|  |  |
| --- | --- |
| **Michael Thomann** |  |

|  |  |
| --- | --- |
| Date of birth | 9. February 1969 |
|  |  |
| Nationality | Swiss |
|  | **Ein Bild, das Mann, Person, Anzug, Schlips enthält.  Automatisch generierte Beschreibung** |
| Function | Lecturer and group leader |
|  | environmental and water technology |
|  |  |

**Professional experience**

|  |  |
| --- | --- |
| 02/20 to present | University of Applied Sciences and Arts FHNW, School of Life Sciences, Muttenz, Switzerland Professor for environmental and water technology |
| 09/05 – 12/19 | HOLINGER AG, Liestal, Switzerland Head wastewater technology Deputy head branch Liestal |
| 10/02 – 07/05 | BMG Engineering AG, Schlieren, Switzerland Project leader industrial wastewater treatment |
| 01/97 – 09/02 | EAWAG, Dübendorf, Switzerland Research department “Process engineering” Prof. Dr. W. Gujer, Dr. sc. techn. ETH |
| 05/94 – 07/96 | ETH, Zurich, Switzerland Scientific assistant Institute of Environmental Engineering, Prof. Dr. W. Gujer |

**Education**

|  |  |
| --- | --- |
| 2002 | Dr. sc. techn., ETH Zurich, Switzerland |
| 1994 | Dipl. Civil Eng., ETH Zurich, Switzerland |
| 1988 | Matura D, Holbein-Gymnasium, Basel |

**Professional experience – Full-scale wastewater processes for the elimination of micropollutants**

|  |  |
| --- | --- |
| 2014 – 2018 | ERZ, Wastewater treatment plant WWTP Zürich-Werdhölzli, Switzerland Overall project manager + project manager process technology, process unit for the elimina-- tion of organic micropollutants with ozonation + sand filtration |
| 2013 – 2019 | Wastewater treatment plant WWTP Altenrhein, Thal, Switzerland Overall project manager and project manager process technology, process unit for the elimi- nation of organic micropollutants with an ozonation and a filtration with granular activated  carbon |
| 2011 – 2014 | Wastewater treatment plant WWTP Neugut, Dübendorf, Switzerland Overall project manager + project manager process technology, first full-scale ozonation for  the elimination of organic micropollutants in Switzerland |
| 2017 – 2019 | Wastewater treatment plant WWTP Flos, Wetzikon, Switzerland Overall project manager + project manager process technology, process unit for the elimi- nation of organic micropollutants with direct dosage of powdered activated carbon in an acti- vated sludge system |

**Professional experience – Industrial wastewater treatment and offgas treatment**

|  |  |
| --- | --- |
| 2011 – 2019 | Wastewater treatment plant ARA Rhein AG, Pratteln, Switzerland Overall project manager + project manager process technology, flotation, upgrade sludge  treatment |
| 2017 – 2019 | DSM Nutritional Products, Sisseln, Switzerland Project manager, feasibility study aerobic und anaerobic industrial upgrade of the waste- water treatment plant and offgas treatment, pilot plant study of a high-rate nitrification in a moving bed reactor |
| 2017 – 2019 | Roche Diagnostic International, Rotkreuz, Switzerland Project manager, feasibility study ozonation and filtration with granular activated carbon  pharmaceutical wastewater, mass-flow model for effluent concentration prediction,  lab tests for ozonation, fenton’s reagent and activated carbon adsorption |
| 2005 – 2012 | Wastewater treatment plant WWTP Hesperingen, Luxembourg Project manager process technology, nitrifying+denitrifying moving bed reactor, anaerobic mesophilic sludge treatment, offgas treatment |

**Professional experience – R&D-pilot projects for the elimination of micropollutants in WWTP**

|  |  |
| --- | --- |
| 2016 – 2019 | Wastewater treatment plant WWTP Altenrhein, Thal, Switzerland - Pilotplant Project manager, semi-industrial pilot plant ozonation and filtration with granular activa ted carbon, R&D-collaboration of HOLINGER with EAWAG (ecotoxicology) und FHNW (EU-project nextGen) |
| 2014 – 2016 | Wastewater treatment plant WWTP Neugut, Dübendorf - Pilotplant Project manager, semi-industrial pilot plant ozonation and filtration with granular activa ted carbon and biological moving bed reactor, project “RETREAT”, R&D-collaboration of HOLINGER with EAWAG and WWTP Neugut |
| 2012 – 2015 | Wastewater treatment plant WWTP Flos, Wetzikon - Pilotplant Project manager, full-scale pilot plant for powder activated carbon dosage into an activa ted sludge system, project “PAK im Belebtschlammsystem” funded by FOEN (Federal  office for the environment) R&D-collaboration of HOLINGER with HSR (Hochschule Rapperswil) |
| 2013 – 2015 | Wastewater treatment plant WWTP Ergolz 1, Sissach - Pilotplant Project manager, realisation of a full-scale pilot plant for dosage of powdered activated carbon in an existing sand filtration, project „Aktifilt“, R&D collaboration of HOLINGER  with AIB (Amt für industrielle Betriebe), FHNW and EAWAG |
| 2008 – 2010 | Wastewater treatment plant WWTP Vidy, Lausanne - Pilotplant Project manager, realisation of three full-scale pilot plants – biological treatment with moving bed reactor, ozonation and ultrafiltration with powdered activated carbon ad- sorption, project „Micropoll“ funded by FOEN (Federal office for the environment), R&D collaboration of HOLINGER with STEP de Vidy, EPFL, EAWAG and Triform |
| 2008 – 2009 | Enhanced hospital wastewater treatment, Kantonsspital Baden - Pilotplant Project manager, semi-industrial pilot plant, membrane bioreactor (MBR) for the en- hanced treatment of hospital wastewater, EU-Project „Pills”, R&D collaboration of HOLINGER  with EAWAG and Kantonsspital Baden |

**Professional experience – expert studies**

|  |  |
| --- | --- |
| 2020 | Technical guideline (VSA, Glattbrugg) – Analytikdaten in ARA Project manager, expert study, guideline for data quality control and uncertainty analysis for wastewater treatment plant data |
| 2018 | FOEN (Federal office for the environment), Bern Project manager, expert study, development of a new infrastructure cost model for the  realization of the elimination of micropollutants in Swiss wastewater treatment plants |
| 2015 | Technical guideline (VSA, Glattbrugg) - Empfehlung Dimensionierungswassermenge und Redundanzen von Stufen zur Elimination von Mikroverunreinigungen Project manager, expert study, Design guideline for upgrade of wastewater treatment plants with organic micropollutant elimination processes |
| 2012 | FOEN (Federal office for the environment), Bern Expert, review of the project report DIMES (Diffuse emissions of micropolluntants from settlements |

**Commissions**

|  |  |
| --- | --- |
| IWA  VSA | Member International Water Association  Member VSA-Plattform „Mikropoll“ Lectures “Anaerobe Schlammbehandlung” in VSA-education since 2011 (Verband Schweizer Abwasserfachleute) |

**Languages**

|  |  |
| --- | --- |
| German | Mother tongue |
| English | Fluently, CAE |
| French | Intermediate |
| Spanish | Intermediate |

**IT Knowledge**

|  |  |
| --- | --- |
| MS-Office | Word, Excel, Powerpoint |
| Simulation | AQUASIM, ASIM, Matlab, Simulink |
| Various Software | S-Plus, LATEX, Matlab Statistic Toolbox |