

Curriculum vitae

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| Name | Christoph Hugi |
| Date of birth | 5. January 1962 |
| Nationality | Swiss |
| Function | Lecturer and team leader |
| Languages | German, English |

Education

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|-------------|---|
| 2000 - 2002 | Master of Business Administration (MBA), London Business School |
| 1996 | Postgraduate course: Risk analysis of technical systems, Swiss Federal Institute of Technology Zurich Switzerland |
| 1988 - 1994 | Dr. sc. techn., Swiss Federal Institute of Technology Zurich Switzerland |
| 1983 - 1988 | Engineer, Swiss Federal Institute of Technology Zurich Switzerland |

Employment

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| Since Sept. 2010 | University of Applied Sciences and Arts Northwestern Switzerland |
| Nov. 07 - Sept. 10 | UBS AG, Competence Center Sustainable Development |
| 2006 - Oct. 2007 | Ernst Basler + Partner AG, team leader environmental economics |
| 2004 - 2005 | Entec UK Ltd, London; Air quality team, senior project manager |
| 2003 | Brunel University, London; Lecturer |
| 2000 - 2004 | Freelance Consultant, London |
| 1994 - 2000 | Ernst Basler + Partner AG, Environmental division, project manager |

Reference Projects

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|-----------|---|
| 2016-2018 | SNF: Improve Sustainability in Milk and Meat Value Chains in Switzerland Project manager |
| 2016 | KFPE: Training on feasibility of biogas as sustainable energy source in Kathmandu/Nepal Project manager |
| 2016 | ETHZ: Feasibility study of high altitude anaerobic digestion in remote community in Nepal Project manager |
| 2015-2017 | SNF: Optimisation of Organic Waste to Energy Systems in India Work package leader |
| 2014-2017 | SNF: WastEturn Economic assessment of industrial and municipal waste treatment options and Waste-to-Energy (WtE) systems Project manager |

- 2012-2017 **UNIDO: Resource efficiency and cleaner production (RECP) training in the Ukraine**
RECP-Assessments in SMEs and train-the-trainer courses in the Ukraine
Project manager
- 2012-2016 **FP7 Water4India**
Analysis of best practice and options for sub-urban drinking water supply systems in sub-urban Indian settings
Work package leader
- 2012 **GIZ: Water management plan for Indian industrial park**
Situation analysis and action planning
Financial expert
- 2012-2015 **FP7 DEMEAU**
Sustainability assessment of advanced water treatment systems to eliminate micro pollutants from different water sources.
Work package leader
- 2011-2014 **FP7 ECOWATER (<http://environ.chemeng.ntua.gr/ecowater/>)**
Case study on eco-efficiency indicators of water technologies in urban setting
Work package leader
- 2011-2014 **FP7 SUNFLOWER (www.sunflower-fp7.eu)**
Sustainability assessment of new organic photovoltaic cell
Task leader
- 2012 **IFC**
Workshop on waste management options for Lviv (Ukraine)
Expert on co-processing and waste management
- 2010 **OEA**
Framework for early stage environmental assessment of organic electronics
Project Director
- 2010 **Canton Aargau**
Framework for an industrial ecology initiative
Project Director
- 2009 - 2010 **The World Bank: Ningbo China**
Financial analysis for sewage, drinking water and road projects for Ningbo New Countryside Development Project;
financial and economic consultant
- 2008 - 2010 **UBS AG, Switzerland**
Assessment of renewable energies, key drivers, contribution potential to global energy supply and possibilities to invest;
sustainability analyst
- 2008 - 2010 **UBS AG, Switzerland**
Assessment of global water challenges, key drivers, PPP developments and possibilities to invest in water related companies;
sustainability analyst
- 2007 **The World Bank, Bengbu China**
Quantitative assessment of environmental and economic benefits for sewage, drinking water and flood protection projects in Bengbu;
financial and economic consultant
- 2007 **Federal Office for the Environment (FOEN)**

- Assessment of the water industries in Switzerland;
Expert in environmental economics and the water industries
- 2007 **Federal Office for the Environment (FOEN)**
Water industries in Switzerland Trends and Outlook 2025;
Expert in environmental economics and the water industries
- 2006 **Office for Technical Installations and Air Pollution of the Canton of Zurich, Switzerland**
Quantitative assessment of environmental benefits of air protection measures;
expert environmental economics
- 2006 - 2008 **Climate cent foundation, Switzerland**
Implementation and execution of three auctions to acquire CO₂ reduction units from projects;
project manager
- 2006 - 2007 **Cerlce Indicateurs, Switzerland**
Develop, implement and maintain indicators to measure sustainable development for 8 cantons and 14 cities in Switzerland;
project manager
- 2006 **Swiss Federal Office of Energy (SFOE)**
Assess environmental legislation for fossil fuelled power plants in 7 European countries;
project manager
- 2004 - 2005 **European Commission - DG ENV**
Assist the Commission identifying and assessing obstacles and difficulties for the implementation of VOC Directive 1994/63/EC (Stage 1) in eight new member states and candidate countries;
project manager
- 2004 - 2005 **European Commission - DG ENV**
Development of a methodology to assess population exposed to high levels of noise and air pollution close to major transport infrastructure;
project manager
- 2004 - 2005 **European Commission - DG ENV**
Ship air emissions: assignment methods for countries, feasibility and cost effectiveness of SO₂ and NO_x abatement technologies and market based instruments;
project manager
- 2004 **Accountability**
Web based questionnaire for small and medium sized enterprises to assess their sustainability based on Global Reporting Initiative;
sustainability analyst
- 2001 - 2003 **Federal Office of Environment, Forest and Landscape, Switzerland**
Guidelines for the planning of traffic surface drainage systems;
project manager and expert in water aspects
- 2000 - 2001 **Office for Water and Air Protection of the Canton of Zurich, Switzerland**
Water action plan for the Canton of Zurich;
project manager and expert in decision making
- 1993 - 2000 **Office for Federal Buildings, Office of the War Commissary, Switzerland**
Rock tank farms for fuels: Risk assessments, incident studies, manuals and

- case studies;
project manager and risk specialist
- 2000 **FLUKA Production GmbH**
Risk assessment and environmental impact assessment for a planned chemical production plant;
expert for risk analysis
- 2000 **Maag Ltd, Switzerland**
Evaluation of different measures for risk reduction in automotive production plant and implementation schedule;
project manager
- 1999 - 2001 **Ministry for National Planning, Luxembourg and National Office for Water and Waste Management, Trier, Germany:**
Development of an atlas of inundated areas in the catchment basin of river Mosel; elaboration of a digital surface model (DSM); prediction of water levels for flood events on the basis of hydraulic simulations of the river discharge and topographic field measurements; integration of the results in flooding hazard maps;
expert for modeling
- 1999 - 2000 **Federal Office of Army Material and Infrastructure, Switzerland**
Risk analysis for petrol fuel station and underground storage tanks;
project manager and expert for risk analysis
- 1999° - 2000 **Federal Office of Army Material and Infrastructure, Switzerland**
Petrol pipeline Sévaz-Payerne, elaboration of guidelines for the operation and the management of emergencies;
project manager
- 1999 - 2000 **AlpTransit Gotthard Ltd.**
Development of a separate drainage system concept for the Gotthard railway base tunnel; integration of safety, environmental, maintenance and operation as well as construction aspects;
expert for risk analysis and technical aspects
- 1999 - 2000 **City of Winterthur**
General planning of storm water and wastewater collection and disposal with special emphasis on risk mitigation;
expert for risk analysis and wastewater facilities
- 1998 - 1999 **Kreditanstalt für Wiederaufbau (KfW), Germany**
Supplementary study for the water management project in Pogradec, Albania; detailed comparison of a local and a trans-boundary solution for sewage collection, treatment and disposal;
expert for technical and decision making aspects
- 1998 - 1999 **Maag AG, Switzerland**
Risk assessment for a groundwater intake on an industrial site and evaluation of different measures for risk reduction;
project manager and expert for risk analysis
- 1998 - 1999 **Department for underground construction of Canton of Obwalden, Switzerland**
Risk analysis on tunnel blasting operations and evaluation of vibration threshold values for underground storage tanks;
project manager and expert for risk analysis
- 1998 - 1999 **Federal Office of Army Material and Infrastructure, Switzerland**
Risk analysis for headquarters of the Swiss army during war conditions;

expert in modeling and programming

- 1997 - 1999 **City of Uster, Switzerland**
Strategic planning for the city's wastewater treatment and disposal facilities, including physical investment, cost and tariff planning;
expert in technical aspects and decision making
- 1997 - 1999 **SUVA, Switzerland**
Coordination of the drainage and flood protection project for the SUVA site in Root;
project manager and water expert
- 1997 - 1998 **Airport Authority, Zurich Airport, Switzerland**
Water management of water quality and of surface waters on the airport area;
project manager
- 1997 **Department for Spatial Planning of the Canton of Zurich, Switzerland**
Fish-biological aspects of the transfer and installation of a landing-stage in the protection zone of Lake Greifen;
project manager
- 1996 **World Bank, Poland**
Olsztyn water management: Evaluation of water issues and related issues relevant for the development of the Olsztyn region, Poland;
expert in technical aspects and decision making
- 1996 **World Bank, Albania**
Pogradec Water Supply and Wastewater Project: Feasibility study and preliminary design of priority investment in the water sector in the city of Pogradec;
project manager and expert in decision making
- 1995 - 2000 **Federal Office of Environment, Forest and Landscape, Switzerland**
Guidelines for the planning of traffic surface drainage systems;
project manager and expert in water aspects
- 1995 **World Bank Lake Ohrid Conservation Project;**
organization and execution of a feasibility study;
expert in water aspects
- 1995 **Federal Office for Foreign Economic Affairs, Switzerland**
Lake Ohrid Conservation Project, Macedonia/Albania, assessment mission;
expert in water aspects
- 1994 - 1995 **Heinrich Schmid AG and Municipality of Jona, Switzerland**
Risk assessment of the Grünfeld drinking water tapping in the vicinity of an industrial plant;
project manager and expert in risk analysis and modeling
- 1994 **Swiss Federal Railway (SBB), project management AlpTransit Gotthard, Switzerland**
Study on feasibility, long-term behavior and risks for groundwater after cross-cutting with a strip mining tunnel;
expert in risk analysis
- 1994 **Office for Technical Installations and Air Pollution of the Canton of Zurich,**
Sanitation Service of the City of Zurich, Switzerland Safety analysis of the municipal heating system Zurich Nord;
project manager and expert in risk analysis

- 1993 - 1995 **Federal Office of Environment, Forest and Landscape, Switzerland**
Development of decisional base for planning of road drainage systems;
project manager
- 1993 - 1994 **Office for Water Protection of the Canton of Zurich, Switzerland**
Feasibility study on deep water drainage from lake Greifen from a technical,
ecological and political point of view;
expert in decision making

1993 - 1994 **Office for Water Protection of the Canton of Zurich, Switzerland**
Assessment and reconstruction of abandoned polluted areas; elaboration of manual for studies and reconstruction projects;
specialist

Publications

- 2012 **Organic photovoltaics: Anticipated fate and effects in the environment**
Zimmermann YS, Schäffer A, Hugi C, Fent K, Corvini PFX, and Lenz M.
Environment International, Volume 49, 15 November 2012, Pages 128–140
- 2011 **Unterschätzte Kosten: Umweltrechnungswesen: Tool des Umwelt- und Ressourcenmanagement**
Dirk Hengevoss, Christoph Hugi, Olga Steiger, Sandra Müller
Umwelt Perspektiven, 1 – 2011
- 2010 **The rush for resources challenges emerging markets: Water scarcity – a major risk**
Christoph Hugi
UBS Wealth Management Research, September 2010
- 2010 **Water: Price crucial to value water**
Christoph Hugi, Gianreto Gamboni, and Alexander Stiehler
UBS Wealth Management Research, May 2010
- 2010 **Biomass and marine energy – untapped potential**
Christoph Hugi and Gianreto Gamboni UBS
Wealth Management Research, February 2010
- 2009 **Efficiency first, but renewables catch up**
Christoph Hugi, Alexander Stiehler, and Gianreto Gamboni
UBS Wealth Management Research, November 2009
- 2009 **Solar thermal – a new power giant is awakening**
Gianreto Gamboni and Christoph Hugi
UBS Wealth Management Research, September 2009
- 2009 **Water - Value in every drop**
Christoph Hugi and Gianreto Gamboni
UBS Wealth Management Research, July 2009
- 2006 **Competition in climate protection (in German only)**
Marco Berg and Christoph Hugi
Umweltperspektiven, Nr. 6, December 2006
- 2005 **Preliminary Assignment of Ship Emissions to European Countries; NOx and SO₂ Abatement Technologies and Shore-side Electricity**
<http://europa.eu.int/comm/environment/air/transport.htm#3>
- 2005 **Service Contract to assist the Commission identify and assess obstacles and difficulties for the implementation of Directive 94/63/EC (Stage 1) in new Member States and Candidate Countries**
http://europa.eu.int/comm/environment/air/pdf/voc_final_report.pdf
- 2002 **Groundwater protection measures alongside transportation routes (German only: Grundwasserschutz bei Verkehrswegen).**
A. Zysset, C. Hugi et al.. <http://www.umwelt-chweiz.ch/buwal/de/medien/publikationen/index.html>

- 2001 **Effectiveness Analysis of Active and Passive Radar Protection Measures**
Kurt Bucher and Christoph Hugi
- 1998 **Comparison of wastewater treatment plants' operation to show improvement potentials;**
C. Hugi and A. Zysset, European Water Management Vol.1, Number 5, 1998
- 1997 **Safety Aspects of the Removal of Mud Collectors in the Drainage of Streets.**
R. Kulik, C. Hugi, D. Schläpfer. die stadt - les villes, S. 31-34, 3/97
- 1997 **Well-field protection.**
Worldwater Vol. 20, Issue 9, p. 23, September 1997
- 1996 **Groundwater protection measures alongside transportation routes**
(German only: Grundwasserschutz bei Verkehrswegen);
D. Schläpfer, Ch. Hugi, and A. Zysset,
Environmental Publication Series No. 263, Federal Office for Environment, Forests and Landscape, Bern, Switzerland, August 1996
- 1996 **The Lake Ohrid Conservation Project: Methodology and Findings of the Feasibility Study,**
International Conference on Ecological Engineering
Beijing China, October 1996
- 1994 **Modeling of Bubble Plumes for Lake Aeration,**
Christoph Hugi, Ph.D. thesis, ETH Zurich, 1994.

July 2014