Curriculum Vitae

Name	Zogg, Andreas	Private	079 334 13 21
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SHORT PROFILE

- Experienced process development chemist with profound knowledge in organic- and physical chemistry, chemical engineering, process safety, and process modelling.
- Strong experience with scale-up of new chemical processes into production scale equipment. Ability to implement new technologies to expand the limits of standard operation conditions – for example continuous reaction technology.
- International experience in technical transfers of existing chemical processes between different production sites all over the world as well as startup of new chemical plants.
- Pronounced communication and motivation competences. Strong didactical skills.

PROFESSIONAL EXPERIENCE

04/2018 to present

Professor for Physical Chemistry, Process Modelling and Reaction Technology

University of Applied Sciences and Arts FHNW, Muttenz, Switzerland

- Lectures and student projects within the field of physical chemistry, process modelling, reaction technology and process safety.
- Research areas: New reaction technologies for chemical process development and production. Process safety.

04/2017 03/2018

Safety Lab Expert, Pharma Chemical and Analytical Development

Novartis Pharma AG, Basel, Switzerland

- Support of laboratory and production teams with technical expertise in the field of process safety.
- Member of the risk analysis teams – responsible for the topic thermal process safety.
- Writing of safety reports
- Process simulation for safety relevant scenarios (Matlab, Aspen).

09/2009 - 03/2017

Senior Scientist, Pharma Technical Development, New Technologies
F. Hoffmann-La Roche Ltd., Basel, Switzerland

- Development of new technologies for process development and process safety:
  - Development of a lab reactor for the safe screening of new materials for heterogeneously catalyzed oxidation reactions with pure oxygen.
  - Development of a Scale-Down-Reactor to improve the lab-scale piloting of chemical processes in agitated vessels. The new lab device allows the analysis of the reaction power, corrosion behavior, and the behavior of the reaction mass during pressure relief scenarios.
  - Development of an innovative tubular reactor concept for heterogeneous catalyzed multi-phase reactions in collaboration with the FHNW-Muttenz.
- Support of the chemical development teams in the field of thermal separation and scale-up of technically demanding chemical processes:
  - Process development, process donor, and startup of an alkaline hydrolysis under strongly alkaline conditions at 200 °C and 40 bars in Clarecastle Ireland. Gathering of safety data for the dimensioning of the pressure relief system. In parallel: Development of a continuous process for the same process in a tubular Nickel-Reactor.
  - Process development & process donor for a batch rectification unit at 5 mbar in a $12m^3$ vessel and corrosive atmosphere in Clarecastle, Ireland.
  - Process development for a short path distillation at 150 °C and 5 mbar in Basel.

08/2004 - present

University lecturer, Case-Study for chemical engineers
ETH Zurich, Institute for Chemical and Bioengineering, Switzerland

- Support of the case study for chemical engineering students, 6^{th} Semester: Modelling with Matlab: Hydrogen Cyanide (Lonza), Metilox (Ciba/BASF), Isophoron (DSM).

07/2004 - 07/2009

Project leader, Process development
BASF (former Ciba SC), Polymer Additives, Pratteln, Switzerland

- Chemical process development and optimization, scale-up from laboratory scale into production scale (up to 25 m^3 reactor-size): Writing of pilot- as well as production procedures including risk analysis.
- Piloting of a large scale Grignard reaction as well as establishment of a safety concept for the pilot trials as well a new automated commercial plant.
- Laboratory head (2 to 4 lab technicians).
- Process donor for investment projects (e.g. Taiwan): Team-Lead during the elaboration of the basic design for mono-plants including: Reactors, filter, dryer, solvent regeneration, effluent- and off-gas treatment.
- Support of toll manufacturers all over the world in case of technical troubles (India, France, Italy, Germany, and Switzerland).
- Research project within the field of enzyme catalysis.

07/2004 - 07/2003

Post-doctoral position, Process development
Ciba SC, Polymer Additives, Pratteln, Switzerland

- Solid phase synthesis for flame-retardants and heterogeneous catalysis for acid catalyzed reactions.

SECONDARY ACTIVITIES

10/2015 - present — **Member of the "Sozialhilfebehörde"**
Community of Frenkendorf, Basel, Switzerland
- Ressort asylum.

1998 — **Software Engineer, *private***
- Development of a LabVIEW control unit for an online concentration measurement device. Customer: Tex-A- Tec AG, Wattwil (CH).

1997 — **Internship**
Paul Scherrer Institute, Villigen, Switzerland
- Radiation Grafted Fuel Cell Membranes.

EDUCATION

2003 — **Dr. sc. techn. , ETH Zurich, Switzerland**
- Reaction Calorimetry and Online-Spectroscopy. Safety and Environmental Technology Group, Prof. Dr. Konrad Hungerbühler.

1999 — **Dipl. Chem., ETH Zurich, Switzerland**

1994 — **Matura C, Gymnasium Burgdorf (BE), Switzerland**

TRAINING – Management and Leadership

2008	Stucki Leadership-Teambuilding AG: Project management (PMI)
2006	Ciba SC: Entrepreneur Seminar
2004	Ciba SC: Basic course in management

TRAINING – Process Safety

2013	Swagelok: Fitting – Safety seminar
2013	SGVC[1]: Safety control in Multi-Purpose-Units
2012	SGVC: Safety consistency of equipment – SIL in practice.
2012	SWISSI[2]: Sizing Emergency Pressure Relief Systems
2009	SWISSI: Explosion protection.
2008	SWISSI: Risk analysis of chemical processes.
	SWISSI: Technical process safety.
	SWISSI: Risks of electrostatics.

[1] SGVC: Swiss Process and Chemical Engineers.
[2] SWISSI: Swissi Process Safety GmbH, now TÜV SÜD Process Safety.

TRAINING – Process Engineering, Process Development, Laboratory Automation

2016	Scientific Update: Chemical Development & Scale-Up
2012&13	HTW Chur and SGVC: supplementary course process engineering: Reaction technology, process safety, process control, renewable energies, and efficiency in energy consumption.
2012	UMETRICS[3]: Design of Experiments General.
2011	SGVC: Flow patterns and reaction technology.
2009	SGVC: Agitation, a key unit operation.
2007	SGVC: Technologies for the mechanical solid/liquid separation
2006	SGVC: Micro-structured devices for chemical research process development and production.
2005	GDCh[4] Seminar: Membrane technology.
2004	UIC[5] Seminar: Short path and whipped film distillation.
2001	National Instruments[6]: LabVIEW training course, advanced level I.

LANGUAGES

- German (mother tongue)
- English (fluency)
- French (intermediate)

AWARDS

2012	Promotion to Prokurist, F. Hoffmann – La Roche AG, Basel.
2005	Award for young scientists for applied chemical thermodynamics, Swiss Society for Thermal Analysis and Calorimetry.
2004	Award for the doctoral thesis: “Medaille der ETH”.

IT KNOWLEDGE

Matlab, LabVIEW, Pascal, C, Aspen, Chemcad, Dynochem. MS Office.

REFERENCES

References on request.

PERSONAL DATA

Date of birth	26.11.1974
Civil status	Married, two children (11 and 12 years old).
Hobbies	Mountaineering, skiing, painting, family activities.

[3] UMETRICS: Data analytics solutions (Design of Experiments, Quality by Design)
[4] GDCh: Gesellschaft Deutscher Chemiker
[5] UIC: Short Path Distillation, Thin Film Evaporation, Rectification.
[6] National Instruments: A Global Leader in Test, Measurement, and Control Solutions.