

## Prof. Em. Dr.-Ing. Dr.-Ing. E.h. mult. Franz Mayinger on His 85th Birthday



Professor Franz Mayinger is one of the well-known names in the field of thermodynamics, heat transfer, and multiphase flow and well-respected among his colleagues in the thermodynamics, heat transfer, and multiphase flow community all over the world. He was born on Sept. 2, 1931, in Augsburg, Germany. He received his Dipl.-Ing. and Dr.-Ing. in 1955 and 1961, respectively, from Lehrstuhl für Thermodynamik (the chair for Thermodynamics), Mechanical Engineering Department at the Technische

Universität München (the Munich Technical University), München, Germany.

During 1956–1961, Professor Franz Mayinger started his professional life as a research assistant at the “Lehrstuhl” (chair) and Institute of Thermodynamics at the Technische Universität München (the Munich Technical University), München, Germany. After completing his Dr.-Ing. in 1961, Professor Franz Mayinger joined MAN Nürnberg as a Chief Engineer and the Research Department Head for Nuclear and Process Engineering from 1962 to 1969. He started his academic life in the Institut für Verfahrenstechnik der Universität Hannover (Institute of Chemical Engineering, University of Hannover), Hannover, Germany, as full professor and director in 1969. During 1973/1974 and 1979/1980, Professor Franz Mayinger served as Dean of the Mechanical Engineering Department at the Universität Hannover (University of Hannover), Hannover, Germany. He then became a director for the prestigious Chair of the Thermodynamics A at the Technische Universität München (the Munich Technical University), München, Germany, in 1981. Professor Franz Mayinger was a deserving successor to this chair that had been held before by Carl von Linde (June 11, 1842–Nov. 16, 1934), Moritz Schröter (Feb. 25, 1851–Mar. 12, 1925), Ernst Kraft Wilhelm Nusselt (Nov. 25, 1882–Sept. 1, 1957), Ernst Schmidt (Feb. 11, 1892–Jan. 22, 1975), and Ulrich Grigull (Mar. 12, 1912–Oct. 20, 2003). Professor Franz Mayinger initiated the first research in the multiphase flow field. He continued the heat convection examination and encouraged combustion research. In addition, he implemented using of new optical measurement techniques like laser-induced fluorescence and holographic interferometry in the institute. Furthermore, he was involved in the Seventh International Heat Transfer Conference (IHTC-7), at the Technische Universität München (the Munich Technical University), München, Germany, Sept. 6–10, 1982. IHTC-7 was organized under the authority of the Assembly for International Heat Transfer Conferences by DECHEMA Deutsche Gesellschaft für chemisches Apparatewesen e.V., Frankfurt/Main, Germany, in cooperation with the International Scientific Committee, the Deutsche Gesellschaft für Chemie- und Verfahrenstechnik (DGCV), and the German Scientific and Executive Committees. Also, he was elected as the Dean of the Mechanical Engineering Department at the Technische Universität München (the Munich Technical University), München,

Germany, during 1986/1987. Finally, he became an Emeritus Professor of this chair in 1999. During 1995–1998, he was the founding Dean of the Faculty for Applied Natural Sciences at the Bayreuth University, Bayreuth, Germany. From 1998 to 2009, he had been the Chairman of the Board of this university. He served as the member of Reactor Safety Commission at the Federal Department of Environment (1971–1992) and the Chairman of this Commissions in 1983/1984 and in 1990, Chairman of the Commission of Accidents and Failures in Chemical Plants at the Federal Department of Environment (1992–1996), member of the Advisory Board of Science and Technology of the Government of Bavaria (1993–1999), and member of the Senate of the German Research Society (1977–1983). From 1991 to 1997, he was a member of the Advisory Board for Science of the Federal Government of Germany. Within the period of 1998–2002, he was the Scientific Chairman of the Bavarian Elite Academy. He has been frequently invited as a lecturer and speaker by different institutions in the Europe, U.S., China, Japan, and other countries.

Professor Franz Mayinger has published over 350 scientific papers as well as several books, on thermodynamics, heat and mass transfer, multiphase flow, power engineering, optical measurement techniques, and reactor safety, such as Refs. [1–9]. He was a former editor of *Wärme- und Stoffübertragung (Heat and Mass Transfer) Journal*.

Professor Franz Mayinger is the recipient of several international awards like Max Jakob Award of the American Society of Mechanical Engineers (ASME) and American Institute of Chemical Engineering (AIChE) in 1991. He received an Honorary Doctorate from the University of Hannover in 1994 and the University of Bayreuth in 2006, Medallion “Bene Meritus” of the Bavarian Minister for Science and Art in 1995, Bavarian Supreme Medal of Merits in 1995, Bavarian Medal for Environmental Research in 1996, Bavarian Medal for Environmental Research in 1998, and Ernest Solvay Award in 2000, Bayerischer Maximiliansorden für Wissenschaft und Kunst (Bavarian Maximilian Order for Science and Art), the highest award of Bavaria for scientific work in 2001, and Emeritus of Excellence of Technische Universität München (the Munich Technical University) in 2005.

Professor Franz Mayinger has served in several scientific societies as the member of the Bavarian Academy of Sciences, German Academy of Technical Sciences, German Supreme Scientific Board, and the Bavarian Leadership Academy president.

On the occasion of his 85th birthday, on behalf of his students, colleagues, and friends all over the world, we wish him a very happy birthday and a continuous active life in good health and happiness with his wife Frau Franziska Mayinger, children Thomas, Brigitte, and Wolfgang as well as grandchildren!

### References

- [1] Bergles, A. E., Collier, J. G., Delhaye, J. M., Hewitt, G. F., and Mayinger, F., 1981, *Two-Phase Flow and Heat Transfer in the Power and Process Industries*, Hemisphere Publishing, New York.

- [2] Mayinger, F., 1982, *Strömung und Wärmeübergang in Gas-Flüssigkeits-Gemischen (Flow and Heat Transfer in Gas-Liquid Mixtures)*, Springer-Verlag, Wien, Austria.
- [3] Hewitt, G. F., Mayinger, F., and Risnic, J. R., 1991, *Phase-Interface Phenomena in Multiphase Flow*, Hemisphere Publishing, New York.
- [4] Hauf, W., Grigull, U., and Mayinger, F., 1991, *Optische Meßverfahren der Wärme- und Stoffübertragung (Optical Measuring Methods of Heat and Mass Transfer)*, Springer-Verlag, Berlin.
- [5] Mayinger, F., ed., 1994, *Optical Measurements: Techniques and Applications*, 1st ed., Springer-Verlag, Berlin.
- [6] Stephan, K., and Mayinger, F., 1998, *Thermodynamik. Grundlagen und technische Anwendungen Band 1: Einstoffsysteme (Thermodynamics. Fundamentals and Technical Applications Volume 1: One-Component Systems)*, Springer-Verlag, Berlin.
- [7] Stephan, K., and Mayinger, F., 1999, *Thermodynamik. Grundlagen und technische Anwendungen Band 2: Mehrstoffsysteme und chemische Reaktionen (Thermodynamics. Fundamentals and Technical Applications Volume 2: Multicomponent Systems and Chemical Reactions)*, Springer-Verlag, Berlin.
- [8] Kakaç, S., Bergles, A. E., Mayinger, F., and Yüncü, H., eds., 1999, *Heat Transfer Enhancement of Heat Exchangers*, Vol. 355 (NATO ASI Series E), Kluwer, Dordrecht, The Netherlands.
- [9] Mayinger, F., ed., 2001, *Mobility and Traffic in the 21st Century*, Springer-Verlag, Berlin.

**Mohamed M. Awad<sup>1</sup>**  
**Mechanical Power Engineering Department,**  
**Faculty of Engineering,**  
**Mansoura University,**  
**Mansoura 35516, Egypt**  
**e-mail: m\_m\_awad@mans.edu.eg**

**Adrian Bejan**  
**Department of Mechanical Engineering and**  
**Materials Science,**  
**Duke University,**  
**Durham, NC 27708-0300**  
**e-mail: abejan@duke.edu**

**Jean-Marc Delhaye**  
**Department of Mechanical Engineering,**  
**Clemson University,**  
**Clemson, SC 29634-0921**  
**e-mail: delhaye@clemson.edu**

**Vijay K. Dhir**  
**Mechanical and Aerospace Engineering Department,**  
**Henry Samueli School of Engineering and Applied Science,**  
**University of California, Los Angeles,**  
**Los Angeles, CA 90095**  
**e-mail: vdhir@seas.ucla.edu**

**Geoffrey F. Hewitt**  
**Department of Chemical Engineering,**  
**Imperial College London,**  
**South Kensington Campus,**  
**London SW7 2AZ, UK**  
**e-mail: g.hewitt@imperial.ac.uk**

**Sadik Kakaç**  
**Department of Mechanical Engineering,**  
**TOBB University of Economics and Technology,**  
**Söğütözü Cad. No.43, 06560 Söğütözü, Ankara Turkey**  
**e-mail: sadikkakac@yahoo.com**

**Andrea Luke**  
**Technical Thermodynamics,**  
**University of Kassel,**  
**Kurt-Wolters Str. 3,**  
**Kassel 34125, Germany**  
**e-mail: luke@uni-kassel.de**

**Dieter Mewes**  
**Process Engineering,**  
**Leibniz University Hannover,**  
**Callinstr. 36,**  
**Hannover 30617, Germany**  
**e-mail: mewes.dieter@gmail.com**

**Thomas Sattelmayer**  
**Lehrstuhl für Thermodynamik,**  
**TU München,**  
**Boltzmannstr. 15,**  
**Garching 85747, Germany**  
**e-mail: sattelmayer@td.mw.tum.de**

<sup>1</sup>Corresponding author.