

## List of publications and patents – Andreas Zogg

### Doctoral thesis

A combined approach using calorimetry and IR-ATR spectroscopy for the determination of kinetic and thermodynamic reaction parameters. ETH Zürich, Nr. 15086, 2003.

<http://e-collection.ethbib.ethz.ch/cgi-bin/show.pl?type=diss&nr=15086>

### Patents

- 2014 AR087118 (A1): Method for the preparation of cyclohexane carboxylic acid.
- 2012 WO2012080178 (A1): Process for the preparation of aromatic thiol derivatives by hydrogenation of disulfides.
- 2003 EP1184649 (A1): Calorimeter - *developed during the doctoral thesis.*

### Presentations

- April 2017 Hightech Zentrum Aargau AG: Reindustrialisierung mit Hightech-Unternehmen. 25. April 2017: *Zukünftige Trends in der chemischen Verfahrensentwicklung und Produktion.*
- Nov. 2016 Haute école d'ingénierie et d'architecture de Fribourg. 08. Nov. 2016: *Reaction Technology.*
- Mai 2003 Achema, Frankfurt: *A new Small Scale Reaction Calorimeter combined with a new Evaluation Principle for Kinetics Screening.*
- Nov. 2002 Aiche Annual Meeting, Indianapolis, Session Nr. 12005, 05.11.2002, Paper Nr. 285e: *A new Small Scale Reaction Calorimeter combined with a new Evaluation Principle for Kinetics Screening.*

### Publications

- 2017 Entwicklung eines neuartigen Rohrreaktorsystems für heterogen katalysierte Mehrphasenreaktionen. Tobias Leonhardt, Andreas Zogg, Cédric Hutter, Julius Jeisy, Wolfgang Riedl. *Chemie Ingenieur Technik*. Volume 89, Issue 4, April 2017, Page 432, DOI: 10.1002/cite.201600147
- 2016 Entwicklung eines Rohrreaktorsystems zur Durchführung von Mehrphasenreaktionen im Labormaßstab. Tobias Leonhardt, Andreas Zogg, Cédric Hutter, Julius Jeisy, Wolfgang Riedl. *Chemie Ingenieur Technik*. Volume 88, Issue 9, September, 2016, Page: 1215, DOI: 10.1002/cite.201650274
- 2004 A Pressure-Resistant Small-Scale Reaction Calorimeter That Combines the Principles of Power Compensation and Heat Balance (CRC.v4). Fabio Visentin, Stefano I. Gianoli, Andreas Zogg, Oemer M. Kut, and Konrad Hungerbühler. *Organic process research and development*, Volume 8, Issue 5, 2004, 725 -737
- 2004 Identification of kinetic and thermodynamic reaction parameters from online calorimetric and IR-ATR data using a new combined evaluation algorithm. Andreas Zogg, Ulrich Fischer, and Konrad Hungerbühler. *Chemical Engineering Science*, Volume 59, Issue 24, 2004, 5795-5806

- 2004 Isothermal reaction calorimetry as a tool for kinetic analysis. Review. Andreas Zogg, Francis Stoessel, Ulrich Fischer and Konrad Hungerbühler. Thermochemica Acta, Volume 419, Issues 1-2, 2004, 1-17
- 2004 A new approach for a combined evaluation of calorimetric and online infrared data to identify kinetic and thermodynamic parameters of a chemical reaction. Andreas Zogg, Ulrich Fischer and Konrad Hungerbühler. Chemometrics and Intelligent Laboratory Systems, Volume 71, Issue 2, 2004, 165-176
- 2003 The runaway scenario in the assessment of thermal safety: simple experimental access by means of the catalytic decomposition of H<sub>2</sub>O<sub>2</sub>. Eissen M; Zogg A.; Hungerbühler K. Journal of Loss Prevention in the Process Industries, Volume 16, Issue 4, 2003, 289-296
- 2003 A New Small-Scale Reaction Calorimeter That Combines the Principles of Power Compensation and Heat Balance. Andreas Zogg, Ulrich Fischer, and Konrad Hungerbühler. Industrial and engineering chemistry research, Volume 42, Issue 4, 2003, 767 -776
- 2001 Determination of Reaction Parameters Using a Small Calorimeter with an Integrated FT-IR Probe and Parameter Fitting. Jörg Pastré, Andreas Zogg, Ulrich Fischer, and Konrad Hungerbühler. Organic process research and development, Volume 5, Issue 2, 2001, 158 -166

#### **Master and diploma thesis initiated and supervised during my professional career**

- 2017 Florian Nestler: Skalierung eines Entlastungssystems für Scale-Down Reaktor. Diploma-thesis; Prof. Dr.-Ing. Norbert Mollekopf, TU-Dresden.
- 2017 Jan Skula: Investigation of detonation pressures of gas/liquid oxidations under explosion conditions. Master-Thesis, Prof. Dr.-Ing. Wolfgang Riedl, FHNW, School of Life Sciences, Muttenz.
- 2015 Pascal Schulthess: Design and Implementation of an innovative Process Screening Device; Master-Thesis, Prof. Dr.-Ing. Wolfgang Riedl, FHNW, School of Life Sciences, Muttenz.
- 2014 Eik Prenzlöw: Scale-Down existierender Produktionsanlagen auf den Labormassstab; Diploma-Thesis, Prof. Dr.-Ing. Norbert Mollekopf, TU-Dresden.
- 2001 Stephanie Portmann: Screening von verschiedenen Lipasen für die enzymatisch katalysierte Umesterung von Acrylsäuremethylester. Diplomarbeit, Prof. Dr. D. Gyga, FHNW, School of Life Sciences, Muttenz.

#### **Bachelor thesis and HFP-diplomas initiated and supervised during my professional career**

- 2017 Ivo Langendorf: Scale-Down einer Suzuki-Kopplung in einem neuartigen Laborreaktor. HFP Diploma-Thesis.
- 2015 Debora Schöni: Regelungstechnische Untersuchungen an Laborreaktoren für Scale-Up. Bachelor-Thesis, Prof. Dr. D. Zogg, FHNW, School of Engineering, Windisch.
- 2014 Simon Grünig: Optimierung der kontinuierlichen Synthese von N-Methyl-N-Nitrosoharnstoff. Bachelorarbeit. Franziska Morganti, Life Sciences and Facility Management.

- 2013 Jerome Blum: Regelung eines Labor-Rührkessels für Scale-up. Bachelor-Thesis, Bachelor-Thesis, Prof. Dr. D. Zogg, FHNW, School of Engineering, Windisch.
- 2013 Sebastian Rieth: Angewandte Reaktionstechnologie – Auswirkung von Reaktionsführung und Durchmischung auf die Selektivität einer elektrophilen aromatischen Substitution. HFP- Diploma-Thesis.

#### **Student works initiated and supervised during my professional career**

- 2017 Tobias Zubler: Regelungsstrukturen an einem Laborreaktor für Scale-Up. Prof. Dr. D. Zogg, FHNW, School of Engineering, Windisch.
- 2016 Lukas Kündig: Scale-Down Reactor. Prof. Dr. Philipp Rudolf von Rohr. ETH Zürich. Department of Mechanical and Process Engineering.
- 2015 Benjamin Kurth: Synthese von Benserazid Hydrochlorid. Dr. Christelle Jablonski & Prof. Dr. Gerhard Grundler. FHNW, School of Life Sciences, Muttenz.
- 2015 Samira Gmür: Synthese von Benserazid – Optimierung für die Anwendung im Rohrreaktor. Prof. Dr. Gerhard Grundler & Dr. Christelle Jablonski. FHNW, School of Life Sciences, Muttenz.
- 2015 Alessandro Urso: Herstellung von Hydroxylamin für den unmittelbaren Verbrauch in der Prozesskette zur Reduktion des Gefahrenpotentials. Dipl. Ing. Daniel Mollet. FHNW, School of Life Sciences, Muttenz.
- 2015 Benedikt Müller & Alessandro Urso: Evaluation verschiedener Oxidationsmittel für den Ringschluss zu 1,2,4-Triazolopyridin. Prof. Dr. Gerhard Grundler & Dr. Christelle Jablonski. FHNW, School of Life Sciences, Muttenz.
- 2014 Daniel Moser: Synthese von N-2-pyridinylbenzamidin Optimierung und Skalierung. Prof. Dr. Gerhard Grundler & Dr. Christelle Jablonski. FHNW, School of Life Sciences, Muttenz.
- 2014 Marc Eichenberger: Betrachtung der Auswirkungen unterschiedlicher Reaktionsführungen auf die Selektivität einer elektrophilen aromatischen Substitutionsreaktion. Tobias Leonhardt. FHNW, School of Life Sciences, Muttenz.
- 2014 Simon Grünig: Risikoanalyse Diazomethan. Franziska Morganti, Life Sciences and Facility Management.