

Precious Metals News

A Publication of the International Precious Metals Institute (850) 476-1156 • Fax (850) 476-1548 • E-mail: mail@ipmi.org • www.ipmi.org

Volume 42, Number 10



European Chapter of the IPMI Annual Meeting & Seminar:

"8 Precious Metals"

November 12th - 13th, 2018 • Hilton Hotel • Budapest, Hungary



Already more than 115 registered participants! Registration fee: ca. 488 EUR, including 2 lunches, cocktail & dinner (discounts available for European Chapter & IPMI members, please contact us).

For registration, more details on the event and hotel booking, please visit www.ec-ipmi.org or contact us by email at officers@ec-ipmi.org. Last rooms are still available but not guaranteed anymore.

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43rd Conference Call for Papers

The IPMI 43rd Conference will be held at the Peppermill Resort in Reno, Nevada, June 15-182018. Our Technical Program, following the format for 2018, is restructured to allow for a more scientific and informative approach and at this time we are officially submitting a Call for Papers.

- Potential Speakers Must Submit Abstract to IPMI by January 31, 2019
- Abstracts will be Vetted by the Technical Chairs and Selected Speakers Confirmed by March 1, 2019.
- Any papers that are "Marketing Oriented" will be assigned to the New Technology: What's on the Horizon session

Topics for Papers

- Sampling and Analysis
- Hedging/Finance/ Market Analysis
- Environmental/Legal/Regulations/Insurance
- New Technologies
- Mining
- Security

Please submit your abstract including Title by **January 31**, **2019** to mail@ipmi.org

PATRON 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.

PATRON PROFILE

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.

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 at your fingertips.



Heraeus Precious Metals

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













Capabilities

The combination of state-of-the art equipment using leading edge technology and our highly trained, knowledgeable staff allows us to process material for **Diverse** industries.

Environmental Footprint

We are committed, responsible stewards of the environment. Our facilities are **Zero Discharge** and feature the most sophisticated pollution control systems in the industry.

Financial Strength

Our **Strong Financial Position** and direct relationships with several worldwide market leaders allow us to flawlessly execute your transactions. We offer a variety of settlement options to meet your specific pricing and hedging requirements.

Results

A singular focus on your bottom line drives us to use the **Optimal** refining processes every time. Partner with us for transparent, timely and accurate settlements, coupled with superior customer service.





2018 Annual Conference Survey What Matters to You

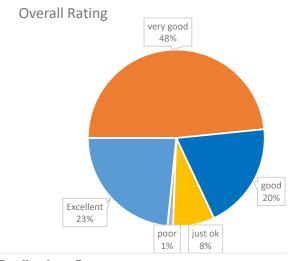
By Larry Drummond, Executive Director of the IPMI

The 2018 conference was a little different from the previous one. We had fewer presentations, we changed the structure from concurrent to consecutive sessions, we started the sessions and members meeting a little later, and we added a couple of new features. One was a podium discussion called "Beverage Break with the Experts", another was called "New Technology - What's on the Horizon".

The new session structure and all the other ideas are the work of a group of members who championed some changes after the 2017 conference. The Marketing Committee was born. They had a common goal: the 2018 conference should be different. They met regularly, brainstormed ideas, discussed various scenarios and options and decided what the 2018 conference should look like.

Instead of guessing how the changes at the conference were received, all 511 attendees were invited to give their feedback and opinion through a 15-question survey via SurveyMonkey.

We want to thank all 185 conference participants who responded (36%). In general, your responses re-enforced our efforts to make the conference a success. More importantly, your suggestions will help us continuously improve the IPMI experience for future conferences.



Feedback on Responses

One of the big questions was about the new session structure, concurrent vs. consecutive, but also how many people attended sessions. Based on the survey result, ¾ of the respondents were in favor of the consecutive session structure.

- 60% of responders attended a session
- 64% of responders thought the number of presentations were just right
- 30% would like to see more presentations
- The quality of the presentations was highly rated
- Excellent 15% very good 45% good 30%

Suggestions

Many suggestions for future improvements were made. We are in the process of incorporating some of them into the June 2019 conference program. Some key areas of interest were:

- Sampling and Analysis and Witnessing Services
- Security
- Catalyst and New Technologies
- Mining

The majority of responders would like to see more panel discussions. The overwhelming majority felt they had enough time to meet and network with customers, vendors, and delegates.

The two new sessions "Beverage Break with the Experts" and "New Technology: What's on the Horizon" were well received and will be part of next year's program.

Planned Changes Based on Your Input

- Some sessions will be moved forward in our program
- Exhibitors' booths will be very centralized to allow for more exposure and networking. We hope to attract more visitors and a "passport" program.
- A Saturday morning golf outing is being planned for Reno 2019.
- A Pool Party reception will also be held.
- A separate 1 ½ hour entertainment event will be held on Sunday night.
- A separate and concurrent open bar reception will be held on The Terrace for those who wish to network.
- We will make attendee lists available earlier and more frequently.

Again, many thanks to everyone who contributed to our survey. The feedback we received for the 2018 conference was a great help and we were happy to hear that most people were very satisfied with the conference. Without the contribution, support and effort of many members such an outcome wouldn't have been possible.

Looking forward to seeing you all in Reno.



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.

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:

GLOBAL METALS &
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ws.enguiries@ahkgroup.com











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

2019 IPMI Premier Industry Awards

The IPMI Awards Committee is now seeking nominations for the 2019 Premier Industry Awards!

The following three (3) Awards will be presented during the 43rd Annual International Conference to be held June 15-18, 2019 at the Peppermill Resort in Reno, Nevada.

The first award is the **IPMI Jun-ichiro Tanaka Distinguished Achievement Award**. It recognizes career contributions to the advancement of the precious metals industry, be it technological, economic or management. The award includes a \$5,000 prize and complementary registration at our International Conference.

The second award is the **IPMI Henry J. Albert Award**, sponsored by BASF Corporation. It recognizes outstanding theoretical, experimental or engineering contributions to the science and technology of precious metals. The award includes a \$5,000 prize and complementary registration at our International Conference.

The third award is the **IPMI Carol Tyler Award**. It recognizes the achievement of a woman in the precious metals industry, precious metals academia or graduate student in precious metals research. This includes a \$5,000.00 prize and complimentary registration at our International Conference.

Please go to the IPMI website, http://ipmi.org/awards/index.cfm for short videos describing our awards and scholarships as well as for lists of past award recipients.

Send a letter of nomination along with curriculum vitae, if appropriate, a list of contributions and achievements and any other supporting documentation in one pdf file by email to: mail@ipmi.org Please put "Premiere Award Nomination" in the subject line on the email.

Nominations should be mailed **no later than January 20, 2019.**

2019 IPMI Student Awards

To support **research focusing on precious metals**, IPMI awards scholarships worth more than US \$100,000 every year. These scholarships include:

• IPMI Student Awards

Up to 3 IPMI-sponsored Student Awards in the amount of up to US \$20,000 each, and US \$5,000 for one of the student advisors.

• IPMI Corporate Student Awards

Several corporate-sponsored Student Awards in the amount of US \$5,000 each sponsored by some of the most prestigious companies in the precious metals industry.

Eligibility

Students applying for an IPMI Student Award have to be enrolled in an academic training program (Masters, Ph.D., Post-doctoral research) performing fundamental or applied research focusing on any precious metal (Au, Ag, Pt, Pd, Ir, Rh or Ru), be it on the scientific side (catalysis, material, mining, refining, etc.) or on the commercial side (finance, marketing, etc.). Their expected graduation date must not be within the same year in which the award is received (e.g. an award winner of 2019 may not graduate before 2020).

Documents

The following application documents are required:

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

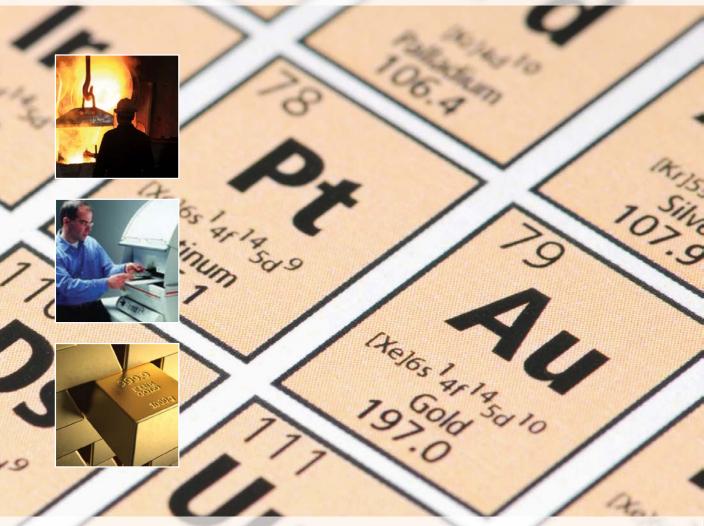
Students are welcome to add any other document they deem pertinent to their application (e.g. published papers, extended research details, academic grades, etc.).

Please submit one single pdf file containing all required documents; the file name should be as follows: "student last name student first name-academic institution" (for example: Smith John-Columbia University USA).

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

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Alex Stewart International provides inspection, weighing, sampling and assay services for the global precious metal industry, including all major and reputable UK, USA, Asian, African and European precious metal refineries.

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All PM enquiries, please contact Mr. Andy Smith **E:** andy.smith@alexstewartinternational.com **www.alexstewartinternational.com**

IPMI® NEWS

Student Awards, continued from page 7

Student Award Winners

The student award winners are expected to attend IPMI's Annual Conference in Reno, NV (USA) in June 2019, present their work in the Student Research Session and join the conference events. They will have many opportunities to meet and interact with people from the precious metal industry.

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

Timeframe

Date **Action** 20 January 2019

Deadline for submitting application 31 March 2019 Award winners will be notified 15-18 June 2019 Conference in Reno, NV

Contact

For questions or for additional information, please contact: mail@ipmi.org

Members Promoting the International Precious Metals Institute Initiative

A newly launched initiative of IPMI is underway approaching industry groups to increase their presence in the Institute.

Zbigniew (Zibi) Milkiewicz of Refinery Group in Poland and a member of IPMI's Marketing Committee, and Dr. Rene Wiskemann of Umicore, Germany, both long-term members of IPMI, took the opportunity at the International Conference for Catalyst Producers in Gdansk, Poland, to present the Institute to attendees.

From their own experience, Zibi and Rene know about the benefits and the broad array of seminars, educational events, and networking opportunities the Institute offers. All industries that directly or indirectly work with precious metals can be found here. To mention just a few, our member companies are refiners, miners, bankers, laboratories, IT specialists, insurers, security people, logistics experts, jewelers.

Smaller groups, special committees, councils, and regional

chapters, keep IPMI members informed and educated about specific current topics, regulations, and best practices.

Once a year, IPMI members gather to learn, meet, network, and discuss business with old business partners and/or establish new relationships.

If you have a question about the best software for precious metal management, you will find your answer there. If you have a health or safety issue, several experts will be present to draw from their expertise. If you look for a new refiner, insurance company or logistics partner, you have several to choose from.

IPMI members benefit from the many years of experience and expertise that can be found in the Institute.

To learn more, please visit www.ipmi.org or send an email to mail@ipmi.org. For Upcoming Events: please see the last page of this newsletter.



REPRESENTATION & ANALYSIS



IPMI® CHAPTER NEWS

"8 Precious Metals," continued from page 1

PROGRAM:

Monday, November 12

10:00 European Chapter - General Assembly - ENDRE ROOM

11:00 European Chapter - Board of Directors Meeting (Directors of the Chapter only)

12:00 LUNCH, RESTAURANT, GROUND FLOOR

13:30 OPENING - BALLROOM A+B
Theo Keuter, President of European Chapter

13:45 Stephen Forrest, SFA

Mining - Redefining competitive PGM supply

14:15 Tony Dobra, Baird & Co. General Market trends in Rh

14:45 Jonathan Butler, Mitsubishi Corp.

Ru - Industrial prospects for last year's best performing precious metal

15:15 COFFEE BREAK, BALLROOM FOYER

15:45 Jonathan Butler, Mitsubishi Corp.

Ir - Can prices prove as resistant as its physical properties

16:15 Bodo Albrecht, BASIQ
Os – the precious metal we don't talk about

16:45 CLOSING

18:00 WELCOME DRINKS, CORVINA ROOM

19:00 IPMI EUROPEAN CHAPTER ANNUAL DINNER, RESTAURANT GROUND FLOOR

Tuesday. November 13

BALLROOM A+B

09:00 Laura Cole, Johnson Matthey Plc.

Pd – Forecast focused on use in Catalysts

09:30 Semih Sunkar, Dowa

Customizing the Pt Recycling: A Future Outlook

10:00 Serge Gambs , SG2 Consult Au - Gold in 2018

10:30 COFFEE BREAK, CORVINA ROOM

11:15 Juniu Liang, Metals Focus Future demands for Ag

11:45 Neil Harby , LBMA From Here To Integrity...and Beyond

12:15 LUNCH, RESTAURANT GROUND FLOOR

PATRONS:

affinia Metals Johnson Matthey
Alfred H Knight Malca-Amit
ALS Inspection UK Metalor Technologies

Aurubis AG R.S. Bruce (Metals & Machinery)

Brink's Safimet SPA Heimerle + Meule Scotiabank IKOI Techemet Alex Stewart International Allg. Gold-und Silberscheideanstalt Arc Metal AB Baird & Co. Degussa Sonne/Mond Goldhandel Hensel Recycling Mairec
Mastermelt
PAMP
Royal Mint
Schneider + Cie
SGS Group Management
Valcambi

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Silver Sponsors









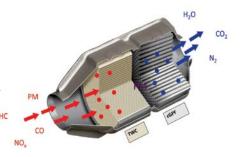


IPMI® NEWS

International Precious Metals Institute



April 4-5, 2019 Atlanta Airport Marriott Hotel Atlanta, Georgia



Auto Catalyst & Fuel Cell Seminar

Regulations • Emission Control • Recycling Fuel Cell Technology • PGM Supply & Demand



IPMI® NEWS

ERAC Meeting Held October 16th

By Mike Riess and Chris Bryant, Co-Chairs

The Environmental and Regulatory Affairs Committee held it's fall meeting at BASF headquarters in Iselin, New Jersey. Turnout for ERAC was the best ever, with about 30 attendees.

Chris Bryant of Bergeson Campbell needed no introduction because he has been attending ERAC meetings for six year. He has provided leadership on environmental questions from the outset. So I was pleased to announce he would be our new co-chair as Larry Drummond's replacement.

Chris detailed the recent happenings in Washington DC—how difficult it is for Federal agencies in general and EPA in particular to provide their mandated services in the face of budget and staff cuts. The early executive order to drop two old regulations for every new one has been problematic in updating regulations.

Mark Hanna is Chief Marketing Officer of the Richline Group, a Warren Buffett Company. Mark gave us an update on where we stand on the "Made in USA" issue. ERAC and Richline have been pushing to change the "all or virtually" standard of materials contained in a product to "substantial transformation." (Let me know if you'd like a full picture.)

Mark also described a joint experiment that Richline and Asahi are conducting to import gold from the Democratic Republic of Congo. The objective is to establish a step-by-step procedure that will satisfy the Dodd Frank Section 1502 conflict mineral requirements. This has yet to be accomplished in gold. The transaction is being tracked and controlled through IBM's block chain software.

Brian Ledgerwood of the International Trade Administration and Department of Commerce gave an in-depth presentation on the various tariff negotiations in which the US is involved. He detailed the Section 301 actions to make the United States whole in the face of China's technology transfer abuses. .

In my talk on AML regulatory matters, I discussed three new developments: The unique application of human rights violations as a predicate crime for money laundering. (I believe Elemetal was the first.)

The vital role of the new automated customer due diligence programs. And the shift in FinCEN's emphasis from laundering money to laundering value and the affect on precious metals transfers

The BASF facilities and venue couldn't have been better or more convenient. And the luncheon sponsored by Metallix was terrific.

ERAC has a record if over 25 years of success representing IPMI and interfacing with Government agencies. The work is fascinating, and we have saved the industry millions of dollars. Please let me know if you'd like to learn more about it. We would certainly welcome your participation.



Sandra Arrants Marks 20 Years of Service as IPMI's Administrative Manager

By Christopher Jones, Past President

October 1st of this year marked 20 years of service for our Sandra Arrants as IPMI's Administrative Manager. It's fair to say that I've been involved with IPMI for many years myself and cringe to think it goes back to sometime in the early 90's. I actually can't even remember a time without Sandra being with IPMI or perhaps I simply don't want to.

Sandra likes to say she came with the furniture. When our Executive Director at the time, Larry Manziek was relocating the IPMI Headquarters to Pensacola, Florida, he started by visiting some of the available leased offices spaces in the area and came across our present location. At the time of that visit, it was being occupied by a failing luxury home builder. The owners of that company had split and charged Sandra to deal with the chaos of upset clients and vendors. While Larry was sizing up the office space he couldn't help but overhear Sandra on the phone trying to assist some very angry and I imagine rather difficult people. As soon as Sandra was free she turned to Larry and asked, "and what could I help you with?" Larry must have heard something he liked because he told her he was interested in buying her desk and wanted to know if she would like to come with it. The rest is, as they say, history.

I can't say for sure what attribute Larry had keyed on. Perhaps it was her calm and poised demeanor under pressure or maybe her attention to detail. For the longest time I thought I had a pretty good sense for the scope of Sandra's role in IPMI but it wasn't until I joined EXCO that I realized how little I knew. For example, I had no idea how much support is needed each year to coordinate a number of the travel visas to enable some of the students and delegates to attend Conference.

Technically, Sandra has worked with six Executive Directors during her tenure and they all had the same impression, that you couldn't find a more caring and dedicated person for IPMI.



Our current Executive Director Larry Drummond says, "The depth of Sandra's institutional knowledge is second to none and has been a real asset to my coming onboard."

Alan Kaye who has worked closely with Sandra over the last 20 years points most notably to Sandra's seemingly effortless ability to "work magic here and make things happen." Highly organized, experienced, and a 'can do' attitude are just a few of the things that make working with Sandra such a pleasure.

Sandra lives in Pensacola with her family, is a trivia expert and is also a published author of murder mystery books.

On behalf of IPMI, I would like to invite all of you to join myself and Executive Director, Larry Drummond in congratulating Sandra on this milestone.

Where are They Now?



Christine Laramy, 2017 IPMI Student Award Winner

Christine Laramy reports: She recently graduated from the PhD program at University of Texas, and will shortly start a position with Latham & Watkins (in Chicago) as an Intellectual Property and Life Sciences Analyst.

We goofed

Please note an incorrect name was portrayed in the Europe Chapter Seminar Program. The correct name of the company mentioned in reference to one of the Speakers is BASIQ. We regret the error.



David Primer, 2016 Sabin Metal Ron Bleggi Student Award Winner

Thanks to the support and funding from the IPMI, David was able to complete his doctorate work on iridium / nickel dual catalysis for the formation of carbon-carbon bonds. Under a completion fellowship from the University of Pennsylvania, he successfully defended his thesis in the summer of 2017, before continuing on into the pharmaceutical industry. In the fall of 2017, he accepted a position in the process group at Celgene Corporation. He continues to write and publish papers while working on designing new routes for drugs in both the cancer and inflammation space.

IPMI® Calendar

2018	Nov 12-13	IPMI Europe Chapter Seminar • Hilton Hotel, Budapest, Hungary
2019	Feb 5	SAC Meeting • Marriott Hotel, George Bush Airport, Houston, TX
	Feb 6	PRC Meeting ● Marriott Hotel, George Bush Airport, Houston, TX
	Mar 18-20	SECAM Meeting • Marriott Harbor Beach Hotel, Ft. Lauderdale, FL
	Apr 4-5	Auto Catalyst & Fuel Cell Seminar ● Atlanta Airport Marriott Hotel, Atlanta, GA
	Apr 17	NY Metro Chapter Spring Seminar • New York, NY
	Jun 15-18	IPMI Annual Conference ● Peppermill Resort, Reno NV