



PERSONAL INFORMATION

NAME
ADDRESS
PHONE
E-MAIL
CITIZENSHIP
DATE OF BIRTH

DR. ROLAND EISL
OBERWEG 26, 4844 REGAU, AUSTRIA
++43 650 22 38 360
Roland.Eisl@enrag.at
Austria
22.04.1981

WORK EXPERIENCE

SINCE FEBRUARY 2016
Certified Court Expert (according to Austrian law) for calculation and simulation of thermodynamical and fluidmechanical processes; for combustion and gasification technologies, for steam generators and for computational fluid dynamics (CFD)

SINCE FEBRUARY 2014
HELIOFLOAT GmbH
CEO
Company selling and engineering innovative swimming light weight platforms for (offshore) solar energy production and water reservoir shading applications

SINCE SEPTEMBER 2013
BIUCO GmbH
General Manager (Chief Technician)
Company selling and engineering biomass gasification combined heat and power plants for small and medium size based on a patented fluidized bed technology.

SINCE JUNE 2010
ENRAG GmbH
CEO
Engineering Company for mechanical engineering (power engineering)
Business operation areas: Modelling and simulation of thermodynamical and fluid mechanical processes and systems; Development of thermal energy storage systems; Process- and power engineering; Optimization of combustion systems

SEPTEMBER 2011-OCTOBER 2013
Research Studio Austria HELIOFLOAT (Vienna University of Technology)
CEO
Business development, marketing, entrepreneurship, acquisition of funding and investors.

MARCH 2007 – MARCH 2010
Vienna University of Technology, Institute for Energy Systems and Thermodynamics.
Junior Scientist
Tasks:

Providing simulations and solutions for industrial partners in the fields of combustion-, power- and process engineering as well as computational fluid dynamics simulations (CFD simulation).
Working and writing on the PhD thesis: „CFD modelling of the coal fragmentation, -drying and -devolatilization inside a moving bed of a COREX melter gasifier.“; in cooperation with SIEMENS VAI

AUGUST AND SEPTEMBER 2009

SANDIA National Laboratories, Livermore, California, US
Guest scientist at the CRF (Combustion Research Facility)
Tasks: Research on combustion and gasification of solid fuels

EDUCATION

1991-1995

Grammar school Bad Ischl, Austria

1995-2000

Higher Technical Education Institute, Vöcklabruck, Austria
Building services and Energy systems
A-Level (**passed with distinction**)

2001 – 2007

Vienna University of Technology: Bachelor and Master in mechanical engineering
Field of in-depth study:
Energy systems and power engineering:

- Advanced power plants
- Thermal energy systems

Finished May 2007 (**passed with distinction**)
Degree: **Diplom Ingenieur (Master of Science, MSc)**

2001-2009

Vienna University of Economics and Business: Bachelor and Master in business administration
Fields of in-depth study:

- Corporate Finance
- Banking and investment banking
- Corporate and capital market law

Finished March 2009
Degree: **Magister der Sozial- und Wirtschaftswissenschaften (Master of Science, MSc)**

2007-2010

Vienna University of Technology: Doctorate program in technical sciences
Modelling and simulation in thermal- and process engineering
PhD thesis: „*CFD modelling of the coal fragmentation, -drying and -devolatilization inside a moving bed of a COREX melter gasifier.*“; in cooperation with SIEMENS VAI.
Finished March 2010 (**passed with distinction**)
Degree: **Doktor der technischen Wissenschaften (PhD)**

PERSONAL SKILLS

FIRST LANGUAGE

German

ADDITIONAL LANGUAGE

English

Fluent in written and spoken

SOCIAL SKILLS

Elected member of the students union, 2003-2005.
Elected student member of different commissions of the faculty of mechanical engineering, 2003-2006
Voluntary employee at the students union press office of Vienna University of Technology, 2003-2005

TEACHING

Numerical methods for thermal energy systems (summer terms 08, 09)

TECHNICAL SKILLS

SOFTWARE:

Office (special Excel VBA knowledge), LaTeX
CAD
Mathcad, Matlab
Process simulation: Gate Cycle, IPSE Pro, KED, GT Pro, EBSILON, Aspen+
CFD: FLUENT
DEM: LIGGGHTS
Linux

PUBLICATIONS

M. Hämmerle, M. Haider, R. Willinger, K. Schwaiger, R. Eisl, K. Schenzel:
„Saline cavern adiabatic compressed air energy storage using sand as heat storage material“; 10th Conference on Sustainable Development of Energy, Water and Environment Systems, Dubrovnik, Croatia; 27.09.2015 - 02.10.2015; in:
"Proceedings of the 10th Conference on Sustainable Development of Energy, Water and Environment Systems", (2015),

K. Schwaiger, M. Haider, F. Holzleithner, R. Eisl:
"A comparison between passive regenerative and active fluidized bed thermal energy storage systems";
Journal of Physics: Conference Series, 395 (2012), 395; 8 S.

K. Schwaiger, M. Haider, F. Holzleithner, R. Eisl:
"A comparison between passive regenerative and active fluidized bed thermal energy storage systems";
Vortrag: 6th European Thermal Sciences Conference (Eurotherm 2012), Poitiers; 04.09.2012 - 07.09.2012.

K. Schwaiger, M. Haider, F. Holzleithner, R. Eisl:
"sandTES - A novel Thermal Energy Storage System based on Sand";
21st International Conference on Fluidized Bed Combustion, Naples; 03.06.2012 - 06.06.2012; in: "21st International Conference on Fluidized Bed Combustion", (2012)

K. Schwaiger, M. Haider, F. Holzleithner, R. Eisl:
"A comparison between passive regenerative and active fluidized bed thermal energy storage systems";
Journal of Physics: Conference Series, 395 (2012), 395; 8 S.

M. Rammerstorfer, R. Eisl: *"Carbon Capture and Storage - Investment Strategies for the future?"* Energy Policy, vol. 39, 7103-7111, 2011.

M. Haider, K. Schwaiger, F. Holzleithner, R. Eisl:
"SandTES - A novel thermal energy storage system based on sand";
Presentation: Eurotherm Seminar No. 93, Bordeaux; 16.11.2011 - 18.11.2011.

R. Eisl, F. Holzleithner, M. Haider, G. Aichinger:
"CFD Simulation of Process-driven Particle Fragmentation in a Coal Bed Gasifier";

presentation: 8th European Conference on Coal Research and its Applications: ECCRIA 8, Leeds, 06.09.2010 - 07.09.2010.

A. Steiner, R. Eisl, M. Haider:
"Energy survey "ECOCEM""; Report for Gmundner Zementwerke Produktions- u. Handels GmbH; 2010.

R. Eisl:
"CFD modeling of the coal fragmentation, -drying and -devolatilization inside a moving bed of a COREX melter gasifier", Vienna, Vienna University of Technology, PhD thesis, 2010.

R. Eisl, M. Rammerstorfer:
"Carbon capture and storage - Investment strategies for the future"; Melbourne Derivatives Research Group Conference, Melbourne; 2009.

R. Eisl:
"Computational Fluid Dynamics - A powerful tool to optimize waste incineration"; Solid Waste Management Symposium, Vienna; 2009.

R. Eisl:
„Validation of CO2 storage and – transportation facilities via real options analysis“, Vienna, Vienna University of Economics and Business., Master thesis, 2009

R. Eisl, A. Werner, H. Walter, M. Haider:
"A Comparison between CFD-Simulation and Experimental Observation of Solids Distribution in a CFB-Test Rig"; 9th International Conference on Circulating Fluidized Beds, Hamburg, Germany, in: "Circulating Fluidized Bed Technology IX", J. Werther, W. Nowak, K. Wirth, E. Hartge (Hrg.), 2008

R. Eisl:
"Modeling the gas- solids distribution in a circulating fluidized bed with computational fluid dynamics (CFD) ", Vienna, Vienna University of Technology, Master thesis, 2007.

PATENTS

R. Eisl, M. Haider, F. Holzleithner:
"Wärmespeichersystem" (engl: "Heat Storage System");
Patent: Austria, Nr. 510897 B1
European Patent, EP 2612098 B1

HOBBIES

Golf (-14,2), skiing
Member of Rotary Club Vöcklabruck-Attersee (RI Club No: 11960, district 1920)

DRIVING LICENSES

A, B, C, E, F, G, carne