

IPMI Announces Premier Award Winners for 2022

IPMI Junichiro Tanaka Award Winner Professor Chad Mirkin, Northwestern

Dr. Chad A. Mirkin is the Director of the International Institute for Nanotechnology and the George B. Rathmann Professor of Chemistry, Chemical & Biological Engineering, Biomedical Engineering, Materials Science & Engineering, and Medicine at Northwestern University. He is a chemist and a world-renowned nanoscience expert, who is known for his discovery and development of spherical nucleic acids (SNAs) and SNA-based biodetection and therapeutic schemes, Dip-Pen Nanolithography (DPN) and related cantilever-free nanopatterning and materials discovery methodologies, On-Wire Lithography (OWL) and Co-Axial Lithography (COAL), and contributions to supramolecular chemistry and nanoparticle synthesis. Mirkin received his B.S. degree from Dickinson College (1986) and a Ph.D. degree from the Penn State University (1989). He was an NSF Postdoctoral Fellow at the MIT prior to becoming a professor at Northwestern University in 1991. He has authored over 830 manuscripts

and over 1,200 patent applications worldwide (over 390 issued) and founded eight multiple companies. Mirkin has been recognized with over 230 national and international awards, including the Kabiller Prize in Nanoscience and Nanomedicine, the SCI Perkin Medal, the Wilhelm Exner Medal, the RUSNANOPRIZE, the Dan David Prize, and the Sackler Prize in Convergence Research. He served for eight years on the President's Council of Advisors on Science & Technology, and he is one of very few scientists to be elected to all three US National Academies. Mirkin has served on the Editorial Advisory Boards of over 30 scholarly journals, and he is the founding editor of the journal *Small*. He was an Associate Editor of *J. Am. Chem. Soc.* and is a Proc. Natl. Acad. Sci. USA Editorial Board Member. He has given over 870 invited lectures and educated over 300 graduate students and postdoctoral fellows, of whom over 120 are now faculty members at top institutions around the world.



IPMI Announces Premier Award Winners for 2022, continued from page 1

IPMI BASF Henry J Albert Award Winner Professor Feringa, University of Groningen

Ben L. Feringa obtained his PhD degree at the University of Groningen in the Netherlands under the guidance of Professor Hans Wynberg. After working as a research scientist at Shell in the Netherlands and the UK, he was appointed lecturer and in 1988 full professor at the University of Groningen and named the Jacobus H. van't Hoff Distinguished Professor of Molecular Sciences in 2004. He was elected Foreign Honorary member of the American Academy of Arts and Sciences, member and former vice-president of the Royal Netherlands Academy of Sciences, foreign member of the Royal Society (London), The US National Academy, The German Academy Leopoldina and the Chinese National Academy of Sciences. Ben Feringa is member of European Research Council. In 2008 he was appointed Academy Professor and was knighted by Her Majesty the Queen of the Netherlands. Feringa's research has been recognized with a number of awards including

the Koerber European Science Award (2003), the Spinoza Award (2004), the Prelog gold medal (2005), the Norrish Award of the ACS (2007), the Paracelsus medal (2008), the Chirality medal (2009), the RSC Organic Stereochemistry Award (2011), Humboldt award (2012), the Nagoya gold medal (2013), ACS Cope Scholar Award 2015, Chemistry for the Future Solvay Prize (2015), the August-Wilhelm-von-Hoffman Medal (2016), The 2016 Nobel Prize in Chemistry, the Tetrahedron Prize 2017 and the Euchems gold medal.

Feringa's research interest includes stereochemistry, organometallic chemistry and homogeneous catalysis, organic synthesis, asymmetric catalysis, molecular switches and motors, self-assembly, molecular nanosystems and photopharmacology.



IPMI BRM Services Carol Tyler Award Winner Ruth Crowell, LBMA

In her tenure as CEO of LBMA, Ruth was responsible for the governance, commercial and transparency overhaul of the LBMA and the Loco London precious metals market. Her experience as a human rights expert helped her successful creation of the LBMA's Responsible Sourcing Programme, which covers all Good Delivery Refiners processing 92% of gold mined annually. Ruth is also a Non-Executive Director for Wilton Park (Executive Agency of the UK FCDO) and a Trustee for Human Rights at Sea. She also continues to serve as Vice Chair of the OECD Multi-Stakeholder Governance Group for Responsible Minerals.



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IPMI 2022 Gannon and Scott Founder's Award Winner Dr. Jonathan Jodry

Based in Japan (since this autumn), Jonathan J. Jodry currently holds the position of Business Development Director for Metalor Technologies, a company he joined in 2009.

He is the Immediate Past President of the European Chapter of the IPMI, as well as the Chair of the Award Committee, and serves on the Board of the IPMI Foundation where Jonathan tirelessly works in these capacities to ensure that the IPMI Foundation seeks and awards precious metal research students of the highest calibre from around the globe. He is a source of guidance and knowledge to the student award winners while

they attend the conference and afterwards. With his mentoring the students are able to stay connected to

the precious metals industry. Additionally, Jonathan has been instrumental in increasing the number and amount of awards given and also has broadened the awareness of the Foundation's award program.

Jonathan got his PhD at the University of Geneva in 2000 in organic and supramolecular chemistry, before spending 8 years in Japan. He also holds two Executive MBAs from London Business School and Columbia University of New York.



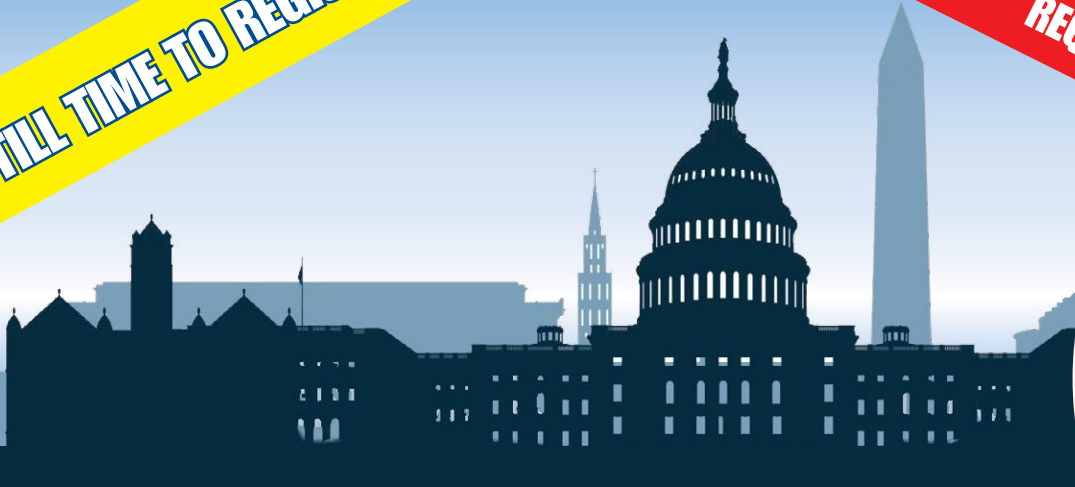
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Annual Legislative and Public Affairs Conference

An insider's look at global issues facing our industry.



February 8-9, 2022

The Army-Navy Club

901 17th Street, NW

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<https://www.armynavyclub.org/>

Registration:

\$425 (members)

\$525 (non-members)

Register Here!
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Annual Legislative and Public Affairs Conference Program of Events

February 8-9, 2022

The Army-Navy Club

Tuesday, February 8

- 1:30 pm** **Opening Remarks**, *Larry Drummond and Grace Stockley*
- 2:00 pm** **The Infrastructure Bill and the Impacts to EHS**
Chris Fitzpatrick, Johnson Matthey
- 2:30 pm** **Not Sold on Gold:
Insights on What's Preventing Broad Adoption of Gold by Investors**
Joseph Cavatoni, World Gold Council
- Break**
- 3:15pm** **The Future of PM & Critical Minerals: Will the Biden Administration and Congress Hinder or Help Manufacturers Grow The Circular Economy?**
Laura Berkey-Ames, BASF
- 3:45pm** **The Biden Administration Trade Priorities
& 100 Days Critical Minerals Supply Chain Report**
Salim Bhabhrawala, U.S. Department of Commerce, International Trade Administration
- 4:15 pm** **Privacy & Cybersecurity**
Scott Schwartz, FidelityTrade
- 5:00 pm** **Networking**
- 6:00 pm** **Reception Sponsored by FidelityTrade and Delaware Depository**
- 7:00 pm** **The Army Navy Club Seafood Buffet** **Coat & Tie Required**

Wednesday, February 9

- 8:00 am** **Continental Breakfast Sponsored by Techemet**
- 9:00 am** **Washington Update**, *Paul Miller, Miller Wenhold Capitol Strategies*
- 9:45 am** **PM Recycling - Rules, Regulations and Issues**
Amy Donohue-Babiak, Johnson Matthey
- 10:15 am** **Break**
- 10:30 am** **Auto Catalyst Theft and Regulations**
Steve Contreras, PGM of Texas and Oliver Krestin, Hensel Recycling
- 11:15 am** **Banking and Market Regulations**
Erin Middleton, CME
- 12:00 noon** **Lunch**
The program will end after lunch

Register Here!
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REGISTRATION OPEN

IPMI Winter Meetings

March 1 - 3, 2022

Hyatt Grand Cypress Resort - Orlando



Members:	1 day - \$425	2 days - \$650	3 days - \$800
Non Members:	1 day - \$525	2 days - \$750	3 days - \$900

March 1 - Security and AML Committee (SECAM)

March 2 - Platinum Group Metals Refining Committee (PGMRC)

March 3 - Sampling and Analytical Committee (SAC)

Register Here!

Sandra Arrants

International Precious Metals Institute

850-476-1156 mail@ipmi.org

IPMI Winter Meetings Agenda

March 1-3, 2022

Hyatt Grand Cypress Resort
Orlando, Florida

March 1 - Security and AML Committee (SECAM)

Precious Metal Security (AM)

- Changes/ Updates in the Insurance Industry - *Simon Codrington, Hugh Wood*
- South African Supply Chain Thefts - *Mark Caffarey, Umicore / Normadene Murphy, BASF*
- Secure Transport Updates - *Brian Hayward, Loomis*
- The Importance of an Effective Disaster Recovery Plan - *Keiken Shah / Steve Holt*

AML/Responsible Sourcing

- AML Compliance Update for Precious Metal Dealers - *Peter Quinter, GrayRobinson*
- AML - KYC 101 - *Steve Crogan, Blue Water Risk Management*
- AML Panel Discussion - *Steve Crogan / Peter Quinter / Randy Weinermen*

AutoCat Theft Panel Discussion - *Steve Contreras, PGM of Texas / Oliver Krestin, Hensel Recycling*

March 2 - Platinum Group Metals Refining Committee (PGMRC)

- PGM Markets Update - *Jonathan Butler, Mitsubishi*
- Role of PGM Enabled Technologies in Achieving Net Zero - *Marge Ryan, Johnson Matthey*
- Hydrogen Applications Beyond Fuel Cells - *Bodo Albrecht, BASF*
- Platinum, Ruthenium, Iridium and Silver...the Most Critical Clean Energy Minerals of Them All - *Matt Watson, Precious Metals Commodity Management, LLC*
- Catalyst Refining Process Developments - *David Caldwell, ECRS*
- Autocat Refining - Open vs. Closed Loop - *Lee Hockey / Oliver Krestin, Hensel Recycling*
- Catching Converter Fraud - *Oliver Cook, Legend Smelting*
- Novel PGM Recovery Process via Hydromet Process - *Jose Muriel, Metal 78*
- PGMRC Path Forward - *Craig Ostroff, BASF*

March 3 - Sampling and Analytical Committee (SAC)

Auto Catalyst Overview: Sampling and Analysis

- Fundamentals of Sampling Auto Catalyst - *Chris Jeremiah, BASF*
- Sampling Equipment and Techniques: A Hands-On Sampling Demonstration - *Joshua Husvar, Cotecna*
- Auto Catalyst Analysis: Method Review, Selection and Applicability - *Nick Sadler, Johnson Matthey*
- Ask the Experts: Sampling and Analysis Panel Discussion - *Malkit Basi, Ledoux / Joshua Husvar / Chris Jeremiah*

SAC Updates

- Sampling & Analytical Committee Updates and Future Plans - *Algis Naujokas, Sabin Metal Corp.*
- IPMI SAC Round Robin Exercise #17: Interlaboratory Comparisons of High Rhodium Spent Auto Catalyst - *Algis Naujokas, Sabin Metal Corp.*

Innovations and Optimization

- Analysis of Liquids Refining Waste Water by ED-XRF - *Romain Sottas, Metalor*
- Custom Analysis by Radial/Axial ICP-OES: How to Reduce Interferences for 69 Elements - *Autumn Phillips / Thomas Kozikowski, Inorganic Ventures*

Sample Preparation and Instrumental Analysis

- Precious Metals Analysis Using a Microwave Plasma Spectroscopy System vs Atomic Absorption - *Greg Gilleland, Agilent*
- Elemental Analysis of Catalyst by Peroxide and Borate Fusion for ICP and XRF - How to Use it and Why? - *Jermie Asselin / Chantal Audet / Matthieu Bouchard, Malvern Panalytical*



HEALTH & SAFETY

Metallix obtains ISO 45001 international standard for Occupational Health and Safety

At Metallix, health and safety in the workplace is our number one concern and we do everything within our power to ensure the safety and wellbeing of our people.

That's why we're proud to have obtained ISO 45001, the world's first international standard for Occupational Health and Safety (OH&S).

WHAT IS ISO 45001?

ISO 45001 provides a framework to increase safety, reduce workplace risks and enhance health and well-being at work, enabling an organization to proactively improve its OH&S performance. The goal of ISO 45001 is the reduction of occupational injuries and diseases, including promoting and protecting physical and mental health.

Developed under the ISO system, with the input of experts from more than 70 countries, it provides an international framework that takes into account the interaction between an organization and its business environment. ISO 45001 adopts a risk-based approach that ensures it is effective and undergoes continual improvement to meet an organization's ever-changing context.

WHO IS ISO 45001 FOR?

ISO 45001 is relevant to all organizations, regardless of their size or industry. The standard has been designed so that it can be integrated into an organization's existing management processes. It follows the same high-level structure as other ISO management system standards, such as ISO 9001 (quality management) and ISO 14001 (environmental management). Metallix now has all 3 certifications which give us an integrated management system to operate our business.

To learn more about our services and how they can benefit your organization, please contact us on:

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WHAT ARE THE BENEFITS?

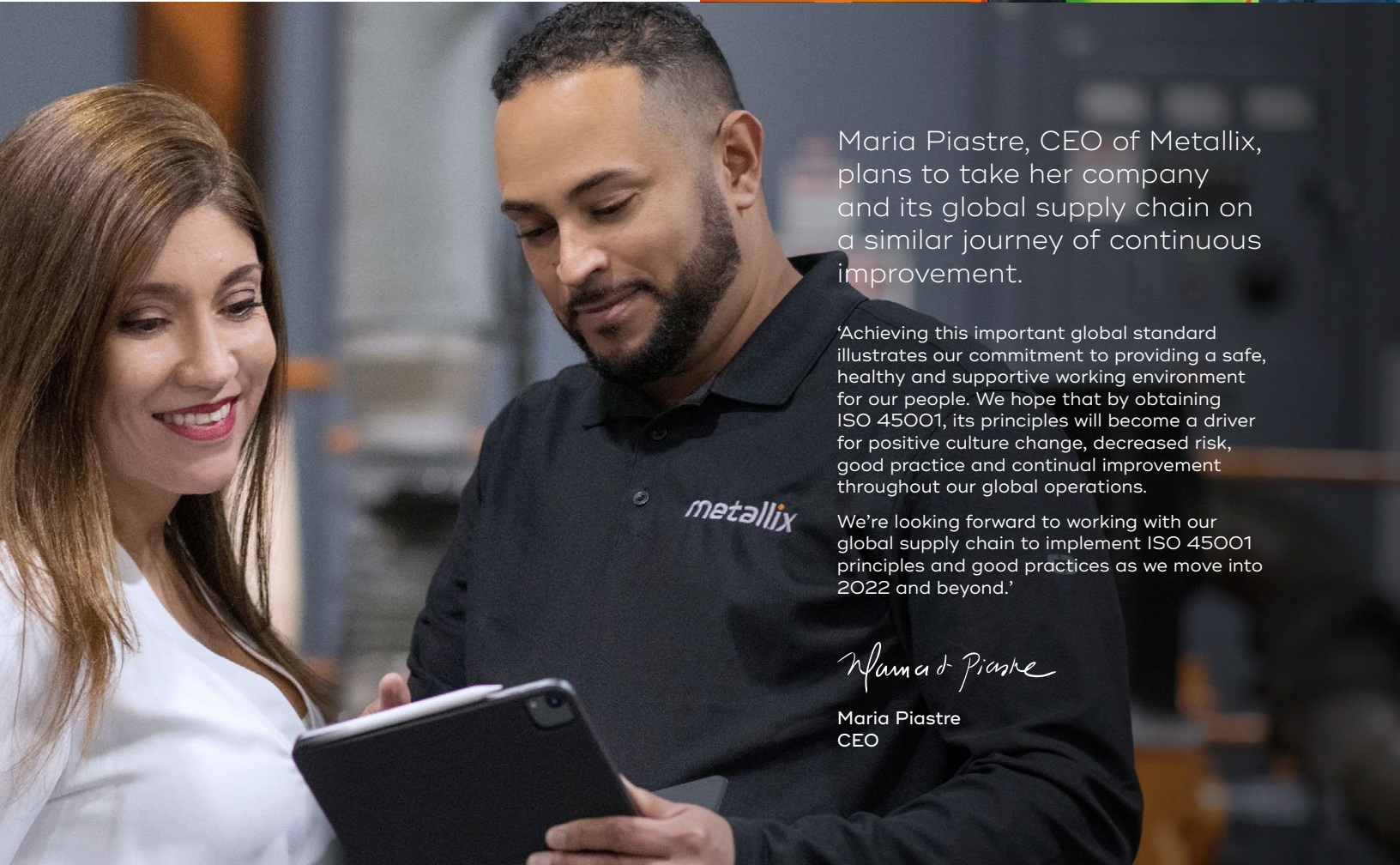
ISO 45001 enables organizations to put in place an occupational health and safety (OH&S) management system. This helps them to manage risk and improve their health and safety performance by developing and implementing effective policies and objectives.

- Fewer workplace incidents
- Reduced absenteeism and staff turnover
- Lower insurance premiums
- Creation of a proactive health and safety culture
- Enhanced reputation
- Improved performance and higher customer satisfaction
- Improved staff morale

As a globally-recognised standard, ISO 45001 can also put businesses operating from different countries on a level-playing field, potentially enabling increased international trade.



Metallix Refining Team



Maria Piastre, CEO of Metallix, plans to take her company and its global supply chain on a similar journey of continuous improvement.

'Achieving this important global standard illustrates our commitment to providing a safe, healthy and supportive working environment for our people. We hope that by obtaining ISO 45001, its principles will become a driver for positive culture change, decreased risk, good practice and continual improvement throughout our global operations.'

We're looking forward to working with our global supply chain to implement ISO 45001 principles and good practices as we move into 2022 and beyond.'

Maria Piastre

Maria Piastre
CEO

TANAKA Denshi Kogyo to Establish New Plant in Hangzhou, China



Strengthening its capacity to produce aluminum bonding wires for power semiconductors

TOKYO, Jan 12, 2022 - (ACN Newswire) - TANAKA Holdings Co., Ltd. (Head office: Chiyoda-ku, Tokyo; Representative Director & CEO: Koichiro Tanaka) has announced that its subsidiary, TANAKA Denshi Kogyo K.K. (Head office: Kanzaki-gun, Saga; Representative Director & President: Shigeru Iseki), which is engaged in the production of various types of bonding wires, will establish a new plant in Hangzhou City, China, for the production of aluminum bonding wires for power semiconductors. The plant is scheduled to commence operations in November of 2022.

Construction of this new plant forms part of TANAKA Denshi Kogyo's plans to increase its production capacity for aluminum bonding wires by approximately three-fold by 2025 in order to meet the growing global demand associated with the growth of power semiconductors.

TANAKA Denshi Kogyo has been producing various bonding wires and providing technical services at its subsidiary, TANAKA Electronics (Hangzhou) Co., Ltd. in China, since 2001. With the recent imbalance of global supply and demand for semiconductors resulting in a worsening shortage of semiconductors, it has been a matter of urgency to establish a stable supply system for high-quality bonding wires as an important peripheral material for the semiconductor industry. To meet the growing demand associated with the domestic production of power semiconductors in China, in particular, the new plant will be established to provide a stable supply system for aluminum bonding wires.

As a leading manufacturer of bonding wire, TANAKA Denshi Kogyo continues to contribute to the semiconductor industry by supplying countries around the world even during states of emergency.

▪ About Power Semiconductors

Power semiconductors are semiconductors that control and supply power (electricity) and are used in power supplies in electronic devices, motors, and switches. They are always used in electronic devices that have power circuits and are used in a wide range of applications, from everyday home appliances, such as PCs, smartphones, and televisions, to automotive and industrial equipment.



Aluminum bonding wire

TANAKA Denshi Kogyo to Establish New Plant in Hangzhou, China, continued from page 10

Bonding wires for power semiconductors are required to have the capability to carry large currents in extreme conditions, and aluminum has already been used in many power device fields for its excellent bonding properties and moisture resistance.

▪ About TANAKA Denshi Kogyo Bonding Wires

TANAKA Denshi Kogyo has produced various types of bonding wire since its founding more than 50 years ago, and today it boasts a leading share of the global market. After establishing its first overseas production base in Singapore in 1978, the company has constructed additional production bases in Malaysia, China, and Taiwan. It now supplies its wires to countries engaged in the production of semiconductors around the world.

▪ Overview of the new plant

Plant name: TANAKA Electronics (Hangzhou) Co., Ltd. Jiangdong Plant

Total floor area: Approx. 11,000 m²

Description of business: Production of aluminum bonding wires

Start of operations: November 2022

Press release in PDF:

https://www.acnnewswire.com/docs/files/202201_EN.pdf

▪ TANAKA Denshi Kogyo K.K.

Headquarters:

2303-15, Yoshida, Yoshinogari-cho, Kanzaki-gun, Saga

Established: 1961

Representative: Representative Director & President: Shigeru Iseki

Capital: 1.88 billion yen

Sales: 28,259,716,000 yen (FY2020 results)

Number of employees: 819, including overseas subsidiaries, as of March 31, 2021

▪ TANAKA Electronics (Hangzhou) Co., Ltd.

Headquarters: F1 Area, West No.19 Street, North No.10 Street, Hangzhou Economic & Technological Development Zone, Hangzhou (310018), Zhejiang

Established: 2001

Representative: Shigeru Iseki, Chairman

▪ About TANAKA Precious Metals

Since its foundation in 1885, TANAKA Precious Metals has built a portfolio of products to support a diversified range of business uses focused on precious metals. TANAKA is a leader in Japan regarding the volumes of precious metals handled. Over the course of many years, TANAKA has not only manufactured and sold precious metal products for industry but also provided precious metals in such forms as jewelry and assets. As precious metals specialists, all Group companies in Japan and around the world collaborate and cooperate on manufacturing, sales, and technology development to offer a range of products and services. With 5,193 employees, the group's consolidated net sales for the fiscal year ending March 31, 2021, was 1,425.6 billion yen.

▪ Global industrial business website

<https://tanaka-preciousmetals.com>

▪ Product inquiries

TANAKA Kikinzoku Kogyo K.K.

<https://tanaka-preciousmetals.com/en/inquiries-on-industrial-products/>

▪ Press inquiries

TANAKA Holdings Co., Ltd.

<https://tanaka-preciousmetals.com/en/inquiries-for-media/>

Update on mandatory Human Rights and Environmental Due Diligence Laws

- In October 2021, the Global Reporting Initiative (GRI) revised their Universal Standards to emphasise and require more transparency in reporting on human rights impacts and due diligence obligations.
- National Human Rights and Environmental Due Diligence (HREDD) laws have been adopted or are in force in France, Germany and Norway, while proposed national legislation is being progressed in a number of other European countries.

Relevance for PGM industry

- Legislative developments aside, investors, civil society and other stakeholders are scrutinising how companies identify and mitigate human rights impacts in their operations and supply chains more closely than ever.
- Companies need to take steps to develop and reinforce their human rights due diligence programmes, both in anticipation of further mandatory HREDD laws and to respond to stakeholder expectations and demands.
- In mid-2021, German parliament passed the Supply Chain Due Diligence Law which will come into force in January 2023.
- Most recently, in December 2021, the Netherlands announced its intent to introduce its own national HREDD law in view of the further delay of the proposed EU law.

In this Policy Update: information on HREDD legislation related activity at the EU level, in the Netherlands and Germany



EU's proposed mandatory Human Rights and Environmental Due Diligence Law faces further delay



The Netherlands to introduce extensive mandatory Human Rights Due Diligence Law



Germany passes mandatory Human Rights Due Diligence Law; 14 things to know about the new law



EU: mandatory Human Rights & Environmental Due Diligence Law faces further delay

- In December 2021, the European Commission has indefinitely postponed its much-anticipated directive on human rights and environmental due diligence (HREDD) – more than 150 days after it was first expected to be published.
- While the reason for the delay is unclear, 47 civil society organisations have penned an open letter seeking “full transparency on the reasons for the delay and on the decision-making process going forwards” (see IPA Info email from 23rd December 2021).

Background of the EU legislative proposal

- In March 2021, the European Parliament [voted with a large majority](#) (504 votes in favour, 79 against and 112 abstentions) to approve the Parliament's Legal Affairs Committee legislative report on due diligence and corporate accountability, signalling support in the European Parliament for the European Commission to table a similar law. A draft legislative proposal was initially scheduled to be published by 30 June 2021, then 27 October 2021 and most recently 8 December 2021.

- However, the long overdue legislative proposal has not disappeared from the European Commission's latest agenda altogether.
- It is currently just not clear when such a proposal will be tabled.

EU law – three key points to note

- Whilst the law remains to be drafted, there are indications – in particular from a [draft report](#) published by the European Parliament Committee on Legal Affairs – that the proposed law would:
 - 1) Apply to all EU companies and any non-EU company selling goods or providing services in the EU – meaning, for example, that the law could impact a US business with EU operations;
 - 2) Require companies to implement human rights due diligence in line with the processes provided in the UNGPs to prevent adverse impacts on people, as well as in relation to mitigating environmental and governance risks; and
 - 3) Contain sanctions for non-compliance – which could include criminal measures.





Wave of national HREDD legislation

- The discussion and/or introduction of national HREDD legislation continues:
 - The French Corporate Duty of Vigilance law has been in force since 2017.
 - In June 2021, Germany passed its own HREDD national law.
 - The Netherlands will introduce a national HREDD law.
 - Norway adopted a similar law ([read more](#)).
 - Austria, Belgium and Switzerland are also considering regulation.

The Netherlands to introduce extensive mandatory Human Rights Due Diligence Law

- On 6 December 2021, the Netherlands announced that it would introduce its own national HREDD law and – at the same time – expressed dismay at the delay of the publication of the EU Directive.
- While a proposal of the draft law is yet to be published, the responsible minister has indicated that the Dutch legislation will be broader in scope and more stringent than similar laws in other jurisdictions such as Germany, France and the UK.
- The Dutch government has also indicated that it wants to act swiftly, so companies may soon have another HREDD law to contend with among the emerging patchwork of laws imposing human rights and supply chain legal obligations on companies.

Germany passes mandatory Human Rights Due Diligence Law

- On 11 June 2021, the German parliament passed the “Law on corporate due diligence in supply chains” (“*Lieferkettensorgfaltspflichtengesetz*”). It requires companies to take steps to prevent human rights violations in their supply chains.
- In a nutshell, under the new law:
 - 1) companies must ensure that human rights are being respected throughout their entire supply chain;
 - 2) companies must establish complaint mechanisms and report on their due diligence activities;
 - 3) companies with more than 3,000 employees will have to meet the new due diligence obligations as of 1 January 2023 (and companies with more than 1,000 employees as of 2024);
 - 4) violations of the obligations under the Supply Chain Law will not give rise to a civil liability of the company;
 - 5) however, companies violating their obligations under the Law will be sanctioned with fines which can amount to up to 2% of the average annual turnover for companies with more than EUR 400 million annual turnover.

Background: Voluntary engagement wasn't enough

- In order to implement the UN Guiding Principles on Business and Human Rights in Germany, the government had relied on voluntary engagement for many years and adopted the National Action Plan on Business and Human Rights.
- However, surveys had revealed that the target of 50% of companies fulfilling the obligations set forth in the UN Guiding Principles was clearly missed. In response to this the government proposed a draft bill for a mandatory human rights due diligence in March 2021.
- As a first step, the Law will apply to and establish due diligence obligations for companies with more than 3,000 employees, which includes employees posted abroad.

Scan entire supply chain for risks

- A company's obligations will extend to the entire supply chain, with more stringent obligations where a company has greater opportunity to exert influence. i.e. in its own business activities as well as vis-à-vis their direct suppliers. Indirect suppliers are included if the company has substantiated knowledge of human rights violations by the supplier.
- A company's due diligence obligations under the Supply Chain Law involve the analysis of human rights-related risks, the taking of measures to prevent and mitigate human rights violations and the establishment of complaint mechanisms.
- In addition, companies will have to report on their due diligence activities.
- The new Law furthermore covers environmental protection insofar as environmental risks can lead to human rights violations. It requires companies to comply with environmental obligations as set out in the certain environmental conventions.

Reduced civil liability but substantial fines

- Although the government initially had considered to establish a civil liability in case of violations of obligations under the Law, the final wording of the Law explicitly excludes a civil liability based on the violation of due diligence obligations. However, German trade unions and non-governmental organisations are allowed to support foreign claimants affected by human rights violations in representing their rights before German courts. The new Law also provides for the possibility to file a complaint with the competent German authority in case of human rights violations.
- The Supply Chain Law provides for fines if companies fail to meet their new due diligence obligations. Companies with an average annual turnover of more than 400 million euros could face fines of up to 2% of their annual turnover for certain violations. In addition, companies can be excluded from public procurement for up to three years in the event of serious violations.
- The Supply Chain Law will come into force on 1 January 2023.

Further reading

- ➔ ‘14 things to know about Germany's new Supply Chain Due Diligence Law’ — click [here](#) for in-depth information provided in a blog post by law firm Ravenscroft & Schmierer.
- ➔ ‘How can your organisation prepare for increasing due diligence obligations?’ — blog post by law firm Mayer Brown at [Eyeonesg.com](#).

Precious Metals Market News

Gold

- **Gold has gained value during 4 of the last 5 weeks**

- Gold continues to trade in a range-bound manner, but over the last five weeks, gold prices have gained value during four of those weeks. For the most part, we have seen gold trade through the eyes of the weekly chart with a succession of higher lows. What has been lacking is a series of higher highs based upon the high achieved in June 2022 when gold topped out at \$1920.
<https://www.kitco.com/commentaries/2022-01-15/Gold-has-gained-value-during-4-of-the-last-5-weeks.html>

- **Gold on track to post second straight weekly gain on inflation risks**

- Gold was set to rise for a second consecutive week as inflation and geopolitical risks underpinned its safe-haven appeal, while strong demand and supply risks put autocatalyst palladium on course for its best week since March.
<https://www.cnn.com/2022/01/21/gold-markets-us-fed-interest-rates-inflation-.html>

Silver

- **South32 predicts at least two Canningtons needed each year until 2040 to meet colossal silver demand**

- Long-term market outlook: \$19 billion ASX200 miner South32 and leading intelligence provider CRU estimate massive silver demand growth between now and 2040 thanks to its increasing use in solar panels. At the same time a lack of new silver mines coming online is expected to result in a material shortage of the precious metal.
<https://stockhead.com.au/resources/south32-predicts-at-least-two-canningtons-needed-each-year-until-2040-to-meet-colossal-silver-demand/>

continued on page 15



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INDUSTRY NEWS

Precious Metals Market News, continued from page 14

- **Silver's Growing Role in the Automotive Industry**

- Taking this a stage further, given the electrified nature of BEVs, coupled with the need for extra energy management systems, silver consumption per vehicle is estimated to be 1.6-2.2 times higher compared with ICE vehicles, which suggest loadings in the range of 0.8-1.6oz (25-50g).

https://www.silverinstitute.org/wp-content/uploads/2021/01/SilverAutomotive_MmktTR2021.pdf

Palladium

- **Global platinum group metals autocatalyst demand to hit record levels in 2022**

- According to Metals Focus, a growing global automotive sector has driven combined autocatalyst demand for platinum, palladium and rhodium (PGM), which rose by 5% in 2021 and expected to hit record levels in 2022. The consultancy said that the total PGM demand is expected to grow 11% breaching 12.8Moz in 2022.

<https://www.kitco.com/news/2022-01-19/Global-platinum-group-metals-autocatalyst-demand-to-hit-record-levels-in-2022-report.html>

- **China's annual auto sales climb for first time since 2017**

- Overall sales in the world's biggest car market rose 3.8% year-on-year, after monthly sales of 2.79 million vehicles in December took total sales for 2021 to 26.28 million (22.76 million ICE).

<https://www.thebharatexpressnews.com/chinas-annual-auto-sales-climb-for-first-time-since-2017/>

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INDUSTRY NEWS

Precious Metals Market News, continued from page 15

Rhodium

- **Rhodium price on the march again as demand from auto sector rises**
 - Rhodium prices are on the march again as OEMs ramp up their demand for the shiny, silvery metal commonly used in vehicles' catalytic converters. Since the start of 2022, rhodium prices have pushed up sharply, rising from \$14,250/Toz on January 4 to reach \$17,500/Toz on January 11 – the highest since September 2021
<https://www.mining.com/rhodium-price-on-the-march-again-on-rising-demand-from-auto-sector/>

Precious Metals Recycle

- **2022 Needs to Be the Year that Technology Recycling Goes Mainstream**
 - At the 2021 U.N. Climate Change Conference, coal, methane and CO2 took the spotlight. Yet there was a deafening silence around the fastest growing solid waste stream in the world—technology. In 2019 alone, the world generated 53.6 million tons of waste, which is approximately 16 pounds per person. Only 17% of that e-waste got recycled. The rest of it was shipped out of sight to a landfill or sent offshore, often in the developing world, where mercury, arsenic and lithium are left to seep into the ground and data-bearing devices with sensitive information can be found and exploited.
<https://www.msn.com/en-us/news/technology/2022-needs-to-be-the-year-that-technology-recycling-goes-mainstream-opinion/ar-AASHDoX?>

Please see our IPMI.org website [IPMI & Industry News](https://www.ipmi.org) for a complete listing of news articles relative to the world of precious metals.



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The Palladium Challenge

Presented by the IPMI Educational and Scientific Foundation
and Sponsored and Promoted by Nornickel



NORNICKEL



Palladium is one of the Platinum Group Metals (PGMs), known for its catalytic capabilities and valuable properties. It is widely utilized in the automotive industry as an essential part of catalytic converters. Palladium is also used in: chemical and petrochemical catalysts; electronic devices production (especially MLCC's and connectors); as well as dental restoration and jewelry.

Nornickel is the global leader in palladium production. As the largest palladium producer, Nornickel feels responsible for developing the palladium market and promoting metal use in new areas. That is why Nornickel would like to encourage professionals worldwide to take a more detailed look at palladium and its potential applications in their research areas. In order to do that, Metal Trade Overseas SA, affiliate of Nornickel, in collaboration with IPMI, launches the "The Palladium Challenge", is an award granted to individuals and institutions who come up with the most promising technological solutions that may generate substantial demand for palladium.

Areas of Research

Projects from any field of science and technology can participate in the competition. However, palladium applications in the hydrogen economy (including hydrogen storage and cleaning films, catalysts for electrolyzers and fuel cells, and hydrogen sensors), battery technologies (with palladium as a battery energy density booster), sensors, industrial catalysts or alloys are seen as the most promising areas of the research.

Who Can Participate

Participation in The Palladium Challenge is not restricted. All laboratories, universities, individual scientists, engineers, and entrepreneurs with a great idea are encouraged to participate.

The Palladium Challenge Criteria

The winner(s) will be determined by a panel of renowned experts in science and technology and the PGM market. The panel's decision will be based on the following key criteria:

1. **The scientific novelty of the proposed project**
2. **Economic feasibility and sustainability of the project**
3. **Minimum annual palladium demand in thousands of troy ounces generated by the proposed application**

Intellectual Property Rights

Subject to the Official Rules of the Palladium Challenge, participants retain any intellectual property, if any, in the submissions and assume all responsibility for any protection thereof. IPMI assumes no responsibility or liability whatsoever for any publication, use or dissemination of any submissions in connection with the Palladium Challenge.

Participant Registration and Official Rules

Participation in the Palladium Challenge is subject to the Official Rules and Participant's agreement to be bound by the terms thereof.

IPMI Disclaimer

IPMI is committed to serving its members and supports education and the sustainable and environmentally responsible expansion of the use of the precious metals in all applications. Subject to the terms of the Official Rules, IPMI makes no representations or warranties regarding the results of the Palladium Challenge and shall remain free and clear of any liability in connection therewith.

The Palladium Challenge Awards

1st place – US\$200,000

2nd place – US\$100,000

3rd place – US\$50,000

Winners to be selected by September 2022

Register

To register, click on the palladium element symbol below. Your completed proposal must be submitted to IPMI by May 31, 2022.

Click Here to Register

PALLADIUM

Pd

46

**Nornickel retains the right to make changes to the awards and/or decline to grant any specific award
In the event the Panel finds that no submission meets the contest criteria.**

The Future of Gold 2022



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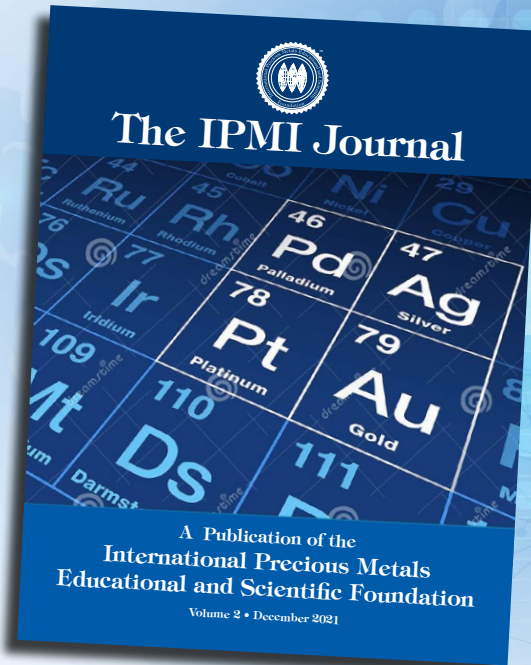
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Contact mail@ipmi.org for details.



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	Feb 8-9	Annual Legislative and Public Affairs Conference • Washington, D.C.
	Mar 1-3	IPMI Winter Meetings • Hyatt Regency Grand Cypress • Orlando, FL
	Apr 7	Gold Seminar • New York, NY CANCELLED
	Jun 11-14	46th Annual Conference • Hyatt Regency Grand Cypress • Orlando, FL
	Sep 12-16	Platinum Week • New York, NY