veterans,” said Gannon & Scott President and U.S. Army veteran Chris Jones.

The company serves customers across North America, processing, assaying and recovering precious metals from a range of spent material at its facilities in Phoenix, Arizona, and Cranston, Rhode Island.

Integrity, value and timely settlement are hallmarks of Gannon & Scott, which has been advancing precious metals refining and assaying for 100 years. For more information, visit Gannon & Scott (www.gannon-scott.com) or call 800.556.7296.

Accepting the HIRE Vets Gold Medallion Award for Gannon & Scott are Laboratory Manager Dana Evans (left) and George Lucas, Vice President of Sales and Business Development -- both U.S. Army veterans. The award recognizes Gannon & Scott’s efforts to recruit, employ and retain veterans. The precious metals refining company has facilities in Phoenix, Arizona, and Cranston, Rhode Island.
In Memoriam - Shashikant Choksi

What a gem of a person!

Mr. Shashikant Choksi was a pioneer and a great visionary and the founder of the precious metal industry in India in the 1950s. As the co-founder of Hindustan Platinum, he led the company to become a leading manufacturer and refiner of precious metal products and services. Through his innovative approach and blending of global and indigenous technologies, he contributed immensely to the precious metal industry.

Mr. Shashikant Choksi truly celebrated his life with passion and enthusiasm. His great sense of learning, love and teachings have been the foundation and guiding light for all. He left for heavenly abode on 23rd October 2019.
A Celebration of Life was held for Susanne Fontana on Monday, November 11, 2019 from 4:00pm to 7:00pm at BERRIES Restaurant in Miami, Florida. She passed away on October 19, 2019.

Susanne Fontana entered into international trade with the U.S. Customs Service in Miami after having served one year with the U. S. Treasury Department Office Of The Secretary in Washington, D.C. During her lengthy career with U. S. Customs she taught the first classes in Miami for Customs Brokers, which resulted in the majority of her students obtaining their Customs Broker licenses. As a senior import specialist, she was in charge of all the Miami Region importations of cargo assembled abroad with U.S. components. She was the authoress of the original 9802 (“807”) procedural guide for importers.

In 1979, she resigned from U.S. Customs to establish corporations specializing in customs brokerage, freight forwarding, consulting, drawback, and warehouse management services and support. Her corporations held a management contract to operate the 110,000 square foot public warehouse in the Miami Free Zone. She also operated the Miami Free Zone container station for Maersk, American President Lines, and Sealand; and established a bonded trucking company to dray the containers from the rail head to the Miami Free Zone container station. In 1985, she founded and operated with a partner MIA/CFS located on the Miami International Airport. MIA/CFS was to be patterned after the Forwarders' Bond in England, but it evolved into a facility for handling air consolidations and ground handling for airlines not having enough volume to establish their own terminals. MIA/CFS later expanded to include the import clearance facility for international couriers.

Susanne was a past president and chairman of the customs committee of the Florida Customs Brokers And Forwarders Association. During her terms, her efforts resulted in monthly meetings with U.S. Customs, an examination site on the Port Of Miami, lock boxes for brokers/importers, lobbying in Congress for a Food And Drug compliance officer in Miami, the first seminars regarding ABI and ABI software vendors, moving U.S. Customs from downtown to the airport, and many other important issues faced by her and her team. As a past vice president of the Florida Importers and Exporters Association, she was most instrumental in having the first Miami Chinese delegation visit and display their products during a seminar to assist trade between our countries. She was a director of the Committee For Production Sharing (National Committee For 806.30 and 807.00, Inc.) a member of the Florida Council Of International Development, and a director of FLORICA. She was also a member of the Coconut Grove Rotary Club, South Miami Elks Club, Woman's Club of Miami, Fairchild Gardens, Coconut Grove Sailing Club, Florida Customs Brokers and Freight Forwarders Association, Florida Foreign Trade Association, and International Precious Metals Institute.

In January 2003, she was honored and her name placed on a monument as a Pioneer in International Trade (“...a leader, trail blazer, and innovator...”).

She was a consultant to numerous companies and has served as a consultant to the Dade Aviation Department. She was an expert witness and has been a frequent public speaker for international trade groups and associations.
Sponsorship Opportunities

Contact
Sandra Arrants  850-476-1156

Coffee Breaks:

3 Availabilities
$3500
Includes Signage in Break Room, Logo Napkins at Break and Company name on Sponsor Banner and Conference App with Company Blurb

IPMI® NEWS

44th Annual Conference
June 6-9, 2020
Green Valley Ranch
Henderson Nevada
Graphics Opportunities

Advertising Graphics
Your image strategically placed for effective exposure and impact.

- Meter Boards
- Mirror and Floor Clings
- Cubes
- Banners
- Photo Booth
Prices Ranging $1000-$4000

Delegate Reception Sponsor

Platinum Sponsor - $3500
Gold Sponsor - $2500
Silver Sponsor - $1000

Multiple Level Sponsors Welcome

All Sponsor Levels Include
Logo Napkins, Signage at the Event,
Company Name on Sponsor Banner and Conference App with Blurb

Platinum Sponsor also includes
Specialty Drink or Dessert Station

Gold Sponsor also includes
Signature Drink with Company Name.

Silver Sponsor includes Signage,
Company blurb, Name on Sponsors' Banner and Logo Napkins.

Contact
Sandra Arrants
International Precious Metals Institute
850-476-1156 mail@ipmi.org
IPMI® NEWS

IPMI International Concert Event

Contact
Sandra Arrants
International Precious Metals Institute
850-476-1156 mail@ipmi.org

Platinum Sponsor $7500
Gold Sponsor - $5000
Silver Sponsor - $2500

Multiple Level Sponsors Welcome

All Sponsor Levels Include
Logo Napkins, Signage at the Event,
Company Name on Sponsor Banner
and Conference App with Blurb

Platinum Sponsor also includes
Specialty Drink or Dessert Station

Gold Sponsor also includes
Signature Drink with Company Name

Silver Sponsor includes Signage,
Company blurb, Name on Sponsors’
Banner and Logo Napkins.

Co-Sponsorship
Available at $7,500
Includes Signage at Event, Logo
Napkins, Signature Drink at Event
Bar, Company Name on Sponsor
Banner and Conference App with
Blurb

Sponsorship
Available at $5000
Co-Sponsorships
Available at $2,500
Includes Signage at Event,
Logo Napkins, Name on
Sponsor Banner and
Conference App with Blurb

President’s
Reception
Sponsor

Closing
Reception
Sponsor
Golf Outing

Closest to Pin $500
Longest Yard $500
Lunch $1,500

Golf Sponsors are included on Conference App with Blurb as well as on Conference Banner.

Cash Sponsorships

Cash Sponsors are Always Welcome!
Your cash donation gets your company name on the Conference Sponsor Banner and on the Conference App including a blurb about your company.

Contact
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International Precious Metals Institute
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44th Annual Conference June 6-9, 2020
Green Valley Ranch
Henderson Nevada

Get your contract!
Contact: Sandra Arrants
International Precious Metals Institute
850-476-1156 mail@ipmi.org

IPMI Exhibit Hall Booth Vendor Contracts
Background
The IPMI Foundation is the charitable, scientific and educational affiliate of the International Precious Metals Institute (IPMI). One of the foundation's primary purposes is its Student Awards Program. Each year at its Annual Meeting, the Foundation awards some $100,000 in grants, internships, and cash awards to students, professors, and student advisors from around the world.

Scholarships to research focusing on precious metals include:
- **IPMI Student Awards**
  Up to 3 IPMI-sponsored Student Awards in the amount of up to US$ 20,000 each and US$ 5,000 for one of the student advisors.
- **IPMI Corporate Student Awards**
  Several corporate-sponsored Student Awards in the amount of US$ 5,000 each sponsored by some of the most prestigious companies in the precious metals industry.

Eligibility
Students applying for an IPMI Student Award have to be enrolled in an academic training program (Masters, Ph. D., Postdoctoral research) performing fundamental or applied research focusing on any precious metal (Au, Ag, Pt, Pd, Ir, Rh or Ru), be it on the scientific side (catalysis, material, mining, refining, etc.) or on the commercial side (finance, marketing, etc.). Their expected graduation date must not be within the same year in which the award is received (e.g. an award winner of 2020 may not graduate before 2021).

Documents
The following application documents are required:
- Student CV (resume);
- Executive Summary of the research (maximum half-page), indicating the program the student is enrolled in, as well as the expected end-date of the program;
- Short research plan (maximum 2 pages) detailing research performed so far with results, as well as planned projects during the remaining time of the education program;
- Nomination/recommendation letter (maximum 1 page) from the supervising professor;

Students are welcome to add any other document they deem pertinent to their application (e.g. published papers, extended research details, academic grades, etc.).

Please submit one single pdf file containing all documents; the file name should be as follows: “student_last_name student_first_name - academic institution with country” (for example: Smith John - Columbia University USA).

Please mail the pdf application to: mail@ipmi.org

Student Award Winners
The student award winners are asked to attend IPMI's Annual Conference in Henderson, nearby Las Vegas, NV (USA) in June 2020, present their work in the Student Research Session and join all the conference professional and social events. They will have many opportunities to meet and interact with people from the precious metal industry.

Students joining the conference will be reimbursed for their travel expenses by the IPMI Foundation (economy flights, to be purchased at the lowest available rate). Conference registration (including meals) and hotel reservation will be made by the IPMI Foundation.

About IPMI
The IPMI Scientific and Educational Foundation, Inc. is the charitable, educational, and scientific affiliate of the International Precious Metals Institute, Inc. IPMI is the largest and best-known organization of producers, refiners, fabricators, scientist, users, financial institutions, merchants, private and public sector groups, and the general precious metals community. The organization seeks and promotes the efficient and environmentally sound use, reuse, and recycling of precious metals from both primary and secondary resources. The IPMI Scientific and Educational Foundation conducts educational meetings, offers courses and serves as primary resource for information for the public, industry, and government agencies worldwide. It is headquartered in the USA with several Chapters in North America and Europe.
Dear IPMI Member:

The Board of Directors has approved a new dues structure which reflects IPMI's reorganization from a purely charitable organization to the premier trade association for the precious metals industry. The "new" IPMI will focus on membership services and benefits as well as IPMI's role in international public affairs. At the same time, IPMI's original charitable mission remains in place through the IPMI Scientific and Educational Foundation. The new Dues Structure covers the activities of both facets of the IPMI.

New Premier Membership Levels

We have changed the names of the various levels of membership and have added two new higher premier membership levels - Platinum and Palladium. These new levels reflect a level of commitment supported by many of our "bedrock" member companies and come with a number of extended benefits, including extra memberships, special company recognition, and most importantly increased consideration to become a member of the Board of Directors and the Executive Committee (EXCO). The Platinum and Palladium levels also come with an incentive for companies with less than 100 employees globally. We recognize and appreciate the financial and resource commitment from companies of this size and have created special rates for these two premier levels.

Gold and Silver Membership Levels

The previous Patron and Sustaining levels are now called Gold and Silver, respectively. The Gold level includes one additional membership. (Please see the dues chart for complete details.)

Discounted Rates

All membership levels will receive the discounted member rate for all IPMI events, including seminars, the Platinum Week Dinner, and especially the Annual Meeting in June.

Implementation Process

Our new dues structure will begin January 1, 2020 and run the calendar year to December 31. For 2020, Members who have paid their 2019 dues will receive a 50% credit until April 2020 toward the new dues.

FAQs

Q1: I'm currently a Patron Member and my company has less than 100 employees. I want to be at the highest level of membership. How would this work?

Answer: You would become a Platinum Member of IPMI. Because you have less than 100 employees, you would be assessed 2020 dues in the amount of $4,750. This is calculated at $6,000 less a one-time credit of $1,250.

Q2: I'm currently a Sustaining Member and would like to upgrade to Gold. How would this work?

Answer: You would be assessed 2020 dues of $2,000. This is calculated at $2,500 less a one-time credit of $500.

Q3: I am an Individual Member and paid my dues in July 2019. When do I have to pay the new dues to take advantage of the discounted member rates for events, especially the annual meeting?

Answer: You will need to pay the new dues by April 1, 2020 to qualify for the discounted rates. Please note we are granting an exception this year only and members who are current with their dues will be allowed to get the discounted member rate for IPMI events taking place in February and March. In your case, your 2020 Individual dues assessment will be $150 ($200-$50).

Q4: I am an Individual Member and haven't decided yet if I want to renew my membership, but I know I will be attending the Annual Conference in June 2020. Will I still receive the IPMI news and be on the distribution list for various announcements? What will my 2020 dues cost?

Answer: We, of course, want you to remain as an IPMI member, attend our Annual Conference at a discounted rate, and receive all the benefits of membership. As you have paid your current dues, we will keep you as an active member through April 2020 and you will continue to receive our various announcements and have access to the Members section of the website. Your event discounts will be valid for events up through March 31st. To receive the discounted rate for events after April 1, 2020 including the Annual Conference, you would have to have paid your 2020 dues prior to registration. Assuming you do this after April 1, 2020 your new dues assessment would be $200.

I would be happy to answer any further questions. Thanks for your continued support of IPMI.

Larry Drummond, Executive Director

continued on page 27
## IPMI Dues Categories
(Effective January 2020)

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>DUES</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLATINUM</strong></td>
<td>$7,500 / $6,000*</td>
<td>• Preferential consideration for nomination to the Board/EXCO</td>
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<tr>
<td></td>
<td></td>
<td>• Special reception at Annual Meeting</td>
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<td></td>
<td></td>
<td>• Special recognition banner at Annual Meeting and on IPMI website</td>
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<tr>
<td></td>
<td></td>
<td>• 1 Designated Representative Plus 6 additional memberships</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• IPMI Annual Conference, Seminars and Symposiums Registration Fee Discounts</td>
</tr>
<tr>
<td><strong>PALLADIUM</strong></td>
<td>$5,000 / $4,000*</td>
<td>• Consideration for nomination to the Board/EXCO</td>
</tr>
<tr>
<td><em>Rates designated for companies with less than 100 employees globally</em></td>
<td></td>
<td>• Special recognition banner at Annual Meeting and on IPMI website</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 1 Designated Representative Plus 4 additional memberships</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• IPMI Annual Conference, Seminars and Symposiums Registration Fee Discounts</td>
</tr>
<tr>
<td><strong>GOLD</strong></td>
<td>$2,500</td>
<td>• Special recognition banner at Annual Meeting and on IPMI website</td>
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<tr>
<td></td>
<td></td>
<td>• 1 Designated Representative Plus 2 additional memberships</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• IPMI Annual Conference, Seminars and Symposiums Registration Fee Discounts</td>
</tr>
<tr>
<td><strong>SILVER</strong></td>
<td>$1,000</td>
<td>• Special recognition banner at Annual Meeting and on IPMI website</td>
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<tr>
<td></td>
<td></td>
<td>• 1 Designated Representative Plus 1 additional membership</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• IPMI Annual Conference, Seminars and Symposiums Registration Fee Discounts</td>
</tr>
<tr>
<td><strong>INDIVIDUALS &amp; GOVERNMENTS</strong></td>
<td>$200</td>
<td>• IPMI Annual Conference, Seminars and Symposiums Registration Fee Discounts</td>
</tr>
<tr>
<td><strong>ASSOCIATE</strong></td>
<td>$100</td>
<td>• For employees of Platinum, Palladium, and Gold member companies attending the Annual Meeting (non-voting)</td>
</tr>
<tr>
<td><strong>STUDENT</strong></td>
<td>No Dues First Year $25/Yr Thereafter</td>
<td>• Non-Voting</td>
</tr>
<tr>
<td><strong>HONORARY</strong></td>
<td>No Dues</td>
<td>• Non-Voting (except Emeritus)</td>
</tr>
</tbody>
</table>
New Venue for 2020 Platinum Dinner

The 8th Annual IPMI Platinum Dinner will be held on September 17th, 2020, but it will not be taking place at the New York Palace Hotel as in the past. The venue has changed to the Grand Hyatt New York.

Please make a note of this and we hope to see you there!

Where Are They Now?

Tracie McGinnity, a 2010 Student Award Winner writes “I am now a Postdoctoral Research Fellow at the University of Illinois at Chicago (UIC) in the Department of Pharmacology continuing research in nanomedicine.”

IPMI® Calendar

<table>
<thead>
<tr>
<th>2020</th>
<th>Feb 10-12</th>
<th>PRC / SAC Meeting • Houston, TX</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Feb 24-26</td>
<td>Security Council Anti Money Laundering Meeting • Hollywood, FL</td>
</tr>
<tr>
<td></td>
<td>June 6-9</td>
<td>44th Annual Conference • Green Valley Ranch • Las Vegas, Nevada</td>
</tr>
</tbody>
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To register attendance to IPMI events or add to your personal calendar, click on the following:

https://www.ipmi.org/events/event_list.asp