

# AISTech 2008 Conference and Exposition Review

AISTech 2008 lived up to the claim of being the steel industry's premier technology event of the year, exceeding expectations with a record-breaking attendance of 8,327.

The four-day event took place May 5–8 at the David L. Lawrence Convention Center in Pittsburgh, Pa., the city most synonymous with a rich steel heritage. AIST members came together with key steel producers, suppliers, corporate leaders and academia to connect with others in the industry, learn about new process or product technologies, and hear about the state of the industry's economy. With a beautiful backdrop of the Steel City's three rivers and skyline, AISTech motivated the attendees to generate new ideas and promote continuous improvement for a more sustainable global steel industry.

## AIST FOUNDATION GOLF CLASSIC

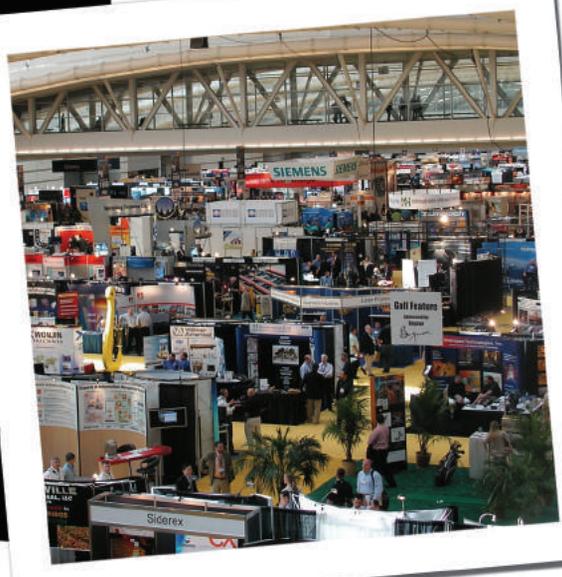
AISTech 2008 kicked off with the fifth annual AIST Foundation Golf classic on Sunday, May 4 at the Olde Stonewall Golf Club and Avalon Golf and Country Club at Buhl Park. The rough ridges, rolling hills and massive limestone boulders of

Olde Stonewall, across nearly 269 acres of dramatic countryside and captivating vistas, presented golfers with a diverse collection of mountain, river and open links-style holes. At 6,300 yards long, pristine Avalon Golf and Country Club at Buhl Park featured small, quick greens and little water, making the course both challenging and fun. The courses made for an enjoyable tournament, with the bonus of great weather and a generous contribution of \$80,000 for

AIST Foundation programs. A total of 12 corporate sponsors and 288 golfers supported the event, getting AISTech off to a good start.

Special acknowledgment is to be given to the AIST Foundation Golf Committee chair, **Randy C. Skagen**, of Nucor Steel Tuscaloosa Inc. The AIST Foundation would also like to thank all the golfers who participated and the companies who sponsored this event.





Mark your calendar! The AIST Foundation Golf Classic 2009 will be held on Sunday, May 3 as the kickoff event for AISTech 2009 in St. Louis, Mo. For more information on sponsorships, please contact Lori Wharrey, AIST, at (724) 776-6040, ext. 621 or [lwharrey@aist.org](mailto:lwharrey@aist.org).

### TECHNICAL SESSIONS

The conference program for AISTech 2008, developed by AIST Operating Committee members from iron and steel producers, suppliers and academia, focused on all aspects of ironmaking, steelmaking, finishing processes and equipment technologies. This year's technical conference saw an increase in sessions and generated a 13% increase in technical registrants compared to 2007. AISTech registrants were invited to join their colleagues at the Welcome Reception on Monday evening at the David L. Lawrence Convention Center Exhibit Hall for a few hours of socializing. A total of 370 papers were presented at 77 technical sessions. Conference technical registration totaled 2,097 with attendees representing 40 different countries.

### EXHIBIT HALL

AISTech 2008 welcomed 470 exhibiting companies, an 18% increase over 2007. The show floor space was extended and grew to 71,700 square feet of booth area, compared to 58,975 in 2007 in Indianapolis, Ind. Special thanks to AISTech Exhibitor Committee chair **Catherine Davidson** of Herr-Voss Stamco, and the rest of the Exhibitor Committee, for helping to produce the largest exposition to date. The exhibit floor provided ample opportunity for conference attendees to visit booths and learn about the latest technologies in the industry, while meeting face-to-face with individuals who specify, design, and operate plants and facilities associated with the production and processing of steel. The Exhibit Hall was the hub of activity, with an added feature of a Steel Museum exhibit hosted by **Ken Kobus** in cooperation with Rivers of Steel. Musicians, along with the Pittsburgh Pierogies and Steely McBeam, were a highlight as they entertained guests, walked the show floor and posed for photographs with conference attendees.

### J. KEITH BRIMACOMBE MEMORIAL LECTURE

The 2008 J. Keith Brimacombe Memorial Lecturer was Dr. **Kent D. Peaslee**, F. Kenneth Iverson Chair of Steelmaking Technology and a Curators' Teaching Professor of Metallurgical Engineering at the Missouri University of Science & Technology (Missouri S&T), formerly the University of Missouri-Rolla (UMR). Dr. Peaslee, also the associate chair of undergraduate studies in the UMR Materials Science and Engineering Department, presented his lecture, "Opportunities and Challenges in Steel Manufacturing — Engineering a Brighter Future," to more than 600 attendees, encouraging businesses to do more to promote their steel industry-related job opportunities to young people. With the growth in the engineering job market today, there are more jobs than there are engineers. Dr. Peaslee spoke of Ferrous Metallurgy Education Today (FeMET), the cooperative effort between AIST and the American Iron and Steel



Institute (AISI) that lends support to students through grants and scholarships, but encouraged steel producing companies to get involved in the recruitment process by offering internships to change the image of steelmaking as being a “dirty” profession. The complete lecture was published in the June 2008 issue of *Iron & Steel Technology*.

### AIST INTERNATIONAL ALLIANCE LECTURE

The 2008 and inaugural AIST International Alliance featured **Dr. Carl-Dieter Wuppermann** of Steel Institute VDEh, Düsseldorf, Germany, presenting his lecture entitled, “The Steel Industry Within the European Union Against the Background of Globalization: Challenges and Opportunities.” This lecture is intended to provide AISTech conference attendees with an improved awareness of global and regional steel industry developments. Each year, a new representative from the various steel industry trade groups, institutes and professional societies located around the world will be invited to deliver this lecture.

### PRESIDENT’S AWARD BREAKFAST

AIST President **Charles Messina** hosted the President’s Award Breakfast on Tuesday, May 6 to a sell-out crowd of 1,260. **John H. Goodish**, executive vice president and chief operating officer of United States Steel Corporation, was honored as Steelmaker of the Year by AIST. Goodish noted that such an honor does not happen without a team effort, then thanked the 50,000 employees of U. S. Steel worldwide for their efforts in safety, quality control, cost-containment and productivity.

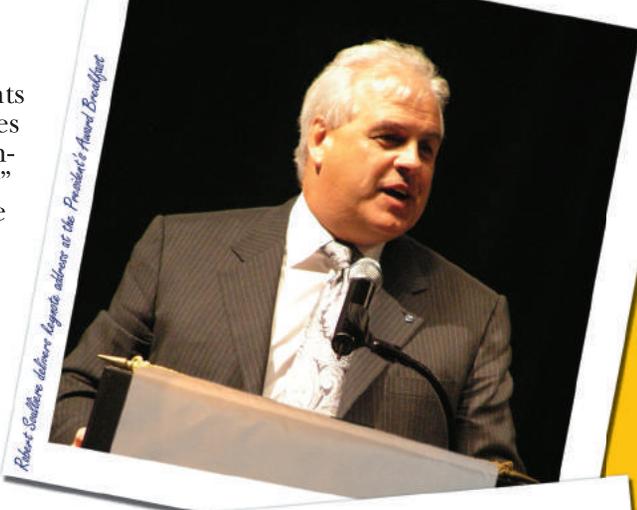
Other awards included the AIME Honorary Member designation to **David K. Matlock**, professor at the Colorado School of Mines, in recognition for distinguished service to the industry. AIST Outstanding Chapter Awards were presented to the San Francisco and Midwest Chapters.

The Hunt-Kelly Outstanding Paper Award was presented to **Kenneth E. Blazek, Oscar Lanzi III, Dale Kellogg** and **Phil Gano** for their work on the paper, “Calculation of the Peritectic Range for Steel Alloys.” The Benjamin F. Fairless Award went to **Andrew Green, David Naylor, Ruth Hambleton** and **Ian Christmas** for their work to create steeluniversity.org, an educational Web site for the promotion of education in the steel industry. The John F. Elliott Lectureship Award went to **Gordon A. Irons** of McMaster University. The Tadeusz Sendzimir Memorial Medal went to **Hisahiko Fukase** of Japan’s IHI Corp. and **Walter Blejde** of Castrip LLC for their work in developing Castrip technology. **Rodney Mott**, former chief executive at Stelco and ISG, was presented with the AIST Distinguished Member and Fellow Award.

**Robert Soulliere**, president and chief executive officer of ThyssenKrupp Steel USA LLC, was given the William T. Hogan Lecture for his keynote presentation, “Balancing Global Trends With Regional Markets: ThyssenKrupp Steel’s Strategy for Growth.” The entire keynote address was published in the July 2008 issue of *Iron & Steel Technology*.

### PLANT TOURS

Tours of two area steel plants, Wheeling-Pittsburgh Steel Corp. and U. S. Steel–Mon Valley Works, were held on Thursday, May 8. Guests toured Wheeling-Pittsburgh Steel Corp., headquartered in Wheeling, W. Va., a producer of carbon flat rolled products for the construction, automotive, appliance, converter/processor, steel service center and other markets. Visitors to the U.S. Steel–Mon Valley Works toured the hot end of the historic Edgar Thomson Plant, Andrew Carnegie’s first steel mill built in 1875.





Keith Busse

## TOWN HALL FORUM

On Wednesday, May 7, a panel of leading industry executives gathered for the Town Hall Forum to participate in a moderated panel discussion that has become AISTech's signature session, including extensive dialogue of global steel industry issues, concerns and opportunities. The Town Hall Forum, held in the Spirit of Pittsburgh Ballroom inside the David L. Lawrence Convention Center, was moderated by **John D. Callaway** and offered extensive dialogue by key industry leaders, followed by an open question-and-answer period from the audience.

Panelists included: **Keith E. Busse**, chairman and chief executive officer, Steel Dynamics Inc.; **Joseph Curtin**, president and chief operating officer, Tube City Div., Tube City IMS Corp.; **Mario Longhi**, chief executive officer and president, Gerdau Ameristeel; **Russ Rinn**, executive vice president, Commercial Metals Co., and president, CMC Americas; **Louis L. Schorsch**, executive vice president, ArcelorMittal, and president and chief executive officer, ArcelorMittal Flat Americas; **R. Joseph Stratman**, executive vice president, Nucor Corp.; **John P. Surma**, chairman, chief executive officer and president, U. S. Steel.

The executives discussed topics such as safety, the steel economy with a weak dollar, major capital expenditures, vertical integration, raw materials, climate change, the industry brain drain and other issues that have a profound impact on the global economy.

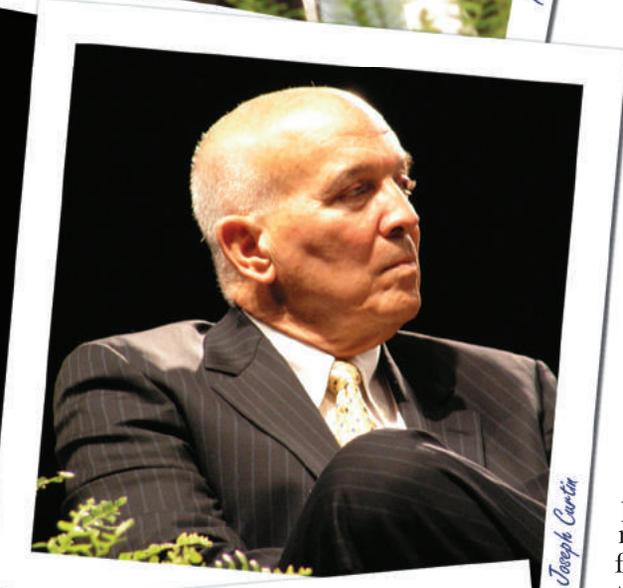
This year's forum began with an emphasis on the issue of safety, with panelists being asked to address the possible reasons for the high fatality rate in the industry since the start of 2008. The circumstances of the deaths of 15 steel workers was discussed before a crowd of more than 1,600. The seven panelists were hard-pressed to find a common link between the fatalities, as inexperience, age, health or substance abuse were not factors. While fatality rates were on the rise, total accident rates have continued to decline, an indicator that, generally, safety statistics are improving in steel plants.

Keith Busse discussed the zero tolerance policy on safety at Steel Dynamics Inc. "Companies have to continue to keep safety first and focus on it." Agreeing that most employees are not breaking the rules, Busse said, "Most companies implement disciplinary policies and procedures, but if you are working by yourself, it might be tough to get caught in the act. If you are working with an individual who condones an unsafe action, I think the discipline needs to go to that individual. Those tragedies are not just timing by a train or a random heart attack on a ladder. People are well-trained, seasoned industry workers. The depth of training is as deep as I've ever seen, and the benchmarking within a plant in a company is the best that I have ever seen."

Louis Schorsch discussed the safety record of the Dofasco unit of ArcelorMittal in Hamilton, Ont., having one of the better safety records among steel producing companies. "Tying safety performance to management compensation is something we are talking about implementing across the entire company at ArcelorMittal. I think it is something we will have in place by next year."

Variable compensation based on safety is a concept already in place with other steel producers. John Surma contributed to the discussion by saying that, among other indicators, safety is a main focus and plays a part in U. S. Steel's management compensation.

When moderator John Callaway asked Surma what he would say to an investor looking for a good investment with a company that would be able to continue great success, Surma's humorous reply was, "Hurry while supplies last!" He then said that the steel industry and its participants were doing much better over the last several years, with the potential for more sustainability. "My hope is that, over time, the global steel industry



Joseph Curtin



Mario Longhi



Russ Rinn

would be a much more sustainable business model that enables capital spending and allows all of our companies to be valued much better, driving share value.”

All steel executives on the Town Hall panel agreed that the industry is on a path toward sustainability, coming out of the ashes of bankruptcies earlier this decade. The consensus among the panelists was that the steel industry is not in an economic bubble waiting to burst, but felt the strong demand from global economies would help the industry to continue with solid financial results.

“A global market is our influence in the steel industry today,” said Nucor’s Joseph Stratman. “The U.S. economy doesn’t necessarily demand as much as it has in the past. The global demand and supply is what is driving the bus today and it is sustainable. There is going to be a supply challenge and we will have cycles along the way. Steel is a cyclical business, and we are conducting business with a new model and threshold.

The panel of executives discussed the need for improvement with the control of greenhouse gas emissions. When Callaway asked what he would tell Al Gore if they met face to face, Keith Busse defended the steel industry, saying that in the last 10 years, energy intensity has decreased 29%. “I don’t think we’ve been getting enough credit for what we have already done,” he said.

Surma added, “We’ve all heard the stories of global warming and the concerns with carbon dioxide emissions. What we have not heard enough about is the cost of environmental complainece.”

On the subject of recruitment, Mario Longhi discussed marketing the industry to the younger generation. “When we go to the college campuses to market our company to them, we send employees that have been on the job and can share their very own personal experiences. Steel is very exciting and attractive. We’ve been able to hire 100 young people right out of school. Opportunities abound. The fact that we are more and more wanting the younger generation’s brains, as well as their hearts, is really bringing the message home. It is second to none.”

Russ Rinn, a second-generation employee in the steel industry, said that he came into the business for discipline. “Today, we place a tremendous amount of emphasis on the high degree of internal training. Through safety training, we try to help employees reach their full potential. The industry today is becoming more technical and more scientific.”

The second half of the Town Hall Forum included questions from the audience that included the topics of new steel mill construction and the environment.

Joseph Curtin brought up the subject of metal theft that is taking place in the U.S. and affecting the scrap industry. “The scrap industry is making a very strong effort to change the bad image. Those in the scrap industry are not part of the problem, they are part of the solution and have been working to improve the environment.” Curtin explained that more credit should be given to working groups that have been formed to stem the tide of material theft that is present, also warning that some laws being imposed could have an effect on the steel industry.

Rinn concluded the session by saying, “Whether it is safety or politics, the thing that is required of all of us is involvement and engagement. Each one of us can make a difference by staying involved. Find that one safety issue that can prevent that fatality from happening. Today and now would be a good time to get started because it makes a big difference.”





The entire 2008 Town Hall Forum is now available for purchase on DVD. Contact AIST at (724) 776-6040, ext. 1, to own a copy of this program in its entirety. The DVD features the complete dialogue and panel discussion on global steel industry issues, concerns and opportunities. For those who attended the session at AISTech or anyone who missed the event, the Town Hall Forum DVD is likely to stimulate ideas and stir debate on the current and future state of the steel industry.

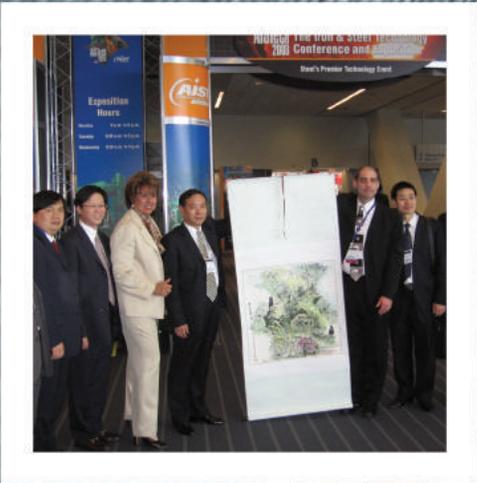
#### AIST EXPRESSES THANKS

The AIST Executive Committee and Board of Directors extend a special thank-you to AISTech 2008 Conference Planning Committee chair, **Mark Fedor** of Morgan Engineering Systems Inc.; Exhibitor Committee chair, **Catherine Davidson** of Herr-Voss Stamco; **George Koenig** of Berry Metal Co., session chair for the Town Hall Forum; **Dale Heinz** of ArcelorMittal Burns Harbor, AIST Foundation president; **Randy C. Skagen** of Nucor Steel Tuscaloosa Inc., AIST Golf Committee chair; as well as all AIST member volunteers, authors and exhibiting companies who were involved in planning the most successful conference and exhibition to date.

#### PLAN NOW FOR AISTECH 2009

AISTech 2009 — The Iron & Steel Technology Conference and Exposition is scheduled for May 4-7, 2009, at America's Center, St. Louis, Mo. More than 250 companies have already purchased exhibit booths for AISTech 2009. Joining us in 2009 will be the Asia Pacific Partnership Technology Showcase. The Showcase will include suppliers of energy efficient and environmental steel technologies, representing another step in the globalization of AIST programs. Hurry to reserve the best location for your company's booth next year. For more information or to reserve your space, contact Geraldine Kane (ext. 639 or [gkane@aist.org](mailto:gkane@aist.org)), or Jeffrey Campbell (ext. 640 or [jcampbell@aist.org](mailto:jcampbell@aist.org)) at (724) 776-6040.





## AIST PROMOTES THE STEEL INDUSTRY TO STUDENTS AT AISTECH 2008

The AIST Foundation, with support from 11 industry companies, held special student-specific programs at AISTech 2008 in Pittsburgh, Pa., May 5–8. The corporate sponsors were AK Steel, ArcelorMittal, Carpenter Technologies, CMC Americas, IPSCO, Midrex, Nucor, Praxair, SMS Demag, Steel Dynamics and U. S. Steel.

Engineering students from all related disciplines were encouraged to attend, being offered complimentary registration, travel grants and paid session monitor positions. A total of 79 students from 25 universities registered for the conference. In addition, AIST held an Attendance Challenge. The university with the highest number of students in attendance received \$500. The winner of this challenge was the Missouri University of Science & Technology.

Student activities began with a plant tour to the U. S. Steel Research & Technology Center, Munhall, Pa., on Sunday, May 4. The 42 students were divided into four groups that rotated to four different locations: the water modeling laboratory, a hot rolling demonstration, the hot-dip galvanizing simulator, and the metals characterization laboratory.

The students returned from the tour for a Student Orientation, which included information about AIST from Ron Ashburn, AIST Executive Director; the importance of belonging to AIST from Charlie Messina, AIST president; the industry's need for young engineers from Nucor's Dan Krug; and networking tips from Clay Spangler, Steel Dynamics Inc. Those attending enjoyed dinner and networking with the corporate sponsor representatives. A scavenger hunt began at this orientation to encourage students to visit the booths in the Exhibit Hall and ask questions about steel companies and the industry. Those who completed the scavenger hunt were given a ticket for a door prize drawing.

A Student Project Presentation Contest was held on Monday, May 8. During this contest, seven students presented their projects before a panel of judges. The judges were Kelly Dallas from ArcelorMittal, Bonnie Alan from AK Steel, Sunday Abraham from IPSCO Inc., Ed Rios from CMC Americas and Mike Peretic from SMS Demag. Participants were judged on technical content, topic coverage and presentation skills.



*Third place winner, Kale Stephenson*

The contestants included Patrick Lueckenhoff, Laura Bartlett and Seth Vandiver from Missouri S&T; Brian Boguski from The Ohio State University; Eric Singer from Virginia Tech; Charles Fisher from Iowa State University; and Kale Stevenson from Washington State University.

Winners of the Student Project Presentation Contest and their presentations are as follows:

- First place (\$1,500): **Charles Fisher**, Iowa State University. Presentation: "Evaluation of Shear Punch Testing to Simulate Conventional Tensile Testing of Small Samples."
- Second place (\$1,000): **Brian Boguski**, The Ohio State University. Presentation: "CNC Router Design/Build Project."
- Third place (\$500): **Kale Stephenson**, Washington State University. Presentation: "Characterization Methods for Ti-6Al-4V Implanted With High-Energy Ions."

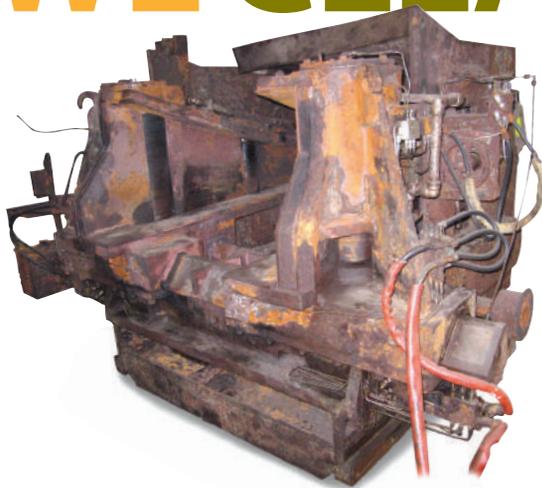
Following the contest, tickets for door prizes were drawn. Laura Bartlett from Missouri S&T won a Nintendo Wii Family Bundle donated by Nucor, and Tom Bailey from Missouri S&T won the Xbox 360 with Guitar Hero III donated by ArcelorMittal. Charles Fisher from Iowa State University and Ye Sun from the University of Kentucky each won a gift card donated by SMS Demag. Pat Leuckenhoff from Missouri S&T won a DVD player. AIST would like to express a special thanks to the contest chair, **Kevin Bort**, Steel Dynamics Inc., along with all contest judges.

The students and sponsoring company representatives spent Monday evening at Dave & Busters for dinner and fun.

A group of about 30 students were transported to a second plant tour at U. S. Steel-Mon Valley Works on Tuesday, May 6. They were divided into two groups to tour the Edgar Thomson Plant and the Irvin Plant, and lunch was provided by U. S. Steel between the tours.



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