

## CELEBRATING OUR COMMON LEGACY: 150 YEARS OF AIME AND TMS

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Above: Attendees and guests of the AIME 50th Anniversary Celebration, held at the Institute's September 1921 meeting in Wilkes-Barre, Pennsylvania.

Many *JOM* readers have seen the story before: on May 16, 1871, 22 mining engineers gathered to discuss technical papers in Wilkes-Barre, Pennsylvania, to form the American Institute of Mining Engineers, which would eventually become the American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME) that we all know today. But in 2021—the Institute's 150th year—this story bears repeating. In several articles to be published over the course of the next year, TMS and *JOM* will celebrate our shared history with AIME; our common legacy.

While much has changed in the last 150 years—within

Technology (AIST); the Society for Mining, Metallurgy, and Exploration (SME); and the Society of Petroleum Engineers (SPE).

If you are unfamiliar with our history, you may be wondering, “Why exactly does TMS celebrate the anniversary of AIME?” TMS's roots date back to 1918 as the Institute of Metals Division of AIME, which later became the separately incorporated Society that we all know today—but more on that later.

In those formative years, the Institute operated under two main purposes: “First, the more economical production of useful minerals and metals. Second, the greater safety

### Help Us Celebrate Virtually



As the TMS 2021 Annual Meeting & Exhibition (TMS2021) has become TMS2021 Virtual, so has our AIME 150th Anniversary Celebration. While we are still planning some in-person elements for TMS2022, as well as the annual meetings of the other AIME member societies, here are a few ways you can celebrate and connect during our anniversary year:

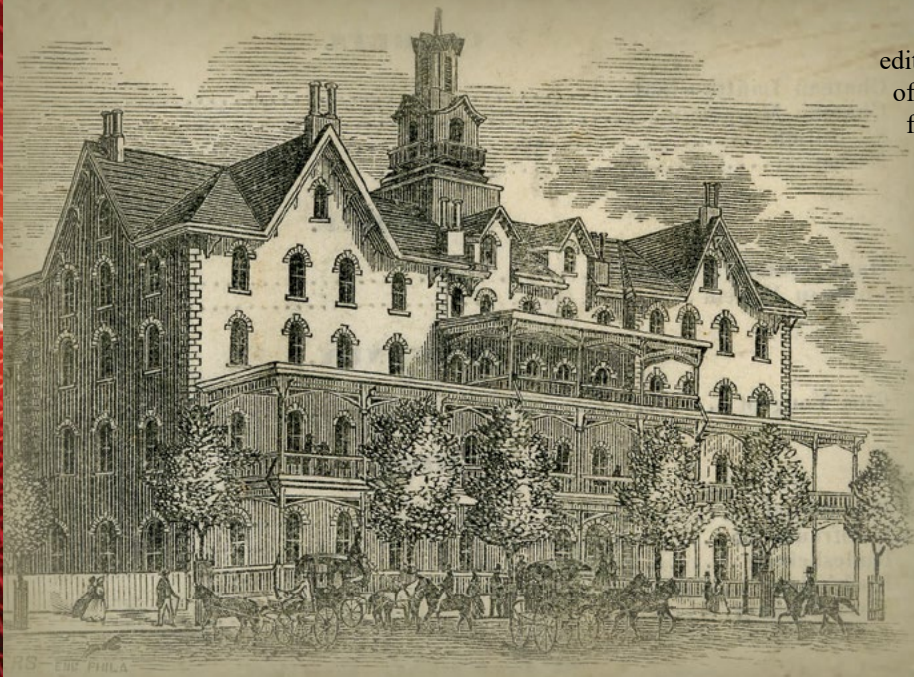
- Visit the TMS History Timeline online, where you can read about major milestones and view photos from our shared history.
- Download the digital AIME History Walk companion booklet.
- Keep reading *JOM* all year long for more articles celebrating the history of TMS.
- Explore the AIME Oral Histories, many of which feature prominent TMS members.

You can access all of these activities and more on the Our History page of the TMS website:  
[www.tms.org/OurHistory](http://www.tms.org/OurHistory)

our Society, the professions, and the world—one thing remains the same. Those 22 engineers formed AIME for a single purpose: to gather. To collaborate. Connecting may look a lot different these days, but this purpose still drives us forward at TMS, AIME, and the three other member societies, the Association for Iron and Steel

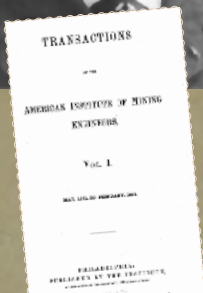
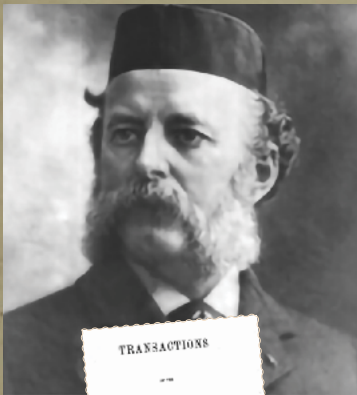
and welfare of those employed in these industries.”<sup>1</sup> At that first meeting in Wilkes-Barre, members presented technical papers, visited local mines and metallurgical works, and established rules and requirements for membership and electing officers. These activities laid the groundwork for AIME to flourish and set the precedent for the way





Pictured here is the Wyoming Valley Hotel, where AIME was founded at its first meeting in Wilkes-Barre, Pennsylvania. (Photo credit: AIME)

that TMS still functions today, as organizing professional meetings is a cornerstone of who we are as a Society.



Pictured here is Rossiter W. Raymond, a leader of the Institute who ensured excellence in the *AIME Transactions*, first published in 1873. (Photo credit: AIME)

Shortly after this initial gathering, AIME began a tradition of excellence that continues to this day through its member societies: the publication of technical papers. In 1873, the first volume of *AIME Transactions* was published, covering topics such as geology, metal mining, ore dressing, and nonferrous metallurgy. Under the 40-year leadership of Rossiter W. Raymond (a founding member, 1873–1875 President, and 27-year Secretary of AIME) the *Transactions* volumes acquired an esteemed reputation, known “not only for their excellent physical format and outstanding

editorial standards but for the superior quality of their content.”<sup>2</sup> Though the frequency and formats may have transformed over the years, TMS currently publishes six technical journals, in addition to a number of conference proceedings, textbooks, studies, and other publications.

The Institute experienced exponential growth in its membership over the next decades, expanding its geographic reach, founding the Women’s Auxiliary to AIME in 1917, and witnessing the diversification of engineering technologies and professions. In 1911, AIME recognized the need to establish local sections, starting with New York, Boston, and Spokane. This allowed for “more frequent meetings, enabling technical exchange and social contact for all members, no matter how remote their location.”<sup>1</sup>

These local sections paved the way for technical committees, beginning with the formation of the Iron & Steel Committee in 1912, which laid the foundation for professional divisions. In 1918, AIME invited the American Institute of Metals (AIM) to combine organizations which created the Institute of Metals Division, AIME’s first professional division. In light of this merger, the organization approved a name change to the American Institute of Mining and Metallurgical Engineers (keeping the abbreviation AIME) at its February 1919 Annual Meeting.

The next 30-odd years saw AIME continue to evolve, with the addition of new divisions, student and junior membership categories, awards and honors for professional excellence, new journals, and more meetings. After World



This plaque honors the merger of AIM, the American Institute of Metals, with AIME, creating the Institute of Metals Division. (Photo credit: AIME)

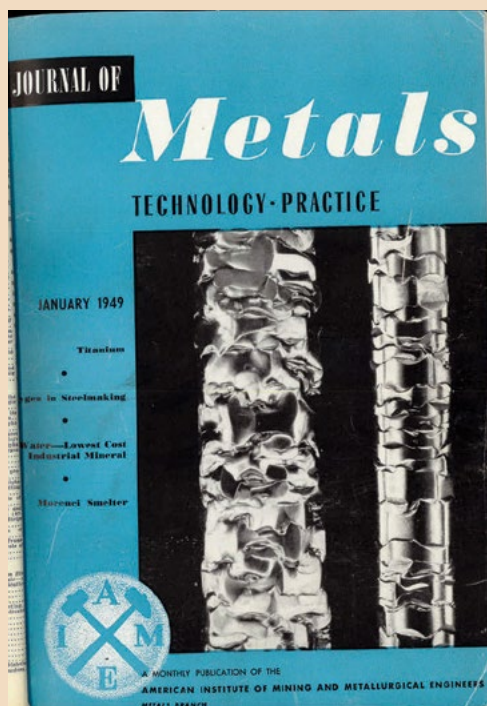
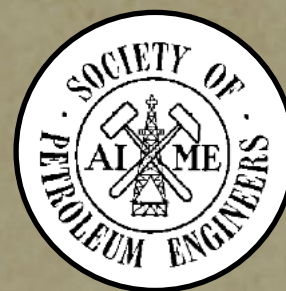


War II, members began to call for a reorganization of the Institute to more closely align with their interests and needs; Joe Alford noted in his *AIME Centennial Volume* that, “a viable organization cannot remain static, however, and the time came for AIME when the central Institute with various professional Divisions and Committees [were] no longer adequate to serve properly the diversity of technical interests of AIME members.”<sup>1</sup>

Responding to its members, the AIME Board formed a number of special committees to explore issues relating to greater autonomy for the divisions; publications; income, dues, and expenditures; and others. At first, it was decided to organize into three branches (Mining, Metals, and Petroleum) that would encompass the various existing divisions of the Institute. This, however,

presented administrative issues which led to the creation of the Long-Range Planning Committee in 1955. After a thorough investigation, the AIME Board of Directors approved a number of the committee’s recommendations at its February 24, 1957, meeting. The two most significant were:

1. Renaming the Institute the American Institute of Mining, Metallurgical, and Petroleum Engineers (again, keeping the AIME abbreviation)
2. Creating three Constituent Societies in place of the previously established branches:
  - The Society of Mining Engineers of AIME
  - The Metallurgical Society of AIME
  - The Society of Petroleum Engineers of AIME



## What About JOM?

Along with the reorganization into three separate branches in the late 1940s, the AIME Board established new monthly magazines for each branch. In January 1949, the Metals Branch published its first issue of the *Journal of Metals*. Initially, papers from the Metals Branch of AIME were published in a separate section of the *Journal of Metals*, but in November 1957 the Board approved a change to this model. Papers from *Transactions* would be published bi-monthly as a new journal: *Transactions of the Metallurgical Society of AIME*. (A precursor to today's *Metallurgical and Materials Transactions* family of journals.) In January 1989, the *Journal of Metals* was renamed JOM.

The cover for the first issue of the *Journal of Metals*, published by the Metals Branch of AIME, featured pure ductile titanium rods.



John C. Kinnear Jr., 1957 President, The Metallurgical Society of AIME (Photo credit: AIME)

John C. Kinnear Jr. became the first President of The Metallurgical Society, having just served as the AIME Extractive Metallurgy Division Chair. In a July 1989 *JOM* member profile, Kinnear reflected on his term as

president, during that crucial first year: “our first challenge was to establish order and direction. The next and biggest challenge was to establish some common interest and purpose which would be embraced by each of the Society’s divisions. Finding funding for our publishing initiatives was a problem as well. Fortunately, we were able to manage these issues through useful exchange and cooperation.”<sup>3</sup>

In 1974, a fourth Constituent Society, the Iron & Steel Society, was established as the AIME Board of Directors took action to “respond to the needs and wishes of its members as they change[d] with time.”<sup>4</sup>

Over the next decade, there was another call within the Constituent Societies for even further autonomy from AIME in an effort to reflect the changing needs and requirements of the professions and industries that the Societies served. In October 1983, the AIME Board approved a plan for decentralization, and at the 1984 Annual Meeting, the Board approved the separate incorporation of the Constituent Societies. The change was described in an issue of “TMS News” as follows: “By



## What About the TMS Foundation?

In 1993, the TMS Board of Directors established the TMS Foundation “to engage the finest young minds in pursuit of the design, development, and applications of materials for sustainable global prosperity by stimulating the dynamic evolution of our educational and professional infrastructures.” The first fundraising goals of the TMS Foundation centered around providing scholarships, leadership development programs, and education for students and young professionals. Over the years the Foundation has seen both peaks and valleys, undergoing a revitalization period beginning in 2013 to provide direction and re-establish a culture of giving within TMS.

Today, the TMS Foundation remains devoted to these original goals. It echoes the AIME commitment to developing the next generation of engineers and ensuring a legacy much larger than itself by supporting students and young professionals with meaningful financial assistance and impactful career-building experiences. Learn more about the TMS Foundation at [www.TMSFoundation.org](http://www.TMSFoundation.org) or by reading the May 2018 *JOM* article, “The History of the TMS Foundation.”





becoming a separate legal body, TMS will not be severing ties with AIME. On the contrary, TMS will continue to support and sponsor AIME programs and activities. This support will be in recognition of the founding role that AIME has played in establishing TMS as a professional engineering society.”<sup>5</sup>

This change established AIME as a Federation comprised of four Member Societies. AIME embraced its new role of supporting Board-level activities as defined by each of the Societies, ensuring its position as a leading engineering organization in the United States. Today, AIME builds on the important work of supporting its four Member Societies through facilitating information exchange and encouraging collaboration between the Societies and other engineering organizations.

Within TMS, separate incorporation presented new challenges, which were addressed by a new Long-Range Planning Committee (LRPC) task force. Harold Paxton, 1982 TMS President and head of the LRPC task force, explained that, “The Society has not moved decisively to assume its role in materials technology and applications...For TMS to remain a central society in the materials field, it must reassess and restructure its strategic objectives according to changes now occurring in metallurgy and materials.”<sup>6</sup> Among the LRPC’s recommendations were to broaden the technical range of materials coverage through two major changes: a name change and a new mission statement. The TMS Board approved the changes, finally becoming The Minerals, Metals & Materials Society. The new mission statement read:

TMS is a leading professional society dedicated to the development and dissemination of the scientific and engineering knowledge base for materials-centered technology. The Society will maintain its interest in minerals and metals while extending its interests into materials and materials-centered technologies. The focus for the Society is on the science and engineering association with the economics, extraction, processing, and fabrication, and the relationships between the structure and properties of materials. TMS disseminates information through regional, national, and international meetings, through publications, and through continuing education programs.<sup>7</sup>

While our mission statement today (“The mission of TMS is to promote the global science and engineering professions concerned with minerals, metals, and materials.”) has been simplified from its predecessor

## In Their Own Words

While looking back at TMS’s history with AIME, *JOM* asked two longtime leaders in the TMS community about their experiences with the Society. Here’s what they told us:



**Alex R. Scott**  
1973–2008  
TMS Executive  
Director, 2008  
AIME Presidential  
Citation Award  
Recipient

**JOM:** How did you first get involved in AIME or TMS?

**Scott:** I got involved with AIME when I was hired in 1969 as the meetings manager to plan for its 100th Anniversary Annual Meeting in 1971 in New York City.

**JOM:** What’s one early and/or favorite memory associated with AIME or TMS?

**Scott:** Working with several member volunteer committees to plan the 100th Annual Meeting and learning of their commitment to AIME and the value of membership organizations.

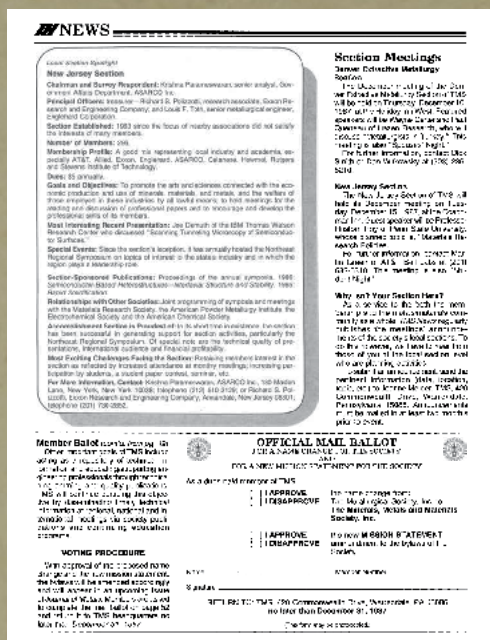
**JOM:** What was the Society like when you first started your employment? What has changed or remained the same?

**Scott:** AIME in 1970 was a centralized organization with three of the Member Societies located in New York City with SPE in Dallas, and all four Member Societies had a technical program at the combined Annual Meeting. AIME embarked on its decentralization plan the year or so after, with the Societies moving out of New York City by 1978.

**JOM:** Is there anything else that you would like to add?

**Scott:** I think people need to know the great value organizations like AIME bring to the welfare of our country and the betterment of the professions it serves for all its individual members.





Shown here is the official ballot from the November 1987 *Journal of Metals* on which TMS members voted to change the Society's name and adopt a new mission statement, as approved by the Board of Directors in 1988.<sup>7</sup>

above, neither are that far off from the early goals of those 22 mining engineers. So much has changed in 150 years. Yet, TMS still organizes meetings, supports education, publishes journals, and encourages excellence within the minerals, metals, and materials professions.

So please, join TMS and *JOM* during our 150th anniversary year, as we journey through this truly shared history to learn, understand, and celebrate our common legacy.

### End Notes

1. Alford, Joe B., "History of The Institute: One Hundred Years of AIME," *AIME Centennial Volume 1871-1970*, 238 (1971).
2. Parsons, A.B., "History of the Institute I 1871-1946," *Centennial History of the American Institute of Mining, Metallurgical, and Petroleum Engineers 1871-1970*, (New York, NY: The American Institute of Mining, Metallurgical, and Petroleum Engineers, 1971), pp. 8-135.
3. "TMS News," *JOM*, 41, 49 (1974).
4. Parsons, A.B., "Iron and Steel Society to be Established as Fourth Constituent Society," *Journal of Metals*, 26, 10 (1974).
5. "TMS News," *Journal of Metals*, 36, 1 (1984).
6. "News" *Journal of Metals*, 39, 49 (1987).
7. "News" *Journal of Metals*, 39, 49 (1987).

## In Their Own Words...



### Rob Wagoner

1997 TMS President,  
2003 AIME President,  
2003 TMS Fellow,  
2007 AIME Presidential  
Citation Award  
Recipient, Former  
Chair, TMS Foundation  
Board of Trustees

**JOM:** How did you first get involved in AIME or TMS?

**Wagoner:** First in a student chapter at The Ohio State University as an undergraduate, but more importantly and long-lasting, as a venue for my first professional talk outside of the university, at a Fall or Annual Meeting around 1975 in Cincinnati. It was fantastic to meet the greats from our profession that I had only heard of before. Scared to death to present to them, but also highly exciting!

**JOM:** What's one early and/or favorite memory associated with AIME or TMS?

**Wagoner:** Too many to choose from! In the 1980s there were memorable meetings in New York and New Orleans, with lots of dancing and socializing—with professionals and also with TMS staff. It is this informality within the TMS family that I think is its most valuable asset.

**JOM:** What has changed or remained the same about the Society since you first became a member?

**Wagoner:** A gradual change that I applaud is the election of younger and more energetic board members and presidents. That made a great difference in the tone of the whole Society from the formal and staid to more casual and flexible. One big change: the student mixer. For some years it dragged, but it has become highly enjoyable and an annual draw.

**JOM:** Is there anything else that you would like to add?

**Wagoner:** In recent years, I have been involved in volunteer service and governance, which is very rewarding and fun on its own. But some of the best and most memorable experiences are as a member and attendee.

