

## THE ROLE of THERMODYNAMICS IN RESEARCH AND TECHNOLOGY DEVELOPMENT

**Dr. Cemil İnan**

Product Director of Arçelik

responsible from global operations of Refrigerator and Compressor business Eskişehir



### **Biography**

Cemil İnan, father of two lovely daughters, was born in Malatya. He got BSc and Msc Degrees in Mechanical Engineering from Dokuz Eylül University, Izmir. He completed PhD studies in Istanbul Technical University. Research studies of his PhD was completed in Univ. Of Illionis at Urbana Champaign (UIUC). Dr İnan, studied Cooling Technologies and Heat & Mass Transfer in a Refrigerator. During the PhD, He worked with Dr. Egrican (ITU) and Dr. Newell (UIUC).

Dr. İnan has been working in Arcelik for 24 years. He was the Head of Arcelik R&D between 2006-2012, and currently working as a Product Director of Arcelik, responsible from global operations of Refrigerator and Compressor business. He worked as Governing Board Member of EIRMA (European Industrial R&D Managers Assoc.), and He is currently, Board Member of Eskisehir Industrial Zone Management.

### **Summary:**

Study reflects the role of Thermodynamics in today's Industrial Research agenda. It emphasizes how Thermodynamics is important for engineering approach on problem solving. In exponential increase of computational power on computers, the simulation codes becomes widely available while their reliability increases. Yet, the role of analytical thinking keeps its importance in this computational World. Thermodynamics and its laws help engineers to develop analytical thinking and eliminate useless claims. In the study, it is also underlined that Thermodynamics is a great team player among other engineering classes when it comes to complex technological problems. Some examples and cases from Industrial R&D are also given.