

**connecting** you to the world of precious metals™

# Precious Metals News

Volume 46, Number 10

2022

### **IPMI** Announces New Committees

# Sustainability ESG Women of IPMI

For over 46 years the IPMI has served as a pillar of industry integrity with respect for our people and planet. Both committees are open to all members. We strongly encourage you to get involved.

#### **Sustainability ESG Committee "SESG"**

The SESG will serve as an inclusive and collaborative forum on these topics in the precious metals industry. Sam Sabin and James Gavilan will serve as SESG Committee Co-Chairs. Prior to the formation of the committee Sam and Jimmy worked with 25+ fellow industry stakeholders to develop the strategy and key areas of focus of the SESG. Our goal is to have a minimum of 2 sessions per year at IPMI events and provide periodic key updates in the IPMI Newsletter.

#### **Examples of possible topics include:**

- Sustainability Planning
- Sustainability Assessments & Frameworks
- Sustainable Financing
- ESG Metrics & Reporting
- ESG Regulations & Standards

With respect to events, the SESG Committee will have a presence during the Winter Meetings, at the Hyatt Grand Cypress Resort in Orlando, Florida on PGM day, which is Wednesday March 1st, offering an "Intro to Sustainability," a 101-style working seminar bringing in basic terms and foundational strategy to members that may not be as familiar with the market and taxonomy. In addition, there will be a second session highlighting the link between ESG & Compliance.

SESG will also have a session at the Annual Conference in June at The Phoenician Resort in Scottsdale, Arizona. We look forward to collaborating with all members who can assist in bringing in relevant content, speakers, issues or themes. Please contact Sam or Jimmy at sam@sabinmetal.com or jgavilan@gavilanc.com if you have ideas for the June session.

#### **Women of IPMI Committee**

The Women of IPMI will serve as an inclusive and collaborative forum in the precious metals industry. Lynn Davis will serve as Committee Chair. Prior to the formation of the committee Lynn worked with 12 fellow industry stakeholders, including the Women of PGM, to develop the strategy and key areas of focus of the Women of IPMI. Our goal is to have a minimum of 2 sessions per year at IPMI events and provide periodic key updates in the IPMI Newsletter.

#### **Examples of key focus areas include:**

- Mentor/Mentorship Program
- Growth and Recognition welcoming new women to the industry and celebrating accomplishments
- Inspiring and Empowering women to transcend traditional boundaries

With respect to events, the Women of IPMI Committee will have a presence during the Winter Meetings, at the Hyatt Grand Cypress Resort in Orlando, Florida on SECAM day, which is Tuesday, February 28th. There will be presentations featuring the key focus areas and accomplishments from several IPMI member companies. This will be followed by an open panel discussion on next steps for the committee.

The committee will also have a session at the Annual Conference in June at The Phoenician Resort in Scottsdale, Arizona. We look forward to collaborating with all members who can assist in bringing in relevant content, speakers, issues or themes. Please contact Lynn at Idavis@fidelitrade. com if you have ideas for the June session.





Legislative and Public Affairs Conference

REGISTER NOW!

When: Tuesday, February 7, 2023

Where: Army Navy Club

Washington, District of Columbia

**United States** 

**Contact: Sandra Arrants** 

mail@ipmi.org

850-476-1156

Online registration is available until: 2/7/2023

Thanks to the following Sponsor:

FIDELI TRADE INCORPORATED

# 2023 WINTER MEETING

FEBRUARY 28-MARCH 2

Hyatt Regency Grand Cypress Resort Orlando, Florida

Tuesday, February 28th Security and Anti Money Laundering Day (SECAM)

Wednesday, March 1st PGM Refining Day (PGMRC)

Thursday, March 2nd Sampling and Analytical Day (SAC)



### Early Registration is Now Open

Register Early and Save!

Please choose your reservation type below:

 Duration
 For Members
 Non-Members

 1 Day
 \$475
 \$575

 2 Days
 \$750
 \$850

 3 Days
 \$875
 \$975



Reserve Your Room at the Hotel

Our IPMI Room Rate is \$265. Please book your room early, as space will be limited.

The Room Block close date is February 3rd.

































### Successful SAC Symposium

# IPMI Sampling, Assay, Mining and Refining Symposium was held at Colorado School of Mines in Golden, Colorado Oct 16-18

The event started with a Meet and Greet on Sunday evening hosted by Bureau Veritas at the historic Table Mountain Inn. Nearly 70 attendees attended the two day sessions on topics such as: Spent Catalyst Processing, Design Experimentation Software, Sampling Dental Materials, and Metallurgical Accounting as well as a keynote presentation from renowned speaker Francis Pitard who addressed

Sampling Theory and Applications. The Symposium included a dinner at the scenic Fossil Trace Country Club, A tour of the Colorado School of Mines Research Lab and Geology Museum and an excursion to a mine in Idaho Springs. IPMI thanks the organizers, Algis Naujokas and Zac Henneman as well as the sponsors, speakers and attendees. The 2023 Symposium is being planned again in Golden.



# IPMI Announces Premier Award Recipients for 2023



**Dr. Gaetano Cavalieri of CIBJO** *IPMI Jun-ichiro Tanaka Distinguished Achievement Award* 

The IPMI Jun-ichiro Tanaka Distinguished Achievement Award Recipient is Dr. Gaetano Cavalieri of CIBJO for his widely recognized role as one of the most prominent leaders in the international Jewellery industry which includes more than 20 years as president of the CIBJO. The Jun-ichiro Tanaka Distinguished Achievement Award which is sponsored by the Tanaka Memorial Foundation, recognizes important career contributions to the advancement of the precious emtals industry, be it technical, economic or management.



Professor Charles Sykes of Tufts University IPMI BASF Henry J Albert Award

The IPMI BASF Henry J Albert Award Recipient is Professor Charles Sykes of Tufts University for his pioneer work in the development of Single Atom Alloy (SSA) catalysts that utilize precious metals at the ultimate limit of atom efficiency, a concept which is expected to lead to significant catalytic improvement in industrial existing processes. The IPMI BASF Henry J Albert Award recognizes and encourages outstanding theoretical and experimental contributions to the science and technology of precious metals.



Professor Franziska Schoenebeck of RWTH Aachen University

IPMI BRM Services Carol Tyler Award

The IPMI BRM Services Carol Tyler Award Recipient is Professor Franziska Schoenebeck of RWTH Aachen University for her creative theoretical and experimental work in the area of precious metal catalysis providing meaningful solutions to organic transformation. The IPMI BRM Services 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.

### **IPMI Internship Program**

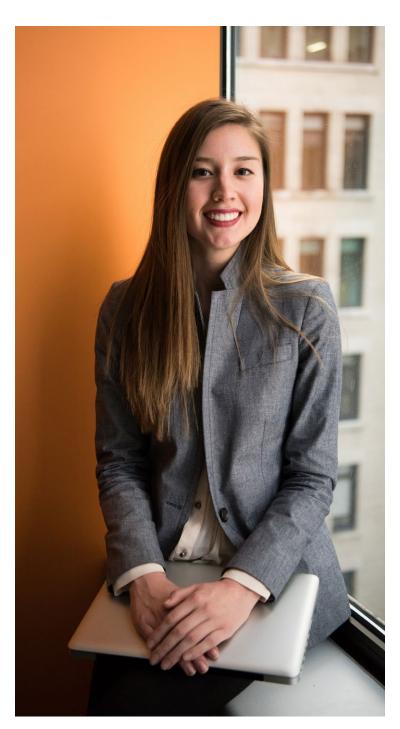
#### Sponsored by FideliTrade

As you know our Foundation has an extensive awards program for PhD level students. We also want to bring to your attention that we also have an internship program for undergraduates with a focus on Chemical Engineers and Chemists, but open to all educational disciplines.

Our program process is up to two of our member companies per year can apply for participation in our program. We assist them in the recruiting but the final decision as to who they hire is up to them. The students selected will receive a \$5000 internship award from our Foundation's Endowment—sponsored by FideliTrade Inc.—at the end of completing their assignment. The hiring company is responsible for paying the student. Obviously the biggest potential benefit is getting hired upon graduation. We are generally looking for those in their Junior year so the company can possibly have 2 different assignments with the student. However, Seniors and Sophomores can also be included as well.

There is another perk in that the student will also be invited to our Annual Conference which is typically attended by 500+ industry professionals from every aspect of the precious metals industry. They will join the 7-8 other PhD student award winners who are present at the conference. They will also present a paper at the conference describing their work.

There is complimentary registration and hotel accommodations provided by IPMI. The hiring company reimburses the student for their travel cost. This is a relatively new program and was typically a summer internship. However, some of our member companies are open to a longer assignment such as can be obtained through working with a Co-Op program where students attend school for 6 months and then work for 6 months.



If you are interested in applying to host a student intern for this year's program please contact Larry Drummond at ljd@ipmi.org



### Remembering Joachim Prior

IPMI sadly learned that former IPMI member Joachim Prior passed away in September.

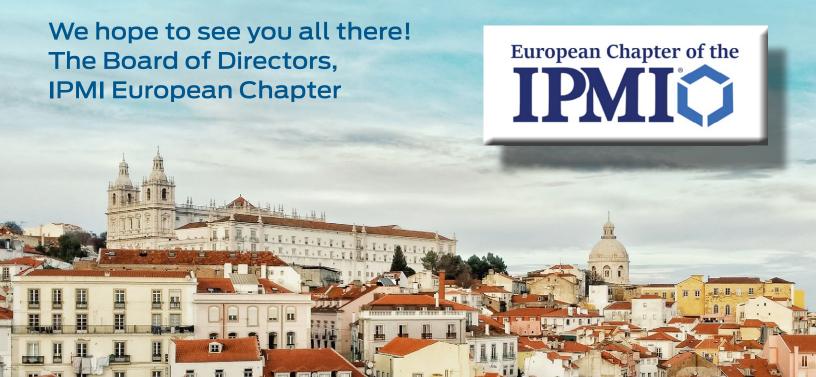
Joachim and his father, Adalbert Prior, of Prior Engineering were long time supporters and familiar faces at IPMI Conferences.

IPMI sends its condolences to Joachim's family.

# The IPMI European Chapter 6th Annual Seminar 13-15th November

The IPMI European Chapter 6th Annual Seminar will be taking place in Lisbon Portugal this year, from the 13-15th November.

The theme of the conference: "Future of precious metal's in industrial applications post pandemic and also under the influence of continued geopolitical uncertainty and a potential global recession"



### TANAKA Memorial Foundation Offer Precious Metals Research Grants up to ¥5 Million

Applications for research projects are open from September 1 to November 30 for research and development themes related to the use of precious metals in new technologies

The TANAKA Memorial Foundation will take applications for research themes for FY2022 Precious Metals Research Grants between September 1 (Thu) and November 30 (Wed). Applications will be accepted from Japanese educational institutions and public research institutes conducting research and development using precious metals. In this 24th year of the research grant, recipients will receive 5 million yen for the Platinum Award, 2 million yen for the Gold Award, 1 million yen for the Silver Award, 1 million yen for the Young Researcher Award, and 300,000 yen for the Encouragement Award.

Applications for the Precious Metals Research Grants are open to themes in all fields related to new technology and research and development in which precious metals can make a contribution. Applications can be submitted using the application form on the TANAKA Memorial Foundation website (https://tanaka-foundation.or.jp), and, after strict examination, award recipients will be announced at the end of March 2023.

The TANAKA Memorial Foundation aims to contribute to the development and cultivation of new fields for precious metals and to the development of science, technology, and the social economy by conducting activities that enable more people to experience a prosperous society. This program is being implemented to help support the various challenges faced in the "new world opened up by precious metals." Last year, the research on "Enhancing development of model-based design and production technologies for electronic parts containing precious metals" won a Gold Award for being able to significantly contribute toward the development of processing technologies and improvement of performance through the development of model-based designs using numerical analysis methods - represented by methods such as the finite element method - to minimize cost and takt time related to product design, prototyping, and process design. Another Gold Award was presented for research and development on "Formation of backside power delivery network using precious metal wires" related to the formation of precious metal wires, which is an element technology for three-dimensional mounting that is gaining attention as an integration technology for advanced logic devices.



The Young Researcher Awards are for researchers under the age of 37 as of April 1, 2022. Application Period: 9am, September 1, 2022 (Thu) - 5pm, November 30, 2022 (Wed)

### Overview of the 2022 Precious Metals Research Grants

#### Theme:

- Themes that involve any of the following: new technologies to which precious metals can make a contribution, research related to precious metals that will bring innovative evolution to products, or research and development of new products using precious metals

#### **Grant Amounts:**

- Platinum Award: 5 million yen (1 award)
- Gold Award: 2 million yen (1 award)
- Silver Awards: 1 million yen (4 awards)
- Young Researcher Awards: 1 million yen (2 awards)
- Encouragement Award: 300,000 yen (several awards)
- \* The grant amount is treated as a scholarship donation.
- \* Awards may not be granted in some cases.
- \* The number of awards is subject to change.

#### **Eligible Candidates:**

- Personnel who belong to (or work for) educational institutions in Japan (universities, graduate schools, or technical colleges) or public and related research institutions may participate.





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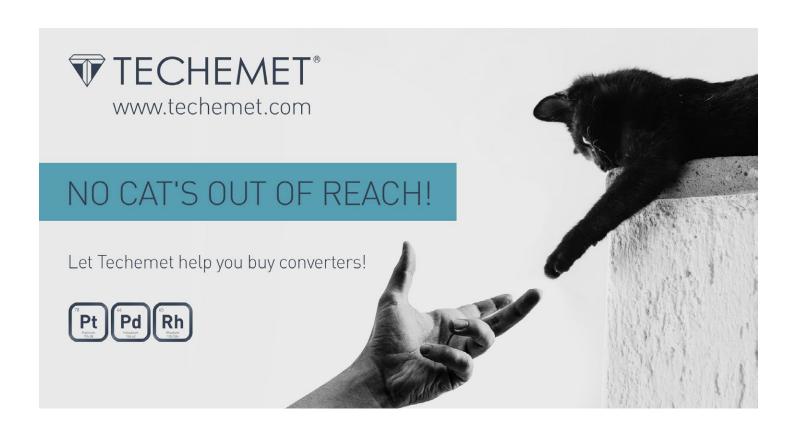


# **IPMI 47th Annual Conference**

Phoenician Hotel - Scottsdale, Arizona

June 10-13, 2023 Mark Your Calendars Now







#### **Precious Metals Market News**

#### Gold

#### LBMA Delegates Predict Gold Price Will Rise to \$1,830.50 in a Year

- Delegates from around the world meeting at the London Bullion Market Association's annual precious metals conference in Lisbon predicted that gold prices would rise to 1,830.50/toz in a year's time, up from around \$1,650 on Tuesday.
- They forecast that silver prices would rise to \$28.30 in a year from around \$18.70 on Tuesday, platinum would rise to \$1,238.70 from around \$915 and palladium would edge up to \$2,058.80 from around \$2,020.

https://money.usnews.com/investing/news/articles/2022-10-18/lbma-delegates-predict-gold-price-will-rise-to-1-830-50-in-a-year

#### U.S. Chip Sanctions 'Put Temporary Checkmate on China'

- Biden Administration's escalation of the chip war with China is expected to at once hamper China's foundry industry and cost multinational chipmakers billions of dollars in lost sales.
- "The sanctions put a temporary checkmate on China developing their foundry industry at more advanced nodes," he said. "The main solution or response from China is in building their own equipment ecosystem, which will require mastering decades of Western R&D, particularly in areas such as material science and lithography. This will be a long and challenging road—but this has always been the main solution, and the restrictions do not change that."

https://www.eetimes.com/u-s-chip-sanctions-put-temporary-checkmate-on-china/

#### Silver

#### Global installed (Solar) PV capacity could hit 260 GW in 2022

- The International Energy Agency Photovoltaic Power Systems Programme (IEA PVPS) estimates that 173.5 GW of new solar capacity was installed in 2021, and that figure might rise to 260 GW in 2022.
- "The markets reached incredible numbers last year, but they will probably be even higher this year,"
   Gaëtan Masson, co-author of the report and co-chair at the European Solar Manufacturing Council, told
   pv magazine. "Without trade disruptions as we've seen in the last two years, my bet is that the market
   will reach 260GW." "Looking at production numbers, we had 153GW of wafers produced YTD, so it is
   not totally impossible to see a market of around 250GW to 260GW," he added.

https://www.pv-magazine.com/2022/10/19/global-installed-pv-capacity-could-hit-260-gw-in-2022/

#### Kodak is Hiring Film Technicians: 'We Cannot Keep Up with Demand'

"Our film finishing area for example we have grown from five days a week, single shift operation a few
years back. To last year, we were three shifts, five days a week and now we are a 24/7 operation. In
the last 18 months, we've hired over 300 people across the film and chemicals floor, and we're looking
to hire more."

https://petapixel.com/2022/10/12/we-cannot-keep-up-with-demand-kodak-are-hiring-film-technicians/

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#### Platinum Group Metals

- A catalyst alloying platinum with a rare earth element could slash fuel cell costs
  - The technique involves only two simple steps. First, the researchers obtained readily available lanthanum salts and trimesic acid, and these two precursor materials then self-assembled themselves into nano-scale "rods." These nanorods were then impregnated with platinum at 900°C. This very high temperature is necessary to ensure a smooth process of alloying the two metals.
  - The resultant platinum-lanthanum nanoparticles were then stress-tested for their performance in a fuel cell. The alloy
    electrocatalyst surpassed the researchers' expectations, delivering superior stability and activity even after 30,000
    fuel-cell cycles.
  - https://phys.org/news/2022-10-catalyst-alloying-platinum-rare-earth.html
  - Intermetallic palladium-zinc alloy: A corrosion-resistant, highly active electrocatalyst
  - Palladium is attracting attention as a fuel cell electrocatalyst, which requires metals with high electrocatalytic activity.
     Corrosion resistance is important for potential electrocatalyst materials because catalytic reactions use extremely corrosive alkaline aqueous solutions that degrade metal electrocatalysts and lower their efficiency over time.
  - The crystal structure of the intermetallic i-PdZn alloy allows Zn to be retained at the core, surrounded by a protective shell of Pd atoms. This gives the i-PdZn better corrosion resistance when immersed in highly alkaline solutions, unlike the substitutional alloy s-PdZn, where random replacement of Pd atoms by Zn in the crystal structure allows the Zn to leach out quickly.

https://phys.org/news/2022-10-intermetallic-palladium-zinc-alloy-corrosion-resistant-highly.html

continued on page 16



Precious Metals Market News, continued from page 15

#### **Precious Metals Recycle**

- UAE-based SAM Precious Metals to set up 13 refineries globally
  - Dubai SAM Precious Metals, a UAE-based refiner, is planning to set up around 13 refineries around the globe, at a time the market is projected to grow at a CAGR of 8.1%, earning revenues of around \$415.3 billion by the end of 2028.

https://www.zawya.com/en/business/manufacturing/uae-based-sam-precious-metals-to-set-up-13-refineries-globally-um7tesxj

- Pollution issues threaten Glencore smelter in Canada E-Scrap News
- The top government official in Quebec suggested public concerns over air pollution could lead the province to close Glencore's Horne smelting site, a key downstream for North America's e-scrap.
- Meanwhile, as regulators consider renewing the smelter's air quality permit, Glencore has pledged to invest over 500 million Canadian dollars (~\$364 million U.S.) to reduce air pollution from the smelter. Located in Rouyn-Noranda, Quebec, the century-old smelter takes in e-scrap and other scrap materials and produces intermediate copper and precious metals products.
- Closure of the smelter, which produces 210,000 metric tons of copper and precious metals annually, would have serious implications for downstream e-scrap flows in North America.

https://resource-recycling.com/e-scrap/2022/10/12/pollution-issues-threaten-glencore-smelter-in-canada/

Please see our IPMI.org website IPMI & Industry News for a complete listing of news articles relative to the world of precious metals.



### IPMI® Calendar

To register attendance to IPMI events or add to your personal calendar, click on the following: https://www.ipmi.org/events/event\_list.asp

2022

Nov 13-15 .....Europe Chapter Seminar • Lisbon, Portugal

2023

Feb 7-8 .....IPMI Legislative and Public Affairs Conf. • Army-Navy Club • Washington, DC

Feb 28-Mar 2...IPMI Winter Meeting • Hyatt Grand Cypress Resort • Orlando, FL

March .....IPMI N.E. Chapter Winter Meeting • Warwick, RI

April.....IPMI New York Metro Chapter Spring Meeting • New York, NY

May.....New England Chapter Jewlery Awards • TBD

May.....IPMI European Chapter Wine Tasting Social • London, UK

June 10-13 .....IPMI 47th Conference • Phoenician Resort • Scottsdale, AZ

Sep 13 .....IPMI New York Metro Chapter Fall Event • New York, NY

Sep 14 .....IPMI 10th Annual Platinum Dinner • International Barclay • New York, NY

Fall 2023.....IPMI EHS Seminar • TBD

Oct 2023 .....IPMI SAC Symposium III • Colorado School of Mines • Golden, CO

Oct 2023 .....IPMI New England Chapter Fall Networking Dinner • Warwick, RI

Nov 2023 .....IPMI European Chapter Seminar • TBD