





Career & Professional Development

Dr.-Ing. Andreas Laschet

Dr. Laschet studied "Mechanical Engineering" at the *University of Technology in Aachen* (Germany). From 1980 to 1985 he was emploeyed as a research engineer at the "Institute of Machine Elements" at the Aachen University in order to work at his thesis "*Development of a method for the computer supported simulation of torsional vibrations in drive systems*". In 1988 his work has been published in a Springer book "**Simulation of the Dynamic Behaviour of Drive Systems**" (in German language; book also available as an E-book). He was one of the first engineers who carefully studied CAE methods and simulation algorithms to generate vibration models of <u>complete drivelines</u>.

From 1985 to 1990 he worked in the German engineering company *MEC*, and from 1990 to 2016 he worked at *ARLA*, which is a family owned company also involved in machine tool building. From 2016/2017 he started his separated engineering and consulting office "LASCHET CONSULTING" primarily specialized in engineering services, torsional vibrations analyses, and rotordynamic studies.

He published more than 60 technical papers on the following subjects:

- simulation of drive systems in rotating machinery to minimize torsional vibrations
- studies of the linear and nonlinear characteristics of drive elements within the complete driveline
- condition monitoring and machine diagnosis supported by suitable CAE methods
- configuration of drivelines with reference to the selection of couplings, universal shafts, gear systems, etc. always with respect to the dynamic behaviour
- applying extended CAE methods to minimize the model generation efforts (in particular of torsional vibration models)
- special NVH analysis (noise-vibration-harshness) dedicated to complete drive systems in automotive applications (cars, trucks, special vehicles), but also in construction machines and ship drivelines