

Precious **Metals News**

Volume 44. Number 10

October 2020

In partnership with:

KITCO MEDIA



A VIRTUAL EXPERIENCE

November 16-17, 2020

First session starts 9 AM EST

IPMI 44th Annual Conference Agenda and Preview of Virtual Experience

As some of you may already know, the IPMI's 44th Annual Conference is going to be a virtual event this year. It's a first for us, and as we continue to finalize details of the virtual space, we can say it is going to be a uniquely valuable networking and knowledge sharing opportunity for our global members.

This year's conference will feature technical sessions and live chats with presenters, a virtual exhibit hall, a range of new technology booths, and plenty of private networking opportunities.

Today we would like to share with you the details of our agenda, plus give a sneak peek of what the virtual conference environment will look like.

By moving our conference to a virtual platform, we feel we are living up to our mandate of keeping our members from across the globe connected. We look forward to seeing you at our 44th Annual Conference on Nov 16-17, 2020.

Virtual Conference, continued from page 1

Event Agenda

Monday, November 16th

SESSION A 9:00AM - 10:30AM

WORLD OF PRECIOUS METALS FINANCE - PGMS

(MODERATOR: STEVE SCACALOSSI)

Jonathan Butler Twin Peaks: Palladium and Rhodium -

Prices, Autocatalyst Demand and Recycling

Wilma Swarts What it takes to be The Comeback Kid?

Matt Watson Ruthenium & Iridium - Critical to Chemical

Production, Electronics & Clean Energy

Panel Discussion

SESSION C 12:30PM - 2:00PM

WORLD OF PRECIOUS METALS FINANCE -

RISK MANAGEMENT/ FINANCING YOUR BUSINESS

(MODERATOR: STEVE SCACALOSSI)

James Gavilan A Review of the Current Bullion Financing Landscape

and Liquidity Risks on the Horizon

Wade Brennan Building A Solid Precious Metal Financing Foundation for

Your Business with Metal Leasing and Alternative

Structures

Ami Kasser Funding Your Precious Metals Business

Panel Discussion

SESSION B 10:45AM - 12:15PM

WORLD OF PRECIOUS METALS FINANCE - GOLD & SILVER

(MODERATOR: STEVE SCACALOSSI)

Jim Steel PM Outlook With A Focus on Gold & Silver

Neil Meader How Governments and Legislation Can Impact

Silver's Supply/Demand

France Capon Update on Silver Regulatory Pressure in the EU

Panel Discussion

SESSION D 2:15PM - 3:45PM

MINING

(MODERATOR: CORBY ANDERSON)

Kerry McQuaid Using the Bazin Method for Determination of Gold

Recovery as Described by Particle Size and

Composition

Diego Medina A Review of the Treatment of Copper Bearing Silver

Gold Ores and Concentrates

Calen Anderson Nevada Gold Mining

Panel Discussion

Tuesday, November 17th

SESSION E 9:00AM - 10:30AM

HOW HAS COVID CHANGED THE CORPORATE LANDSCAPE? (MODERATOR: BRAD COOK)

Covering: Pandemic Preparedness

.....

Well-being of our Employees

Business Continuity

Panel Discussion - Panelists Brad Cook, Chris Jones, Larry Bodden,

Chris Bone, Elba Lizardi and Mark Caffarey

SESSION G 12:30PM - 2:00PM

SAMPLING & ANALYTICS COUNCIL SESSION 1

(MODERATOR BY: ALGIS NAUJOKAS)

Algis Naujokas Intro to SAC, Round Robins, 2021and Beyond

Josh Husvar Considerations for Field Sampling of Heterogenous

Materials

Francis Picard Sampling Theory

Panel Discussion

SESSION F 10:45AM - 12:15PM

AML, CORPORATE GOVERNANCE & RESPONSIBLE SOURCING (MODERATOR: MONICA MELLAS)

Tiffany Stevens AML Compliance Outside Banking,

the Jewelry Supply Chain Experience

Ruth Crowell LBMA Market Update & Digital Gold

Frank Paucod An LBMA Auditor's Perspective on Responsible

Sourcing

Pamela Fierst-Walsh U.S. Policy on Responsible Minerals Sourcing

Panel Discussion

SESSION H 2:15PM - 3:45PM

SAMPLING & ANALYTICS COUNCIL SESSION 2

(MODERATOR: ALGIS NAUJOKAS)

Corby Anderson Fundamentals of Fire Assaying

Chris Jeremiah An Overview of Methods used for the Analysis of

Recycled Automotive Catalysts

Cody Burke TBD

Simha Signa Optimizing Precious Metals Analysis on ICP-OES and

ICP-MS

Scott Fess XRF Analysis for Beginners in Automotive Catalyst

Analysis

Panel Discussion continued on page 3

Virtual Conference, continued from page 2



Registration:

Non-Sponsor and Individual Registration Rates

IPMI Members \$225

Non IPMI Members \$325

REGISTER NOW!



connecting you to the world of precious metals more than ever...

connecting makes a world of difference

continued on page 4



Virtual Conference, continued from page 3



The Virtual Environment Sneak Peek

The Lobby

From the lobby, attendees will be able to visit the exhibit hall, attend presentations in the auditorium, network in the lounge, or visit the info and resource center for answers to any questions, technical or otherwise.

The lobby is also an excellent venue for promoting your company. Some of the banner spaces in our lobby are still open. If your organization would like to reserve a space, we urge you to contact Sandra at mail@ipmi.org or call 850-476-1156.



The Auditorium

The presentations will be easily accessible from a virtual auditorium.



Virtual Conference, continued from page 4

The Exhibit Hall*

In the exhibit hall, attendees can browse booths from a host of leading industry companies, chat with booth reps in real-time, view presentations, and even hop into direct private meetings. The exhibit hall is where some of the most valuable networking opportunities will take place.

The exhibit hall is also an excellent venue for promoting your company. There are still some booth availabilities. If you are interested, we urge you to contact Sandra at **mail@ipmi.org** or call **850-476-1156** as soon as possible.



*Please note that this rendering is an example for visualization purposes only.

continued on page 6



Full Range Of Recycling And Metal Trading

Recycling catalytic converters for the recovery of Platinum, Palladium, Rhodium



Virtual Conference, continued from page 5

Become a SPONSOR or EXHIBITOR

Becoming a sponsor or exhibitor at IPMI's 44th Annual Conference affords your organization the chance to:

- Secure unique promotional opportunities across the virtual conference space
- Operate a branded virtual booth
- Great alternative to canceled industry events
- Acquire new international contacts. Maintain and strengthen existing relations
- Two live event days, accessible for one month on demand
- Brand exposure in IPMI's pre-conference marketing campaigns and promotional materials

UNIQUE PROMOTIONAL OPPORTUNITIES

By becoming a sponsor, you are putting your company in the best possible position to make maximum impact at this year's conference. In addition to promoting your organization, you are also showing support for the work done at IPMI. We urge member companies that value what we bring to the precious metals industry to support us by becoming a sponsor. Any level of support is invaluable and is much appreciated.

Sponsors will have their company logo shared on the virtual conference landing page (as shown on page 4).

Guardian sponsors go one step further; they will have their logo shared in, all marketing communications about the conference, including the landing page and email promotion from IPMI.

In addition to these promotional perks, the Benefactor and Patron sponsors secure ideal placement for their company within the virtual environment. Benefactors and Patrons can place clickable logos in banners in the lobby that lead visitors either to their booth in the virtual exhibit hall or to their company website. Contact Sandra at mail@ipmi.org or call 850-476-1156 as soon as possible.

SPONSORSHIP PACKAGES

Benefactor \$7,500

- Complimentary Trade Show/New Technology Virtual Booth (a \$750 benefit)
- 20 Attendees (a \$4,500 benefit)
- Featured in IPMI video
- · Company logo with link on conference main page
- Special recognition at next June's conference for those who go above and beyond

Patron \$5,000

- Complimentary Trade Show/New Technology Virtual Booth (a \$750 benefit)
- 10 Attendees (a \$2,250 benefit)
- Featured in IPMI video
- · Company logo with link on conference main page

Guardian \$2,500

- 5 Attendees (a \$1,125 benefit)
- Company name listed as conference sponsor

Donor \$500

- One complimentary Attendee (a \$225 benefit)
- Company name listed as conference sponsor

Partner \$1,000

- Up to 2 Attendees (a \$450 benefit)
- Company name listed as conference sponsor

Supporter \$100

 Company name listed as conference sponsor (Does not include registration)

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Virtual Conference, continued from page 6

The Virtual Trade Show

Virtual Trade Show or New Technology Booths Prices start at \$750

VIRTUAL BOOTHS: A UNIQUE BRANDING OPPORTUNITY

WHY GET A BOOTH?

- Support of virtual sales, marketing and business development activities
- Global event, international promotion
- · Time saving and cost effective



FOR SERVICE PROVIDERS

A booth is a vital networking hub for your company.
 Aside from its promotional value, it is also the most
 effective way in a virtual conference to set up private meetings.

FOR TECHNOLOGY PROVIDERS

Technology providers from across the precious metals supply chain can promote their brand with informative thought leadership promotion, whether video or text-based.



FOR EVERYONE ELSE



No matter the size or sector of your organization, a virtual booth enables you to:

- Audio and video interaction
- Real-time business development and meetings all from the comfort of your home
- · Precise visitors data
- Schedule 1:1 meetings with attendees
- Chat in real-time with visitors
- Include videos, descriptions, white papers, presentations, sales sheets, and other marketing collateral of your choice
- Link strategic landing pages to logos in your booth
- Save on operating cost (no shipping displays and equipment costs, no travel).
- Track performance better than in-person conferences through detailed post-event reporting
- Have videos play on your booth display
- Have your company representatives interact live with the attendees via chat
- Choose from 30 + booth layouts
- Get assistance from IPMI on booth best practices and setup
- Host a booth for two live days and up to 30 days post-conference

30+ Booth Layouts to choose from







Virtual Conference, continued from page 7

Virtual Booth - What your booth could look like*

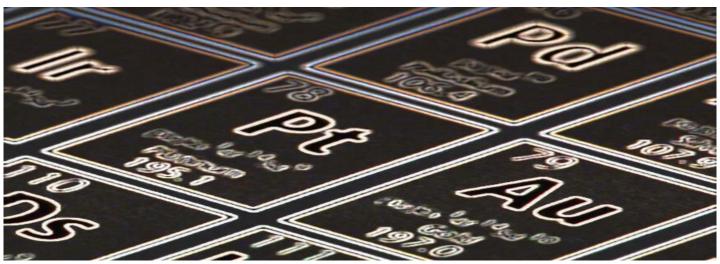


*Please note that this rendering is an example for visualization purposes only.

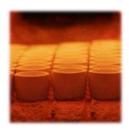
To reserve your Sponsorship and / or Virtual Booth: Contact Sandra Arrants at mail@ipmi.org or call 850-476-1156 for details.



Alex Stewart International



Alex Stewart International provides independent, ISO accredited analytical and inspection services to the global precious metals industry:



✓ Analytical services: We analyse all precious metal bearing materials, including Bullion, Dore, Concentrates, Scrap, PGMs, Catalysts, Sweeps and Slimes/Sludges/Residues.



✓ Inspection services: We attend at precious metal refineries and processing facilities for the inspection/supervision of weighing, melting and sampling operations. Alex Stewart International is an approved/accredited supervisor for LBMA, LPPM and DMCC Good Delivery refinery monitoring.



Bullion vault audits & inventory checks: We provide bar auditing and inventory services at bullion vaults worldwide.

Your Global Network of Inspection & Analytical Services Alex Stewart International

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PREMIER MEMBER PROFILE

Heraeus Sustainable Precious Metals Management is the Key to Success

Precious metals are very rare, and thus also very valuable. More than 90 percent of what people consume or use either contains platinum group metals in some form or comes into contact with them during the production process. Even though the amounts of precious metals contained in any kind of application are often very small, it becomes clear that they play an essential role in our everyday lives. Modern cars would not run without precious metals, computers would not work, there would be no flat screen televisions, and major portions of the chemical, glass or oil industry would not exist.

Increased Importance of Secondary Sources

Mines in South Africa and Russia are the primary sources for precious metals, but they cannot supply the entire demand for these raw materials on a sustained basis. More than 32,000 tons of silver and only about 4,000 tons of gold are annually produced in mines. Platinum group metals are even rarer: Altogether, approximately 600 tons of these metals are extracted worldwide from primary sources and by recycling automotive catalysts. The amount of platinum obtained each year—around 230 tons—would easily fit in a garage. For that reason, the use of secondary sources is gaining in importance, and Heraeus is a leading global player in refining platinum metals from these sources. There is no precious metal that the specialists at Heraeus cannot refine. The company has gained a strong market position in the recycling of platinum group metals (PGMs)—not only platinum, but also palladium, rhodium, ruthenium and iridium.

Expertise in Technical Chemistry a Key to Refining

The experts at Heraeus focus on precious metal concentrates from the mining industry and on spent industrial catalysts (reforming-, fixed bed-, supported-, and organic catalysts) or metallic precious



metal residues from products like sputtering targets, which for example are used to coat the magnetic data storage devices in computer hard disk drives. Refining primary and secondary materials requires very complex manufacturing processes. The steps involved are similar for all precious metal residues: pretreatment/analysis of a homogeneous sample, pre-enrichment, wet-chemical extraction processes and isolation of the various precious metals, refining into pure precious metals, and finally manufacturing new products containing precious metals.

Responsible Treatment

Apart from ensuring supplies for the company, recycling renders an important contribution to environmental protection and careful handling of resources. For this reason Heraeus Precious Metals has from an early stage continually built up recycling as an essential component of the precious metal cycle. In many products precious



metals are only present in small quantities, for other, they are firmly joined to or mixed with a variety of materials. Heraeus Precious Metals masters the demanding technologies and processes which are needed in order to extract the valuable precious metals in an ecologically sensible manner and to return them to the required purity.

Today, primary and secondary concentrates, industrial catalysts, alloys and residues from the precious metal processing industry and makes the retrieved precious metals available to our customers. With versatile aqueous chemical and melting processes all precious metals can be retrieved in the desired purity.

PREMIER MEMBER PROFILE

Heraeus, continued from page 9

Precious Metals Recycling – a Holistic Challenge

The precious metals cycle at Heraeus is an important contribution to safeguarding resources and protecting the environment. In the course of the recycling process, however, also technical and logistical challenges have to be resolved. Our mastery of the entire precious metals cycle underscores the range of expertise at Heraeus.

Trading of Precious Metals

Along with recycling, refining and production, precious metals trading is a significant factor in this system. Precious metals trading at Heraeus is not just a matter of trading with external customers.



It also means that there are channels within the company through which precious metals flow. So each day, all sales of precious metals conducted by the product divisions are conducted through Precious Metals Trading, as are the purchases that take place in the course of refining precious metals.

Worldwide Expertise

Through constant transfer of technology and a comprehensive quality management system uniform standards are guaranteed at all locations around the globe. In this way the worldwide production processes and the purity levels meet the internationally specified standards. As a result, the Recycling section can act on the market offering a high level of retrieval and competitive conditions.

myHeraeus.com - Recycling at your Fingertips

Precious metals recycling was always linked with much paperwork and time exposure — with the online platform myHeraeus. com we established a digital solution for the optimization of the recycling processes. Our aim is to make precious metals recovery as simple and comfortable as possible, starting from the initial waste classification until the final settlement to the pool account.

Heraeus Precious Metals - contact us

www.heraeus-precious-metals.com precious.metals@heraeus.com

> Heraeus at your fingertips.



We deliver a full range of analytical services to our clients, in addition to providing independent inspection and technical expertise.

The Alfred H Knight North American laboratory is ISO17025 accredited and specialises in analysing precious and platinum group metals in a broad range of commodities.



GLOBAL METALS & MINERALS SPECIALISTS

In addition to our experienced chemists and technicians, our operations have dedicated teams of knowledgeable support staff committed to assisting our clients in all aspects of precious and platinum group metals inspection and analysis.

AHK North America offers independent inspection, weighing and sampling services to the precious and platinum group metals industry. Our locally based, experienced inspectors cover all major precious metal refineries, producers and re-claimers in the US and Canada.



For more information:



www.ahkgroup.com/NorthAmerica



ws.enquiries@ahkgroup.com



At the forefront of the **metals** and minerals industry for over 135 years

2021 Awards

By Jonathan J. Jodry, Awards Committee Chair

In those complex times, many companies had to adapt their operations, and IPMI is no exception. While there will be unfortunately no in-person annual conference this year, our association really wanted to keep the award programs running.

As you probably know, IPMI is distributing each year several types of awards, including:

- Premier awards (Tanaka, BASF, ... awards) presented to top experts in the precious metals fields, both from academic and industry; numerous Nobel awardees have received also an IPMI Premier award.
- Student awards (supported by IPMI, IPMI chapters and key precious metal companies) - offered to students (master, Ph.D. or post-doc) while they are performing research on or using precious metals.

As the chair of the award committee, I would like to take the opportunity to thank again all the companies sponsoring those awards, some of them doing so for many decades. We are definitively looking for more sponsors, especially for the student awards, so please contact IPMI if your company would like, too, to support the next generation of precious metals specialists.

The IPMI awards are important for multiple reasons, one of them being that they are the only long-term link between universities and precious metal industries. It was hence tried to minimize the impact of the CoVid crisis on our award programs, and have taken the following decisions:

- 2020 Premier award recipients will be invited to join the 2021 conference; we will not have separate 2021 premier awardees, but nominations for 2022 can already be submitted;
- 2020 Student award recipients have received their awards, as we felt this was needed more than ever by students; those students will be invited, too, to the 2021 conference, together with the students who will be granted the 2021 student awards; we hence will have even more students at the 2021 conference.

One question coming often is regarding the nomination/application process for IPMI awards. For Premier awards, we are seeking nominations from our members and former recipients, to be submitted by the end of Summer. For student awards, application files are to be submitted by the students themselves by mid-January. The recipients are chosen by an independent group of experts. If you have an academic background and would like to help rating the student applications, please let me know, too.

Should you be interested by more information on the IPMI award programs, please let Sandra, Larry or myself know.

Environmental Regulatory Affairs Committee (ERAC) holds a Webex Webinar

The Environmental Regulatory Affairs Committee (ERAC) held a Webex webinar on Oct 14. The organizers for this event were Mike Riess, materials Management and Elba Lizardi, BASF.

Presentations Included:

- Lynn Bergeson, Bergeson & Campbell, "Washington Update"
- Sara Barba, Urban Swirski, "Legislative Efforts around Equalizing the Tax Treatments for Precious Metals and Other Investment assets
- France Capon, European Precious Metal Federation, "Update on Silver Regulatory Pressure in the EU
- Larry Bodden, Johnson Matthey, "Operational Health and Safety during the Covid-19"



Precious Metals Market News

Gold

Commodities headed for bull market in 2021 on inflation fears, stimulus - Goldman Sachs

In the past month investors bought 39 metric tons of the metal through gold ETFs, equivalent to \$2.1 billion in assets under management. While that marked the slowest monthly pace for 2020, global inflows have driven up the collective holdings of gold ETFs by 38%, to an all-time high of 3,824 metric tons, worth about \$241 billion. That surpassed the largest annual gain, in 2009, by nearly 50%.

https://uk.reuters.com/article/us-goldmansachs-research-commodities-idUKKBN2770NW

Semiconductor Related Articles (impacting Precious Metals electronics):

5G Rollout on a Steady Ramp Toward Big Growth

101+ mobile operators in 44 countries have commercial 3GPP-compliant 5G services.

138 million 5G connections globally, +116% improvement over the first guarter of 2020.

400 commercially available 5G devices globally, 20 commercially available 5G-capable mobile processors/platforms, and eight discrete 5G modems from five different semiconductor companies.

Growth strongest China, South Korea, North America, with most EU countries just starting to catch up.

The three giant Chinese operators to deploy 600,000 5G bases-stations by the end of this year.

https://www.eetimes.com/5g-rollout-on-a-steady-ramp-toward-big-growth/

IC packaging material firms see clear order visibility

Many IC backend service firms have stepped up purchases of related packaging materials as they are currently operating in high gear rolling out an array of ICs for consumer electronics products for year-end seasonal demand, said the sources.

Niching's sales expanded 11% sequentially and 23% on year in third-quarter 2020, with significant orders from ASE Technology Holding, SPIL and Greatek, the sources said.

https://www.digitimes.com/news/a20201019PD209.html

Silver

China will need 1.9 TW of solar by 2060 to hit net zero – WoodMac

The bill for full decarbonization of the economy – which is likely to see the decommissioning of no more than half the current coal fleet, with CCS doing some heavy lifting, according to the US-owned analyst – could come in at more than \$5 trillion.

Analyst View: At today's Solar PV Loadings, 1.9TW of incremental demand = 1.56 Billion Toz of Silver over 40 years -or- 39Moz/ year for the next 40-years.

https://www.pv-magazine.com/2020/10/08/china-will-need-1-9-tw-of-solar-by-2060-to-hit-net-zero-woodmac/

Solar the new 'king of electricity' as renewables make up bigger slice of supply: IEA

In its annual World Energy Outlook on Tuesday, the IEA said in its central scenario - which reflects policy intentions and targets already announced - renewables are expected to overtake coal as the primary means of producing electricity by 2025.

https://www.reuters.com/article/us-iea-energy-renewables-idUSKBN26Y0E7

Precious Metals Market News, continued from page 13

Platinum

Platinum well positioned in hydrogen economy's sweet spots - WPIC

Hyundai has stated categorically, in a double-page advertisement in The Economist of London, that it will be making 700 000 fuel cell stacks a year by 2030.

While Hyundai has not given exact platinum loadings for the fuel cell stacks, it is estimated that each fuel cell stack will require about 1 oz of platinum, which would total 700 000 oz of platinum per year, just for Hyundai alone.

https://www.polity.org.za/article/platinum-sits-in-hydrogen-economys-sweet-spot-wpic-2020-10-20

Palladium

Recovering auto production revs up platinum, palladium prices, Reuters poll shows

"Rebounding auto sales, tight mine supply and little indication of new sources of supply have helped palladium rise," said ETFS Capital analyst Nitesh Shah. "Continued tightness could see record prices regained."

https://www.reuters.com/article/us-precious-prices-platinum-palladium-idUSKBN2761GP

China's 2020 auto production and sales could return to 2019 levels: government official

China's 2020 auto production and sales may possibly be close to last year's levels should they keep growing in the fourth quarter, an official from the country's state planner said on Wednesday.

https://www.reuters.com/article/us-china-autos/chinas-2020-auto-production-and-sales-could-return-to-2019-levels-government-official-idUSKBN27604Y

Mining

Anglo American's third-quarter production recovers from Covid-19 impact

Diversified mining group Anglo American has posted a 24% increase in production in the third quarter, compared with the second quarter of the year, while operating at 95% of normal capacity across its subsidiaries' operations in regions including Canada, South Africa, Australia, Finland and South America.

https://www.miningweekly.com/article/anglo-americans-third-quarter-production-recovers-from-covid-19-impact-2020-10-22/rep_id:3650

Fresnillo Cuts Production Outlook Again as Gold Trades Near Record Highs

In March, Fresnillo said it expected to produce between 815 and 900 koz of gold.

In July reduced the outlook to to 785 to 815 koz as coronavirus restrictions impacted operations in Mexico. All mining operations were initially halted in the country before the government deemed it an essential industry in May.

On Wednesday they announced now expected output between 745 and 775 koz.

Gold production in Q3'2020 fell 6% compared with Q2, and was -18% v/v.

https://www.barrons.com/articles/fresnillo-cuts-production-outlook-again-as-gold-trades-near-records-the-stock-dropped-51603288372

Rhodium

FEATURE: Rhodium price rises may prompt South African producers to mull restarts

Heraeus said that over the last decade just over 150,000 oz of rhodium supply was shuttered.

"Conceivably, some capacity could be recommissioned within three years," the refiner said.

https://www.spglobal.com/platts/en/market-insights/latest-news/metals/101320-feature-rhodium-price-rises-prompt-south-african-producers-to-mull-restarts

Tales from the Furnace -Bob the Melter



What is it that truly separates the good from great in secondary precious metal refining? It goes without saying that the precious metal industry is very mature, and after 100 years at it, we think we have a good idea about what really makes a difference. It's not any rumored "secret assay fluxes" or any "too good to be true" rates; it's simply the quality of the people that get the work done. For this reason, we wanted to depart from the usual profile piece that talks about a company but instead highlights an example of the kind of people you will find in any of the great refining companies in our industry.

Without experience, knowledge is a tough thing to obtain. At Gannon & Scott, our people are both experienced and knowledgeable. That combination is why we chose to spotlight one of our foundry leadmen, Bob Gariepy, a.k.a. "Bob the Melter."

Tales from the Furnace

With 43 years in the business, including 35 years at Gannon & Scott, Bob Gariepy has seen just about everything that can go into a crucible. We thought we might ask Bob a few questions about some of the things that stand out in his mind with all this experience.

Q. This is one of those boxers or briefs questions. Which is for you, gas or induction melting?

A. That's easy, hands down induction melting. I started my career using both, and back then, I believed that each had their benefits. Now I have to say with the right crucible material selection, you can process anything you would have done in a gas furnace, plus you can't beat the efficiency and performance of an induction furnace. It has to be something like 25 years now was the last time I used a gas furnace.

Q. What kinds of material do you prefer to melt?

A. We melt a wide range of precious metal materials, but I would have to say that the most satisfying is melting silver oxide. It always amazes me that you can take this black powdery substance that looks like graphite dust, and just by direct melting, it produces these nearly pure silver bars that are just gorgeous.

Q. That said, what type of material do you like to handle the least?

A. It would have to be dirty oversize from electronic scrap, especially when it contains a high amount of steel and aluminum. Very challenging material for sure, and a good deal of experience is needed. It's hard on the equipment, and you're dealing with a mix of metals with very high melting points combined with metals with fairly low oxidation points. You really need to have the right combination of fluxing, copper heal, and heat to get a reliable sample.

Q. Tell us about an occasion that you helped a customer solve a problem.

A. Sure, we had a regular customer that for years was chemically stripping their gold plating wire. They would then send us the stripped

wire to melt and recover any of the remaining gold inadvertently left behind. Also, worth pointing out, they were sending us the pregnant stripping solution to recover the gold from that as well. At one point, they fell behind and started bringing in their employees on the weekend to catch up with stripping the wire. I mentioned to one of their managers that was in witnessing one of the wire melts, "why not just have us melt the unstripped wire?" It was like a lightbulb had gone on. A clear case of "we've always done it that way." They were putting in all this extra effort to lose sight of the goal, recovering the gold as efficiently and completely as possible. In the end, the customer was thrilled with the amount of time and money that this simple suggestion saved them.

Q. That's great, and I think we can all identify with that example. Are there any other tips you can share that might help people avoid similar pitfalls?

A. Wow, how much time do you have?

Q. Okay, how about the top three issues that come up the most?

A. Absolutely, first would have to try your best to keep any no value extraneous material out of your precious metal scrap collection. We see lots coming in with fairly high-grade materials but mixed with nails, soda cans; you name it. We will do our best to pull these materials out, but really the most practical thing is to keep these contaminants out from the start.

Second would be to try to relay as much information about your material as possible. I realize the primary focus is on precious metals but having a clear understanding of the balance of the material, we go to all lengths to make sure the refiner selects the best and safest processing method.

Lastly, I would recommend building a good working relationship with your refiner. I love working with our customers, and I'm always happy to help whenever I can. I have noticed consistently over the years that the people who are more engaged in the process tend to be just that much happier overall with the service.

This is Why Gannon & Scott

Craftsmen like Bob are the people who've made Gannon & Scott, an industry leader for over 100 years. We're proud to have the best technicians and the best equipment in the industry, from our highefficiency induction furnaces to our proprietary Tru3Tec® thermal reduction system. We aim to give our customers the best possible returns and the peace of mind that comes from environmentally sound technology.

As a founding and patron member of IPMI for three generations, Gannon & Scott has shown an unwavering commitment to its customers and the industry. We're ready to serve nearly any precious metals recovery need from small-volume, high-grade lots to lower-grade, high-volume residues.

TANAKA Receives 2020 Technology Award from Catalyst Manufacturers Association, Japan

Development of hydrophobic precious metal catalyst that improves hydrogen oxidation reaction and hydrogen infrastructure is evaluated

TANAKA Holdings Co., Ltd. (Head office: Chiyoda-ku, Tokyo; Representative Director & CEO: Koichiro Tanaka) announced today that TANAKA Kikinzoku Kogyo K.K. (Head office: Chiyoda-ku, Tokyo; Representative Director & CEO: Koichiro Tanaka), which operates the TANAKA Precious Metals manufacturing business, has received the 2020 Technology Award from the Catalyst Manufacturers Association, Japan, (CMAJ). The award was in recognition of the company's joint development of a hydrophobic precious metal catalyst in collaboration with the National Institutes for Quantum and Radiological Science and Technology (Headquarters: Chiba-shi, Chiba; President: Toshio Hirano; QST). Hitoshi Kubo, from TANAKA, and Yasunori Iwai, from QST, received the award and gave an acceptance speech at the 2020 CMAJ award ceremony, held online on October 14.

Examples of Hydrophobic Precious Metal Catalyst Products

The hydrophobic precious metal catalyst for which the Technology Award was received was developed through a collaboration between TANAKA and QST. It was developed as an ambient-temperature hydrogen oxidation technology for ITER and other nuclear fusion facilities. With its hydrophobicity enabling the catalytic reaction to be maintained even at ambient temperatures, it is used for hydrogen oxidation reactions. With conventional catalysts, moisture in the reaction gas and water vapor generated during reactions cover the catalyst surface and stop the catalytic reaction, so they must be heated to prevent the water vapor coating from occurring. Also, normal catalysts use plastic as the carrier, which makes them heat sensitive, causing combustion to occur as the temperature of the catalyst increases through the reaction.

This newly developed catalyst employs an inorganic material, which has better resistance to heat and radiation than plastic, as its underlying carrier. The carrier has a hydrophobic group attached (a substance that is difficult to mix with water), which creates a uniform hydrophobic surface to the carrier to improve its hydrophobic and heat-resistant properties. According to internal testing at TANAKA, a precious metal catalyst consisting of this carrier coated with platinum can maintain hydrophobicity for 24 hours at a temperature of 450 degrees C.

This catalyst can be used for oxidation reactions of hydrogen and combustible gases, in nuclear fusion facilities and elsewhere, without the need for heaters and other equipment. It also enables reactions

in outdoor environments without access to an electric power source or in disaster-affected areas during power failures. Because of the hydrophobic properties of this catalyst, it has potential applications in safety equipment to prevent explosions and other accidents. It is particularly promising for use in infrastructure development for the hydrogen energy society.

[2020 Technology Award from Catalyst Manufacturers Association, Japan]

- Category: Technology Award
- Recipients:
 - Hitoshi Kubo, TANAKA Kikinzoku Kogyo K.K.
 - Yasunori Iwai, National Institutes for Quantum and Radiological Science and Technology
- Recognition: Development of a hydrophobic precious metal catalyst







Inorganic Ventures Announces Official Launch of New Brand Tagline

Inorganic Ventures announced today the launch of its new brand tagline, "Refine Your Results. Redefine Your Industry." The new tagline articulates Inorganic Ventures' position in the high-quality analytical inorganic standards industry and reinforces the company's position as a global leader in manufacturing specialized Certified Reference Materials.

Inorganic Ventures underwent a strategic reorganization earlier this year to better leverage its business. As part of the process, the company conducted a comprehensive branding review and research resulting in the new "Refine Your Results. Redefine Your Industry" tagline. The new identity enables opportunities to market the organization in pursuit of new ventures, expansion, and growth.

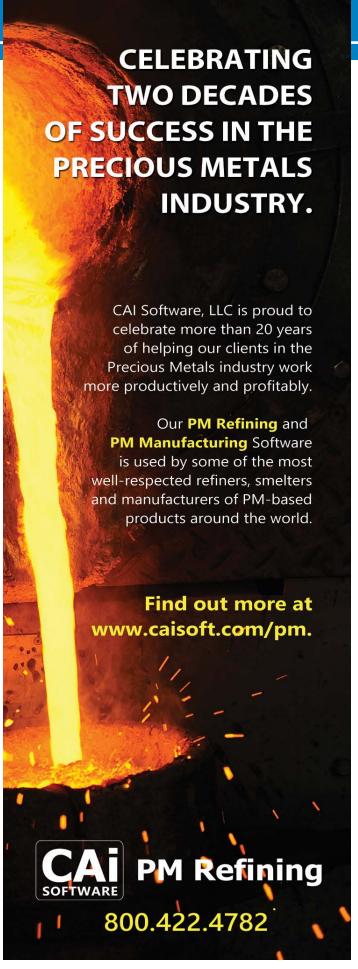
"The rebranding is part of our long-term strategy to evolve our business and create a platform for new opportunities," said Christopher Gaines, CEO. "Our refreshed identity reflects the company's ongoing transformation over the last 35 years and the evolution of our elite manufacturing capabilities."

Inorganic Ventures will begin the rollout of the brand overhaul effective immediately, with the launch of a new corporate video. The new tagline will be utilized in every aspect of the company's visual identity, including its logo, social channels, and website, and will be utilized globally in all markets to strengthen the company's position.

About Inorganic Ventures

Inorganic Ventures is based in Christiansburg, Virginia. Since 1985, the company has manufactured high quality analytical inorganic standards, specializing in certified custom reference materials with a focus on ICP, ICP-MS, IC, atomic absorption, wet chemistry, and QC applications. Inorganic Ventures is accredited to ISO 17034 and ISO 17025 by A2LA and is ISO 9001 registered by Quality Systems Registrars, Inc. Visit inorganicventures.com for more information.





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2020	Nov 16-17	IPMI Virtual Conference ● On-line
2021	Feb 9-10	Public Affairs Legislative Seminar • Army Navy Club, Washington, DC
	Mar 2	Sampling & Analytical Committee Meeting • Hollywood Beach Marriott, Hollywood, FL
	Mar 3	Platinum Group Metal Refining Committee Meeting Hollywood Beach Marriott, Hollywood, FL
	Mar 4-5	Security & AML Committee Meeting • Hollywood Beach Marriott, Hollywood, FL
	Apr 26-28	PGM Autocat/Fuel Cell Seminar • Hyatt Grand Cypress, Orlando, FL
	Jun 12-15	45th Annual Conference ● Peppermill Resort ● Reno, NV
	Oct 21	Gold Seminar • New York, NY