



A virtual conference would have been an unfathomable concept in 1871, the year that TMS's parent society, The American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME), held its first annual gathering.

For 149 years, TMS carried on the tradition of that first in-person conference where research and ideas could be shared among like-minded professionals. At the TMS 2021 Virtual Annual Meeting & Exhibition (TMS2021 Virtual), the 150th anniversary meeting, the Society demonstrated that the spirit of that first event would continue—even if the format had to change.

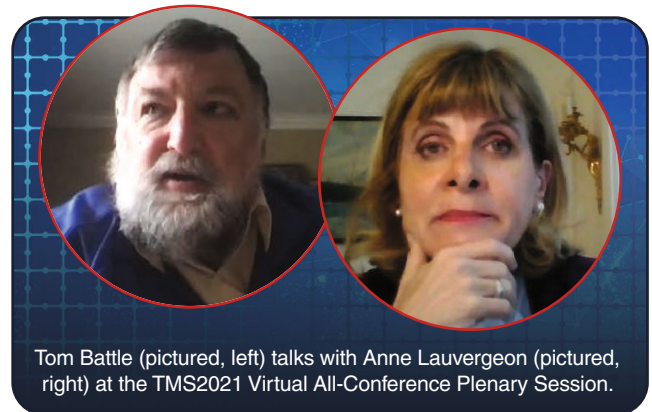
On March 15–18, TMS2021 Virtual marked the first fully online installment of the TMS Annual Meeting & Exhibition. In many ways, the Society kept with the tradition of previous years by offering scientists and engineers a recognized forum for sharing their work, a broad selection of technical symposia and presentations to view, and opportunities to initiate conversations and make connections with others working in their field.

There were some necessary changes, of course. In place of cocktail receptions in conference meeting rooms, TMS2021 Virtual featured smaller gatherings in virtual networking spaces. Instead of stepping up to the microphone to ask questions of distinguished speakers, attendees engaged in live online Q&A sessions with presenters. In the exhibit hall, conversations shifted from bustling show floors to one-on-one screen chats. Despite all these changes, TMS2021 Virtual remained a place that brought people together.

“Despite all these changes, TMS2021 Virtual remained a place that brought people together.”

Throughout this article—and in two other articles published in the June 2021 issue of *JOM*—you'll gain a glimpse of this year's meeting through key statistics and event summaries that show how TMS2021 Virtual retained the key elements of a TMS Annual Meeting & Exhibition. Then look forward to TMS2022 and beyond to see where we'll be meeting once we can all gather in person again.

All-Conference Plenary Session



More than 200 attendees from around the world tuned in live to hear Anne Lauvergeon deliver the TMS2021 All-Conference Plenary, “New Methodologies: Producing High-Quality Metal from Low-Grade Ores,” on Wednesday, March 17.

2020 TMS President Tom Battle introduced Lauvergeon, describing her as a person known for her leadership in pushing the boundaries of technology and innovating business practice in her field. She is founder/CEO of ALP; chair, École des Mines de Nancy; and former CEO of Areva S.A. She is also board chair of the start-up company IB2, which is pioneering an alumina production method that Lauvergeon called a potential revolutionary innovation with far-reaching implications.

The traditional way to produce alumina from bauxite, she explained, is the Bayer process, which results in significant waste known as red mud. It also requires transporting high-quality ores over long distances to refinery sites.

She described the IB2 technology, which can produce high-quality alumina from low-grade bauxite, as a green solution that addresses these problems. “What was considered mine waste using the normal process can be considered ore with this technology,” she said.

During a Q&A session with Battle following her presentation, she explained that this technology can be added on to the traditional Bayer process. “You have nothing to change to the existing facility or installation,” Lauvergeon said.

After piloting the process at two locations, Lauvergeon said the technology is now ready to commercialize.

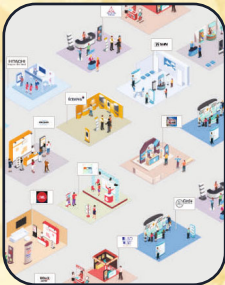
TMS2021 VIRTUAL

By the Numbers:



2,967

Total Number of Attendees Registered for TMS2021 Virtual (as of March 31, 2021)



20

Number of Companies that Displayed Booths in the Virtual Exhibit Hall

2021 AWARDS



192

Individuals Honored with 77 Awards Presented During TMS2021 Virtual

Learn more about these awards and their recipients at awards.tms.org.

Ni-Co 2021 at TMS2021 Virtual



The Fifth International Symposium on Nickel and Cobalt (Ni-Co 2021) was held as part of TMS2021 Virtual. This special four-day symposium convened operators, engineers, and researchers to exchange information about all aspects of current processing technologies for nickel and cobalt, as well as emerging technologies for both metals.

The symposium opened with the Ni-Co 2021 plenary session on Monday, March 15, featuring invited presentations from five speakers. (For a closer look at the plenary session, see the article, “Keynotes and Featured Talks at TMS2021 Virtual,” in the June 2021 issue of *JOM*.) Additional sessions were held on the topics of batteries; hydrometallurgy; pyrometallurgy; and market, materials, and mineral processing.

Ni-Co 2021 was organized by TMS, with sponsorship from the TMS Extraction & Processing Division, the TMS Pyrometallurgy Committee, and the TMS Hydrometallurgy and Electrometallurgy Committee. It was co-organized by the Metallurgy & Materials Society of the Canadian Institute of Mining, Metallurgy and Petroleum. The Ni-Co 2021 Organizing Committee was led by Corby Anderson, Colorado School of Mines.

TMS2021 Proceedings

Eleven proceedings volumes, including *Ni-Co 2021: The 5th International Symposium on Nickel and Cobalt*, are now available for purchase through the TMS Bookstore in both hard copy and electronic formats. *Light Metals 2021* and *Magnesium Technology 2021*, the latest editions in TMS’s long-running proceedings series, are also available, along with collections from six additional symposia.

The final volume in the collection, the *TMS 2021 150th Annual Meeting & Exhibition Supplemental Proceedings*, features a compilation of papers gathered from a variety of TMS2021 Virtual symposia.

Visit www.tms.org/Bookstore to view a full listing of available TMS2021 Virtual publications. TMS members should log in to receive a 40% discount off hard copy purchases.

TMS Installs New Leadership



Ellen Cerreta, 2021 TMS President (pictured, left) and Tom Battle, 2020 TMS President (pictured, right).

Each year, the TMS Annual Meeting & Exhibition marks the transition to the new year's TMS president. At this time, several members of the TMS Board of Directors end their leadership terms and new directors begin their cycles.

Tom Battle began his term as TMS President on February 27, 2020—the final day of the TMS 2020 Annual Meeting & Exhibition in San Diego, California, which brought together more than 4,600 attendees.

“Less than two weeks after the end of the conference, our world changed. New terms were introduced such as social distancing—rather the opposite of the business model that had been so successful in San Diego,” he reflected, in a speech at the 2021 TMS-AIME Awards Ceremony, held on Wednesday, March 17. Looking back on his year as TMS President, Battle noted the unique challenges the Society encountered, but also the way the community stood together, even while staying apart. “It has been an honor and privilege to lead TMS through the most extraordinary of years,” he concluded.

As Battle's presidential term came to an end, Ellen Cerreta of Los Alamos National Laboratory began her term as 2021 TMS President during TMS2021 Virtual. Cerreta also gave an address at the awards ceremony that acknowledged the challenges of the previous year and looked ahead to a brighter future.

“What has transpired since our last in-person TMS Annual Meeting in 2020 shouldn't be allowed to change what we are doing as a Society for the profession, even if it is likely—perhaps more than likely—to change the how, the implementation of that vision,” Cerreta said, reminding listeners of the strategic goals laid out in the TMS Aspires plan and how these will serve the profession well as the Society moves forward.

This change in leadership also included Jud Ready, Georgia Institute of Technology, moving into the role of 2021 Vice President. Ready will serve as TMS President beginning at the TMS 2022 Annual Meeting & Exhibition. Timothy Rupert, University of California, Irvine, also joined the TMS Board of Directors at TMS2021 Virtual, moving into the position of Programming Director.

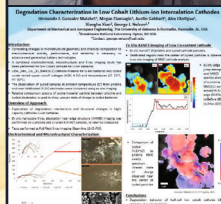
TECHNICAL SESSIONS and Proceedings



440
Technical Sessions
Held at 83
Symposia in 13
Topic Areas



2,493
Presentations
Given, including:



273
Poster
Presentations

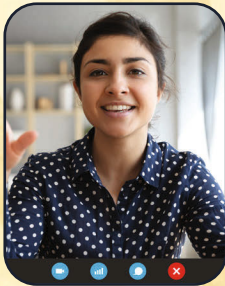


583
Student
Presentations

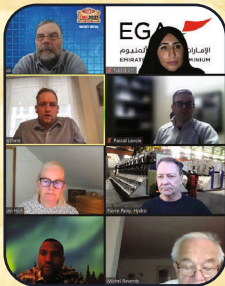


480
Manuscripts
Published in
11 Collected
Proceedings
Volumes

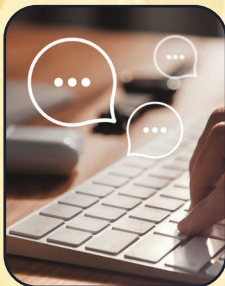
ATTENDEE ENGAGEMENT at TMS2021 Virtual



90,035
Total Views of On Demand Sessions (as of March 31, 2021)



1,082
Attendees Participated in Live Q&A Sessions and Networking Events



1,883
Direct Messages Sent Between Conference Participants

Future Annual Meeting Dates and Venues

For 149 years, the TMS Annual Meeting & Exhibition operated in-person meetings, and we plan to return to that model in future years. Mark your calendars now and plan to join us at these future venues:



Plans are already underway for the **TMS 2022 Annual Meeting & Exhibition**, which is now accepting abstracts for symposia planned by all five TMS technical divisions. TMS2022 will feature two co-located events: **Diversity in the Minerals, Metals, and Materials Professions 4 (DMM4)** and the **REWAS 2022** Symposium, which will focus on the theme of Developing Tomorrow’s Technical Cycles. In addition, TMS2022 will feature the popular **Bladesmithing Competition** and continue the celebration of the Society’s **150th Anniversary Year**.



Visit www.tms.org/TMS2022 to learn more and to submit your abstract by July 1.

