

Prof. i.R. Dr.-Ing. habil. Dr. h.c. Rudolf H. Schilling

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Curriculum Vitae :

Date of birth: January 01, 1944

Education: 1964 - 1970 Mechanical Engineering at Universität Karlsruhe(TH), Germany
1976 Dr.-Ing. in Mechanical Engineering at Universität Karlsruhe(TH):
"Radial Cascades for Pumping highly viscous Fluids"
1979 Habilitation, Dr.-Ing. habil., at Universität Karlsruhe(TH):
"Fluid Flow in the Impeller Side Spaces of Centrifugal Pumps"

Career: 1970 - 1971 Design Engineer with the Pump Manufacturer KSB, Frankenthal
1971 - 1980 Research Assistant with the Institute of Fluid Mechanics and
Fluid Machinery (IFM&FM) at Universität Karlsruhe(TH)
1976 - 1980 Provisional Supervision of the Teaching Chair for Fluid
Machinery at the IFM&FM at Universität Karlsruhe(TH)
1980 - 1988 R & D Engineer in the field of Hydraulic Turbomachinery at the
Turbine Manufacturer VOITH, Heidenheim, Germany
1984 – 1988 Head of R & D at VOITH, Heidenheim, Germany
Since 1988 Technische Universität München (TUM),
Full Professor (C4), Lehrstuhl für Hydraulische Maschinen,
since 2002 Fluid Mechanics
1992 - 1996 Chairman of International Association of Hydraulic Research
(IAHR), Section Hydraulic Machinery and Cavitation
1994 – 1998 Chairman of "Deutscher Fakultätentag für Maschinenbau und
Verfahrenstechnik"
1996 – 2000 Vice-Dean and Dean of Faculty of Mechanical Engineering
2001 – 2003 Member of the TUM - Senate
2003 – 2009 Vice-President of Technische Universität München
2003 – 2009 Member of the Board of TIME-Association (Top Industrial
Managers for Europe)
2004 – 2010 Managing Director of German Institute of Science & Technology,
(GIST), later GIST-TUM Asia, Singapore
2009 - 2011 Authorized Person of TUM – President
2011 Retirement from Technische Universität München
2012 -2015 Invited Professor at the International Hellenic University,
Thessaloniki, Greece
2015 Foundation of the Hydro Consulting GmbH, CEO

Research Interests:

Development of Numerical Design Tools.
Computational Fluid Dynamics (CFD), Structural Analysis (CAS),
Hydro - Acoustics (CHA), Fluid – Structure Interaction.
Development of CFD-, CAS- and CHA-Tools for the Numerical Analysis
of Hydraulic Turbomachinery
Optimum Design of Hydro Turbines, Centrifugal Pumps and Fans.
CAD/CAM of Hydraulic Turbomachinery Components.

Teaching: Fluid Mechanics,
Control Theory,
Numerical Simulation of Real Fluid Flows,
CFD Aided Design of Fluid Machinery,
CAD/CAM of Fluid Machinery Components,
Hydraulic Machinery,
Water and Wind Turbines,
Power Engineering – Hydro and Wind Power

Honors: 1976 : Dr.-Ing. Thesis with “Summa cum laude”
1992 : Call to a Full Professorship (C4) at the University of Stuttgart
1998 : Best Paper Award, MTM III Conference on Hydro Power Plants, Ex-en
Provence, France
2000 : ISROMAC-Award from the Pacific Center of Thermal-Fluid
Engineering, Hawaii, USA
2001 : Appointment as Consultant Professor of Huazhong University of
Science and Technology in Wuhan, China
2009 : Honorary Degree “Dr. h.c.” from St. Petersburg Polytechnical
University, St. Petersburg, Russian Federation
2010 : Award of Nanyang Technological University (NTU), Singapore, for the
“Outstanding Contribution towards Fostering the NTU – TUM
Partnership”
2010 : Award of GIST- TUMAsia
“In Appreciation of the Unwavering Support and Contributions to GIST-
TUMAsia in the Years 2004-2010”
2012 : Invited Lecture on the ISROMAC 14, Hawaii, USA, Febr./March 2012 :
“ Future Development of Waterpower – Possibility and Limits”
2013 “Goldene Ehrennadel” des VDMA Fachverbandes Pumpen+Systeme
2015 : Invited Lecture from German Federal Ministry for Economic Affairs and
Energy, Zagreb, Croatia, May 2015 :
“Development of Efficient Small Hydro Machinery”
2015 : Invited Lecture on the Sino-German Symposium in Zhenjiang, Jiangsu,
China, October 2015 :
“Development of Radial-Axial Pump Turbines for Decentralized Small
Pumped Storage Power Plants”

Selected Memberships:

International Association of Hydraulic Research (IAHR),
Representative of Germany, 1990 – 2004, Chairman 1992 – 1996

TIME-Association (Top Industrial Managers for Europe), 2001 - 2009
Member of the Board, 2003 – 2009

Konsortium Deutscher Universitäten (KDU), Vice-President, 2004 – 2007

German Institute of Science and Technology, Singapore, Institute of
Technische Universität München, 2004 – 2011