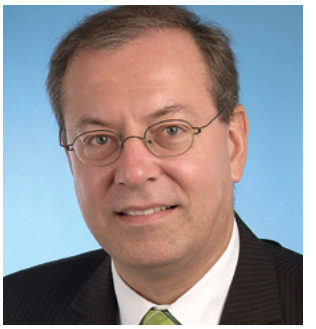
Distinguished Member and Fellow

Jürgen Cappel

Jürgen Cappel holds a doctoral degree in ferrous metallurgical engineering from RWTH Aachen in Aachen, Germany. He has more than 20 years of experience working in iron- and steelmaking facilities. His responsibilities included management of the blast furnace process, the BOF and secondary treatment processes, raw material procurement, steelmaking research and development, and overall steelmaking production. Throughout his career, he has been an active proponent for fundamental education of individuals in the steel industry. He has provided instruction to many of his employees while in steel production. Currently, as a consultant in the steel industry, one of the primary benefits to his customers is the education of their employees in producing steel efficiently in a safe, sustainable environment.



How did you get started in the industry?

I started in the industry when I was 14 years old. My father, Dr. Fred-Erich Cappel, was employed with the German engineering company LURGI and I had the opportunity to do an internship and holiday work at his company and even in steel plants his company served. Later I studied metallurgy at the University of Aachen, Germany. My first job was at Krupp Stahl in Duisburg, Rheinhausen, at the blast furnace shop back in 1984.

Who has been most influential in your life or your career?

The most influential person in my professional life for sure was my father, Dr. Fred-Erich Cappel, in the early stage. He was a reputed metallurgist known worldwide and our home always hosted many of his friends, colleagues and partners from all over the world, at a time when international traveling was not common habit. Later, my teacher in Aachen, Prof. Heinrich-Wilhelm Gudenau, played a great part in my decision to start in primary metallurgy. My focus on the blast furnace operations was so strong that I did not consider other possibilities. My great luck was that with my first job I also got a commitment from the company in support of my Ph.D. in pulverized coal injection. Later in my career, I was moved around in the company from area to area, from operational to management functions and back, so I could get a wide overview of the business.

How did you get involved with AIST?

When I decided back in 2006 to leave the German steel industry after 22 years of service, the organization I had served as a member since 1982 excluded me from all technical committee activities. At this time, I was a permanent member of the German steelmaking committee. I do not claim that; it was the rule. The Germany VDEh is a producer-only organization. So, if you leave the producer circles, you can no longer participate. But for me, this situation created the necessity to engage with other steel industry associations to keep in touch with the industry. So, I went to the USA and found the Oxygen Steelmaking Technology Committee of AIST, who immediately accepted my membership application.

How has membership benefited you in your career?

From this time on I engaged in the committee activities and we commenced preparation of international study tours (so far, we have done six tours in 10 years) and other activities in the USA. I really like that each committee meeting is held at a different steel plant. This has given me the opportunity to visit almost every U.S. integrated steel plant over the last decade. Another contribution I've been able to make to the organization is to prepare and present papers at AISTech and to attract and invite engineers from other countries to participate. By engaging in these activities, I was able to sharpen an image which helps me in the meantime in my business as an iron- and steelmaking consultant.

What have you accomplished that makes you most proud?

What I'm really proud of in my professional career is that, during the last decade, I came to international reputation and recognition. A big part of this achievement would not have been possible without my engagement in AIST's international activities,

Cappel has served as an instructor for the AIST International Steel Academy (ISA) for several years.

Cappel and his fellow ISA instructors, Dirk Van der Schueren (left) and Emmanual De Moor (right), during a sunny lunch break in India.

The certificate ceremony is always a highlight of the ISA (left to right): Cappel; R V Ramna of Tata Steel; Ajay Kumar Chaubey of Hospet Steels Ltd.; and Ronald Ashburn, executive director of AIST.

Anand Sen acknowledged Cappel's contributions to the International Steel Academy.

where I have met people from around the globe. I'm doing business with some of them, while others I meet on a regular basis in their countries or at international conferences. AIST, for me, is the platform which offers the networking possibilities that are beneficial for my business activities.

You're often sought to serve as an instructor for AIST's educational programs. Talk about your experiences serving in this capacity.

At a certain point during my AIST membership, I was asked to participate in the development of the International Steel Academy (ISA). This was, for me, a great opportunity to (a) structure my experience and knowledge in a way that I could transfer it into lectures and (b) to sharpen my image as a primary steelmaking operation expert. Another side effect for my benefit was that I had the chance to become international. Before, I was truly German. To have the possibility to serve in this international AIST activity is a great honor and I'm very sure that we bring value to the countries we are serving. We have held the ISA five times since 2012, four of them in India and one in Turkey.

What do you get out of serving as an instructor and sharing your knowledge?

For me, this activity is a great opportunity to travel to foreign countries, to learn about other steelmaking strategies, to share expertise and knowledge with a large number of young talents, and to present myself. Since one part of lecture always is to provide statistical information about the global steel industry and the industry in the country where we hold the event, it obliges me to always stay informed and to look around for the latest developments in technology, raw material trends, steel product trade and political regulations as the main

factors to be considered to run the primary operations in steel plants.

Especially in the last five years, the worldwide discussion about greenhouse gas emissions has resulted in a major move of the industry toward eco-friendly technologies which will change the industry in the next two decades radically. I'm not talking about simply the share between EAF and oxygen-based steelmaking but a change in the iron ore reduction processes from carbonaceous fuel to hydrogen-based fuel.

What does winning the AIST Distinguished Member and Fellow Award mean to you?

Winning the award was a real surprise to me and a great honor. To be involved in the activities of the inner circle of the organization will be a strong motivation to continue my engagement in AIST to develop the worldwide network in the future. We have big challenges to face in the next five years, one of which is to grow the European Member Chapter to a real EU-wide organization. I'm committed to support this approach and look forward to an interesting and exciting future to spend on board of the AIST boat. ✦

The international Study Tours (here at Hyundai Steel, South Korea) are a key activity of the Oxygen Steelmaking Technology Committee.

Cappel was presented with the AIST Distinguished Member and Fellow Award by 2017–2018 AIST president Randy Skagen.

Cappel received the Distinguished Member and Fellow Award in recognition of his service to the steel industry and his willingness to share his extensive knowledge of steelmaking processes.