

Company History and Profile

BAUSCH-GALL GmbH (LLC) in Munich, Germany, is owned and operated by Dr. Ingrid Bausch-Gall and Hans Gall who started as independent consultants in 1983 and 1981, respectively. In the first years, main areas of activity were ACSL¹-based projects and training, software development, computer-aided RF circuit design projects and training, and consulting for and sales of various mathematical and CAE programs.

In 1986, a new office building was constructed. BAUSCH-GALL GmbH was incorporated and more employees were hired. The marketing of MATLAB² was added to the company activities in 1988. Simulation-oriented work using ACSL continued and a large project with DLR (German Aerospace Research Establishment) was completed. New training courses were developed and organized in-house and at many customer sites.

In 1989, sales of the SPICE³-based electronics simulation products from Intusoft started. Through increasing sales of MATLAB software products, BAUSCH-GALL GmbH grew to 15 employees.

In 1994, the MathWorks-related sales business was sold to the German company Scientific Computers GmbH which took over the entire sales staff. BAUSCH-GALL GmbH concentrated on the development of its own special software products, project work and new training courses for MATLAB/Simulink, ACSL, Dymola⁴, SPICE and QuickFil⁵. Among the software products developed is a Real-Time Extension for Simulink, an ACSL-SPICE-Interface, a Simulink-SPICE-Interface and MECHMACS⁶, a mechanical blockset for MATLAB/Simulink which was developed in cooperation with Hermann Fischer, an expert for mechanical simulation.

For a consortium of German car manufacturers, a detailed study for the application of VHDL-AMS⁷ in the automotive industry was worked out in 1995.

In the following years, several RF circuit design projects were completed and special hardware was designed and built. For these projects, specialized modeling and design software was written.

In September 1994, Ingrid Bausch-Gall met Hilding Elmquist at the EuroSim Conference in Vienna and became interested in Dymola, a software family for object-oriented simulation. This was the beginning of our working relationship with Hilding and his company Dynasim.

Since 1996, BAUSCH-GALL GmbH is a distributor for Dymola. Many training courses for Dymola were organized in the following years.

Sales of Dymola grew continuously from year to year. Intensive customer support via telephone and personal contacts, our very large customer base, built over the many years from 1981, in combination with the steady development of Dymola through Hilding Elmquist and his excellent co-workers allowed this sales growth.

Based on a broad range of expertise in the solution of practical problems by effective computer application, BAUSCH-GALL GmbH will continue to serve the market for high-quality simulation.

¹Advanced Continuous Simulation Language, AEGIS Research Corporation, Huntsville, U.S.A.

²Mathematical Laboratory, The MathWorks, Inc., Natick, MA, U.S.A.

³Simulation Program with Integrated Circuit Emphasis, U. C. Berkeley, U.S.A.

⁴Dynamic Modeling Laboratory, Dynasim AB, A Dassault Systèmes Company, Lund, Sweden

⁵Filter Synthesis Program, OMICRON electronics, Klaus, Austria

⁶Mechanical Macros, Ingenieurbuero Fischer / BAUSCH-GALL GmbH, Munich, Germany

⁷VHDL-AMS, IEEE Std 1076.1

Personal Profiles

Dr. Ingrid Bausch-Gall (owner/partner)

Ph.D. in Numerical Mathematics from Technical University Aachen (RWTH Aachen)

Expertise:

- simulation of nonlinear dynamic systems with Dymola, Simulink, VHDL-AMS and ACSL
- numerical integration algorithms, linear algebra and optimization
- development of Modelica-, MATLAB-, C-, FORTRAN- and VHDL-AMS-code
- teaching of training courses for Dymola, MATLAB and Simulink
- co-author of book "Simulation with ACSL" (in german)
- co-founder and former member of the board of directors of the german-speaking simulation society ASIM (Arbeitsgemeinschaft Simulation)

Hans Gall (owner/partner)

Dipl.-Ing. (MSEE) in Telecommunication from Technical University Muenchen

Expertise:

- RF and microwave circuit design and filter synthesis (hardware development)
- computer-aided circuit design using SPICE, Serenade⁸, S/FILSYN⁹, etc.
- modeling of electronic components
- development of FORTRAN programs (CAE software)
- teaching of courses for SPICE, Serenade, S/FILSYN, QuickFil, ACSL
- design and construction of high-power RF transformers for EMC-measurements
- co-founder of german-speaking SPICE User Group and member of IEEE
- active radio amateur (call sign DK3YD) since 1969

⁸ANSOFT Corporation, U.S.A.

⁹ALK-Engineering, U.S.A.