The 2nd AIST International Steel Academy (ISA) was held on 3–6 December 2012 at the Hilton Istanbul, Istanbul, Turkey. The ISA features two concurrent courses: the Making, Shaping and Treating of Steel® (MSTS) 201 course, which focuses on steelmaking, and the MSTS 202 course, which focuses on the shaping and treating of steel. Each course was conducted over the four-day period.

The ISA was offered in Turkey, reflecting the strong increase in steel production occurring within that country. Over the last decade, Turkey has grown from the 17th position to No. 8 in the world for annual steel production in 2012. With the rapid increase in production come the challenges of benchmarking current production, knowledge of equipment and technologies, research and development for innovation in processing and products, education of the public on the superior benefits of steel vs. competing materials, and the improvements in infrastructure, as well as the beneficiation of land, energy and natural resources. The AIST International Steel Academy addresses many of these concerns during its four-day curriculum.

"This was a good seminar. I learned a lot about ironmaking, and I am also more confident in steelmaking, which I can apply at my plant. [The instructors] have a lot of experience which [they] were able to transfer to us."

— Trakune Arjkhumwongsa, staff, Siam Yamato Steel Co. Ltd.

The event began with an introduction by Mr. Ronald Ashburn, AIST executive director. Mr. Ashburn explained the ideology of AIST and further elaborated on the structures and curricula of the MSTS 201 and 202 courses. He also explained the relevance of the courses to the steel industry’s technological growth, equipment knowledge and its efficient utilization of available raw materials. In his concluding remarks, he thanked Dr. Jürgen Cappel and Prof. Dr. Bruno De Cooman, the course instructors, and all of the attendees for accepting the challenge of the rigorous, world-class curriculum of the AIST International Steel Academy.
MSTS 201: Steelmaking was developed by AIST and delivered by Dr. Jürgen Cappel. While many courses focus on steel as a material, the MSTS 201 curriculum broadens the scope to include the ancillary, supporting technologies critical to steelmaking, such as environmental aspects, equipment technology, production scheduling and control systems. The course begins with the history of iron- and steelmaking from the earliest smelters of wrought iron to the modern, technological wonders in steelmaking that exist today. Today’s steel technology has advanced due to a focus on sustainability and environmental awareness. The acquisition and beneficiation of the necessary raw materials for iron- and steelmaking were described, followed by detailed descriptions of iron production and steel production through the latest technology used in continuous casting.

“Dr. Cappel is a great instructor and good reference for the iron and steel industry. He touched on many points that metallurgists face and gave a comprehensive overview of the importance of steelmaking in the global market.”

— Gabriel Maita, process improver, Tenaris Siderca

MSTS 202: Steel Shaping and Treating was developed and delivered by Dr. Bruno De Cooman. This course, first and foremost, is an introduction to the processing of steel products for industry professionals. The

“Beyond expectation and good to be there. I will take all I have learned to our team in the factory.”

— Piya Chairat, department manager, Siam Yamato Steel Co. Ltd.
course brings together decades of internationally recognized efforts acquired in the industry and at academic institutions, and reflects the vitality and the global nature of steel product and processing innovation. MSTS 202 merges advanced steel metallurgy concepts and principles of state-of-the-art steel processing technologies, focusing on topics that play an essential role in current steel processing and product development.

“The Making, Shaping and Treating of Steel: 202 course, in particular, covers everything relevant to steel shaping and treating. It is useful both for beginners to learn new technology and for advanced individuals to refresh their industry knowledge. Dr. De Cooman was an excellent instructor and is an expert in this field.”

— Pamir Ozbay, sales application engineer, TMEIC Corp.

Throughout the time of instruction, the delegates had many opportunities to ask questions of the instructors, to network and meet new colleagues from Turkey as well as Middle Eastern, Asian and European countries. Fifty percent of the attendees were directly employed by steel producing companies in Turkey, Bahrain, Saudi Arabia, Thailand and Romania.

For more information or to inquire about hosting the AIST International Steel Academy in your facility or country, visit AIST.org/ISA.