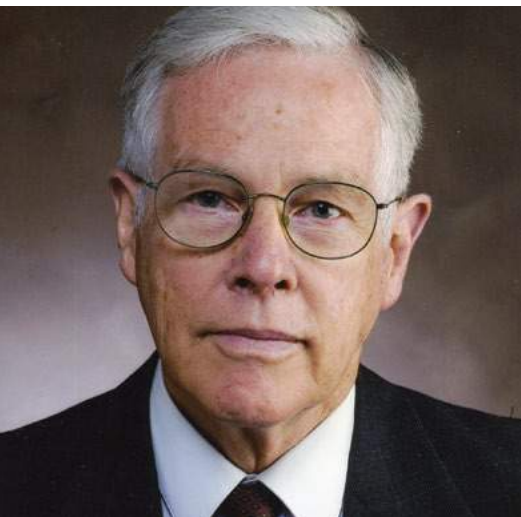


# FRANK M. WHEELER

## 45-YEAR LIFE MEMBER



### FRANK WHEELER

received his M.Sc. (honors) in metallurgical engineering from the University of Mining and Metallurgy, Ostrava, Czechoslovakia, in 1962, and his doctorate from the University of Mining and Metallurgy in 1992. He began his career in 1960 in the Department of Electrometallurgy at the University of Mining and Metallurgy. In 1970, he moved on to Hatch, where he began as a senior process engineer and moved through positions of increasing responsibility until his retirement as vice president, special projects, Iron & Steel. Since 2007, he has been an adjunct lecturer at the University of Toronto. Wheeler co-authored and co-edited *Metallurgical Plant Design*, has authored nearly 30 technical articles, and has four patents to his name.

Throughout my professional career I have been involved, one way or another, in bridging the gap between research and development and industry by applying the fundamentals to plant design and operations. To this end, the publications of the Iron & Steel Society (ISS) and the Association of Iron and Steel Engineers (AISE), first as separate journals and then combined in *Iron & Steel Technology*, are an essential source of insight into both theory and practice.

I first learned about AISE and ISS (then AIME) through their publications, in particular *Iron and Steel Engineer*. These journals were an important source of information for my master's thesis and subsequent applied research work at

my alma mater, where I graduated in metallurgical engineering.

I was introduced to AIME when Terry Gamble, a colleague at the firm I had recently joined, took me to my first Electric Furnace Conference in Pittsburgh, Pa., in 1970. Up to that point, I had to satisfy my interest in electric furnace steelmaking by collecting the proceedings from this annual event.

My main involvement with ISS and AISE was through participation at conferences. I was an avid attendee, and presented numerous technical papers, primarily on electric furnace steelmaking as well as meltshop plant projects, both greenfield and brownfield, on which I had worked.

The steel industry has undergone a dramatic development — an understatement if there ever was one — since I first walked through the plant gates as an apprentice some 65 years ago. Virtually all the technologies then in use in that plant have been supplanted: Bessemer converters, open hearth furnaces, ingot teeming and cross-country rolling, to name but a few.

I always found the ISS, AISE and AIST publications and conferences an essential part of keeping abreast with these changes. I feel indebted, both for the knowledge gained as well as the opportunity of sharing my work with the steel community.



► Research heat in the meltshop lab at Wheeler's alma mater.



► Piloting the Hatch Continuous Steelmaking Process at the MEFOS Research Center in Luleå, Sweden. Wheeler is fourth from left.

The steel industry continues to make major strides, both in quality and productivity. Electric furnace steel plants can, for instance, transform raw materials into quality products in a couple of hours. The EAF, however, still remains a batch operation in the midst of continuous processes. Can we envision a continuous EAF process?

After "official" retirement, I was invited to continue working with Hatch on developing the continuous steelmaking process of which I am a co-inventor. The results of pilot tests at the MEFOS Research Center in Luleå, Sweden, were presented at the 2012 AIST Scrap Supplements and Alternative Ironmaking Conference in Baltimore, Md., USA.

I also teach process (metallurgical) plant design to fourth-year students graduating in materials science at the University of Toronto. The course is case-study based with the class working in small groups, each charged with designing an EAF/LMF/continuous caster plant. It is no surprise that *Iron & Steel Technology* magazine is an important source of information for the students' endeavors. The importance of AIST membership is thus a natural choice for any student electing for a career in this field. ♦



► End of a long day of logging firewood with family.



► In classroom at University of Toronto.



► Vacationing in Ireland with wife Jean.

AIST represents individual members in the iron and steel community from more than 70 countries around the world.

Through active networking at the chapter level, AIST members benefit from the interchange of ideas and solutions with others from the local iron and steel community. Visit [AIST.org](http://AIST.org) to learn more about Member Chapters.



## Recent Member Chapter Events

### Birmingham Member Chapter

The AIST Birmingham Member Chapter hosted a dinner meeting on Wednesday, 24 February 2016, at the DoubleTree by Hilton Decatur Riverfront in Decatur, Ala., USA.

There were approximately 100 attendees from across the industry at the dinner. The event was highlighted by a keynote presentation from **Anna Ehrich** and **Aimee Cipicchio**, Nucor Public Affairs Inc. The presentation,

titled, “Steel Trade Issues,” provided insight on how critical the year 2016 will be for the U.S. steel industry, as decisions are expected in three trade cases addressing imports of flat rolled sheet steel into the U.S. Ehrich and Cipicchio also presented **April D. Pitts**, Nucor Steel Tuscaloosa Inc., with the Birmingham Member Chapter Award and the Board of Directors Recognition Award.

### Midwest Member Chapter

The AIST Midwest Member Chapter held its March dinner meeting on Tuesday, 8 March 2016 at the Avalon Manor in Merrillville, Ind., USA. Chief of staff **Mark Lopez**

from Congressman **Pete Visclosky’s** office addressed the crowd of nearly 300 attendees with his keynote presentation.



**1.** April Pitts was awarded two plaques at the 8 March 2016 Birmingham Member Chapter meeting — the Birmingham Member Chapter Award and the Board of Directors Recognition Award (left to right): Thomas Marks, Nucor Steel Birmingham Inc.; Anna Voss, Birmingham Member Chapter secretary-treasurer, Nucor Steel-Decatur LLC; Pitts, Nucor Steel Tuscaloosa Inc.; Peyton Nicholson, Nucor Steel Tuscaloosa Inc.; and Ed Druschitz, Birmingham Member Chapter vice chair, Nucor Steel Birmingham Inc. **2.** Anna Ehrich and Aimee Cipicchio of Nucor Public Affairs Inc. gave the keynote presentations at the Birmingham Member Chapter meeting (left to right): Peyton Nicholson, April Pitts, Ed Druschitz, Anna Voss, Cipicchio, Ehrich and Thomas Marks. **3.** Love Kalra (right), Midwest Member Chapter chair, ArcelorMittal Indiana Harbor, presented a plaque of appreciation to keynote speaker Mark Lopez (left), chief of staff for Congressman Pete Visclosky on 8 March 2016. **4.** Bernie Marrese (left) presented Tyler Rigby (right) with the AIST Premier Scholarship during the Pittsburgh Member Chapter’s Young Engineers Night.





The Pittsburgh Member Chapter held its Young Engineers Night on 14 March 2016 (left to right): **Bernie Marrese**, Pittsburgh Member Chapter chair; **Megha Jampani**, Carnegie Mellon University; **Austen Fradeneck**, University of Pittsburgh; **Joe Sopcisak**, AK Steel Corp. – Butler Works; **John Cunningham**, Carpenter Latrobe Operations; **Nathan Goldblatt**, U. S. Steel – Mon Valley Works; and **Lauren Keating**, United States Steel Corporation.

### Pittsburgh Member Chapter

On Monday, 14 March 2016, the AIST Pittsburgh Member Chapter hosted a Young Engineers Night dinner meeting at the Sheraton Pittsburgh Hotel at Station Square in Pittsburgh, Pa., USA. There were 172 attendees. The panel was moderated by Pittsburgh Member Chapter chair, **Bernie Marrese**, and past chair, **Lauren Keating**, United States Steel Corporation. Panelists included **Joe Sopcisak**, AK Steel Corp. – Butler

Works; **Megha Jampani**, Carnegie Mellon University; **John Cunningham**, Carpenter Latrobe Operations; **Austen D. Fradeneck**, University of Pittsburgh; and **Nathan Goldblatt**, U. S. Steel – Mon Valley Works.

Also at the dinner, **Tyler Rigby**, Penn State Erie, The Behrend College, was recognized as the recipient of the AIST 2016 Steel Premier Scholarship.

### Southwest Member Chapter

The AIST Southwest Member Chapter held its annual meeting on 6–8 March 2016 at the Hilton College Station & Conference Center in College Station, Texas, USA. On Sunday, 6 March, 26 golfers teed off under sunny Aggie skies at The Campus Course at Texas A&M University. Later that day, the meeting officially began as 71 registrants networked at the vendor fair and welcome reception.

On Monday, 8 March, the following technical presentations were given:

- “Spindle Support Redesign on Texas 1 Rolling Mill,” by **Wade Hedrick** of Nucor Steel–Texas.
- “Change and Risk Awareness,” by **Matthew Hammer** of Gerdau Long Steel North America Beaumont Mill.
- “Descaler System Replacement at Nucor Steel Jewett,” by **Sig Johansen** of Nucor Steel–Texas.
- “CMC Steel Texas’ New Walking Beam Furnace,” by **Alan Speir** of CMC Steel Texas.
- “Mill Automation Upgrade — Results on the Floor,” by **David Muha** of Nucor Steel–Texas.
- “Technology for Process Control during Tap and Refining Nupro SlagView and TruStir at CMC Steel Texas,” by **Eddie Rios** of CMC Steel Texas.
- “Improving Descale Performance with the DescalJet® Pro,” by **Oldair Sasso** of Spraying Systems Co.
- “Mill 1 Upgrade for Wide Sheet Piling,” by **Jim Shelton** of Nucor-Yamato Steel Co.

### Local Member Chapters

Argentina  
Australia  
Baltimore  
Birmingham  
Brazil  
Detroit  
Globe-Trotters  
India  
Korea  
Mexico  
Midwest  
Northeastern Ohio  
Northern  
Northwest  
Ohio Valley  
Philadelphia  
Pittsburgh  
San Francisco  
Southeast  
Southern California  
Southwest  
St. Louis

- “2015 Replacement of the Bar Mill Finishing Department,” by **Randy Irvan** of Gerdau Long Steel North America Midlothian Mill.
- “Mill Tour Preview Nucor Steel–Texas,” by Sig Johansen of Nucor Steel–Texas.
- “Five Reasons to Set Your Hair on Fire and Five Reasons to Chill,” by **Chris Kuehl** of Armada Corporate Intelligence.

A keynote speech by **Tommy Massey**, maintenance manager, Nucor Steel–Texas, capped off the dinner on Monday evening. The event concluded with an informative plant tour of Nucor Steel’s Jewett facility, after which the 36 attendees were treated to an authentic Texas barbeque lunch.

The Southwest Member Chapter appreciates the sponsors, exhibitors, presenters and attendees who made the annual meeting a success. The chapter thanks Nucor Steel–Texas for hosting the plant tour.

A special note of thanks to outgoing Southwest Member Chapter secretary-treasurer **James Sigler**, Belden, and golf chair **Dale Koehn**, Spraying Systems Co., for their many years of dedication and service to their positions and to the Southwest Member Chapter. Sigler served as secretary-treasurer from 2001 to 2016. Koehn has been a member of AIST for 26 years and has served as the chapter’s golf chair since 2013. AIST wishes them well in their future endeavors. ♦



1. Outgoing Southwest Member Chapter golf chair Dale Koehn (right), Spraying Systems Co., played his exit round on official duty as chair. Koehn is pictured on the greens with Vernon Hargrave (left) and Dave Kyser (center), both of Spraying Systems Co. 2. Attendees networked at the Southwest Member Chapter Vendor Fair (left to right): Neil Parker, Gerdau; Matt Hammer, Gerdau Long Steel North America Beaumont Mill; and Dean Bridges, Flame Technologies Inc. 3. Representatives from Nucor Steel–Texas were presented with a plaque of appreciation for hosting the plant tour on 8 March 2016 (left to right): Sig Johansen, Justin Farris, Ross Simmons and Wade Hedrick. 4. Southwest Chapter Member chair Wade Hedrick (right), Nucor Steel–Texas, presented a plaque of appreciation to Tommy Massey (left), Nucor Steel–Texas, for his keynote address. 5. The Southwest Member Chapter annual meeting concluded with a plant tour of Nucor Steel–Texas on 8 March 2016.