

Curriculum Vitae

Personal Data

Name: Clemens Dorfmann
Birth date: 28.12.1978
Place of birth: Bozen (Italy)
Nationality: Italy



Education

2007 - 2010 and
2016 - 2017 Doctoral Programme in Engineering Sciences at the Graz University of
Technology, Graz (Austria)
Dissertation: Flow Phenomena in a Reservoir investigated by Field
Measurements and Numerical Modelling

2007 Award NEPTUN Wasserpreis for the master thesis from Federal Ministry
of Agriculture, Forestry, Environment and Water Management, Austria

1999 - 2006 Diploma Study Civil Engineering at the Graz University of Technology,
Graz (Austria), Specialization study: “Water and Environment”.
Master Thesis: Optimierung der Ab- und Aufstauvorgänge bei
Stauraumpülungen an der Oberen Mur

1998 - 1999 Study Civil Engineering and Project Management at the University of
Applied Science (FH Kärnten), Spittal an der Drau, Austria

1993 - 1998 Scientific High School, J. Ph. Fallmerayer, Brixen, Italy

Professional Experience

2017 Director of engineering company flussbüro OG

2007 - 2016 Project and University Assistant at the Institute of Hydraulic Engineering
and Water Resources Management, Graz University of Technology, Graz

May 2008 Visiting Researcher at the Norwegian University of Technology, Prof.
Nils Reidar Olsen: 3-D sediment transport modelling of reservoir flushing

Teaching / Co-lecturer as University Assistant (2007 - 2016)

- Basic Hydraulics (Undergraduate studies)
- Hydraulic Engineering (Undergraduate studies)
- Advanced Hydraulics (Master studies)
- River and Sediment Hydraulics (Master studies)
- Numerics in Hydraulic Engineering (Master studies)
- Supervision of Master thesis as well as Master and Bachelor projects

Research Projects carried out as Project and University Assistant (2007-2016)

Numerische Berechnungen und Monitoring Feldversuch, Grundablass Drossensperre, 2007
Project work. 1D hydraulic modelling, Hec-Ras

Numerische Berechnungen, Murverlegung Unzmarkt, 2008
Project work. 1D hydraulic and sediment transport modelling, Hec-Ras

Numerische Berechnungen, KW Schönau an der Enns, 2010
Project co-work. 3D hydraulic and sediment transport modelling, SSIIM

Numerische Berechnungen, KW Kendlbruck an der Mur, 2011
Project co-work. 2D hydraulic and sediment transport modelling, Telemac-2D

Numerische Berechnung, Hochwasserschutz Villach, 2011
Project work. 2D hydraulic modelling, Telemac-2D

Entsanderanlage Högmoos, Numerische Berechnung, 2011
Project co-work. 2D hydraulic modelling, Telemac-2D

Numerische Berechnungen, KW Leoben, 2012
Project co-work. 2D hydraulic and sediment transport modelling, Telemac-2D

Numerische Berechnungen, KW Niklasdorf an der Mur, 2012
Project co-work. 2D hydraulic modelling, Telemac-2D

Numerische Berechnungen, KW Ferschnitz and der Ybbs, 2012
Project work. 3D hydraulic and sediment transport modelling, Telemac-3D

Numerische Berechnungen, KW Fischening, 2013
Project co-work. 3D hydraulic and sediment transport modelling, Telemac-3D

Numerische Berechnungen, Hochwasserschutz Schöckelbach, 2013
Project work. 2D hydraulic modelling, Telemac-2D

Ökologische Ersatz- und Ausgleichsflächen Brenndorfer Bucht-West, 2013
Project work. 2D hydraulic modelling, Telemac-2D

Numerische Berechnungen im Stauraum des Kraftwerks Edling an der Drau, 2014
Project work. 2D and 3D hydraulic modelling, Telemac-2D and Telemac-3D

Ökologische Ersatz- und Ausgleichsflächen Brenndorfer Bucht-Ost, 2014
Project work. 2D hydraulic modelling, Telemac-2D

ADCP Messungen im Speicher Wasserfallboden, 2014
Project work. Measurements of flow fields and suspended load concentrations

ADCPtool: Entwicklung der Open Source ADCP postprocessing Software, 2014
Project work and supervision

Bed Load Analyzer: Entwicklung der Software zur Berechnung von hydraulischen und sedimentologischen Parametern in gegliederten Querschnitten, 2012-2015
Project work and supervision

Grundsatzstudie Stauraum KW Edling, 2015
Project work. Analysis of the sedimentation evolution in the reservoir

Plabutschunnel, Ausgießversuch, Monitoring Ost- und Weströhre, 2015

Project work. Field measurements

Numerische Berechnungen, Selkacher Bucht, KW Feistritz-Ludmannsdorf an der Drau, 2016

Project co-work. 3D hydraulic and sediment transport modelling, Telemac-3D

Plabutschunnel, Ausgießversuch, Monitoring Ost- und Weströhre, 2016

Project work. Field measurements

Plabutschunnel, Siphon Monitoring Oströhre, 2016

Project work. Field measurements

Lainbergtunnel, Ausgießversuch, Monitoring, 2016

Project work. Field measurements

European Space Agency (ESA): Enhanced Flood Forecasting System for Critical

Infrastructure Protection in Medium Size Alpine Catchments (EFFORS), 2013-2017

Physical model studies

Vollmodell KW Feistritz-Ludmannsdorf an der Drau, 2010

Project work, Optimization of the sediment management in the reservoir

Vollmodell KW Schönau an der Enns, 2010

Project co-work. Optimization of the sediment management in the reservoir

Schnittmodell KW Ferlach an der Drau, 2010

Project work. Investigation of the weir capacity and the stilling basin performance

Schnittmodell KW Annabrücke an der Drau, 2010

Project work. Investigation of the weir capacity and the stilling basin performance

Schnittmodell KW Feistritz-Ludmannsdorf an der Drau, 2011

Project work. Investigation of the weir capacity and the stilling basin performance

Vollmodell Siphon, Lainbergtunnel, 2016

Project work. Investigation and optimization of discharge capacity of the siphon

Vollmodell Denil-Fischpass, 2016

Project work. Investigation and measurements of the velocity distribution and turbulence

Organizer of Workshops and Conferences

- Hybrid Hydraulic Modelling – Application, Methods, Challenge. In cooperation with University of Ljubljana, Graz, 06.05.2009
- 3D numerical modelling with Fluent, Flow-3D and SSIIM – Theory, Applications and Practice. Benchmark workshop in cooperation with University of Innsbruck, Graz, 20.-21.11.2009
- openTELEMAC-MASCARET workshop. For Austrian civil engineering companies, Graz, 13.05. 2013
- Application of the numerical modelling open source suite openTELEMAC-MASCARET. Workshop, University of Innsbruck, Innsbruck, 21.-22.11.2013

- Hydraulische Modellierung von Fließgewässern mit Open Source Software. With Uwe Merkel, Graz, 09.07.2014
- 24th TELEMAT-MASCARET User Conference at the TU Graz, Graz, 17.-20.10.2017

Board Member

- ÖWAV (Austrian Water and Waste Management Association): Working group: "Surge and sink waves – ecological and energy related challenges", 2007-2008
- Federal Ministry of Agriculture, Forestry, Environment and Water Management: Working group: "Development of the guideline for the estimation of the dam-break outflow hydrographs and the related flood analysis", since 2014
- Scientific Committee, openTELEMAT-MASCARET consortium, since 2015

Reviewer

- Journal of Hydraulic Research
- Water - Open Access Journal
- Interpraevent (International Research Society)

Participation in Seminars and Workshops (most relevant)

- Fachtagung: Nachfragegerechte Stromversorgung: vielfältige Chancen für die Wasserkraft, Glarus, Schweiz, 06.-07.2007
- DWA Seminar: Entlandung von Stauräumen, Stuttgart, 27.09.2007
- DWA, 10. Gewässermorphologisches Kolloquium: Sedimentmanagement in Flussgebieten, Koblenz, 05.-06.11.2007
- ÖWAV Seminar: Schwebstoffe im Fließgewässer - Erfassung des Schwebstofftransportes, Wien, 26.03.2009
- ÖWAV Seminar, Speicher- und Pumpspeicherkraftwerke, Planung, Bau und Betrieb, Graz, 23.09.2009
- AGAW Symposium, Wasserrahmenrichtlinie und Versorgungssicherheit, Villach, 01.-02.10.2009
- River Flow 2010, International Conference on Fluvial Hydraulics, Master Class: Sediment in reservoirs, Nils Reidar B. Olsen & Thorsten Stoesser, Braunschweig, 07.-10.09.2010
- South East Europe (SEE) Hydro Power Symposium, Graz, 30.09.2010
- UFRIM, Urban Flood Risk Management, International Symposium, Graz, 21.-23.09.2011
- ÖWAV Seminar, Speicher- und Pumpspeicherkraftwerke, Investitionssicherheit, Marktumfeld und technische Lösungen, Graz, 29.11.2012
- 12th International Benchmark Workshop on Numerical Analysis of Dams, ICOLD, Graz, 02.-04.10.2013

- Schwall und Sunk: Forschungsstand & Ausblick, 6. Expertentag, Verein für Ökologie und Umweltforschung, Wasser Cluster Lunz, Lunz am See, 20.-21.05.2014
- BAW Kolloquium: Herausforderung Sedimenttransport – Methoden und Konzepte im Flussbau, Karlsruhe, 26.11.2014

Co- supervision of Master Thesis

Wasserwirtschaftliches Management der Kraftwerksanlagen an der Pöls. Georg Edelsbrunner and Jakob Friess, 2008

1D numerische Untersuchungen der Abflussvorgänge an der Lutz. Knut Sterlé, 2008

2D numerische Untersuchungen der Abflussvorgänge an der Lutz. Peter Prossliner, 2008

3D numerische Modellierung von Laborversuchen in einem Glasgerinne. Christoph Ortner, 2009

2D numerische Modellierung eines Wehrüberfalls. Marco Oblasser, 2011

Entwicklung einer Software zur Berechnung von hydraulischen und sedimentologischen Kennwerten in gegliederten Flussquerprofilen. Reinhard Fleißner, 2013

Optimierung der Ab- und Aufstauvorgänge an der Görtschitz. Stefanie Knauhs and Katharina Sammer, 2014

Untersuchung von Spüleinrichtungen zur Reinigung von Stauraumkanälen der Mischwasserbewirtschaftung. Thomas Golger, 2014

Grundlagen der ADCP Messtechnik und Auswertung von Messdaten. Shkelzen Kryeziu, 2014

ADCP Messungen im Hochgebirgsspeicher Wasserfallboden. Jakob Steidl, 2014

2D Numerical Simulations of Dam Failure. Konrad Moser, 2014

3D numerische Berechnung der Wehrförderfähigkeit für ein Flusskraftwerk. Fabian Gottfried Heinzle, 2014

Morphodynamic Modelling of Sediment Control Groynes in a Meandering River entering a Reservoir. Zhina Mohammed. University of Ottawa, with Prof. Colin Rennie, 2016

Hydromorphological assessment applied on a stretch on river Sulm. Julia Cancola, 2016