
CURRICULUM VITAE

NAME: Jacobs, Sven Christian
BORN: 1956
NATIONALITY: Austrian
PROFESSION: Consulting Engineering Geologist
NAME OF FIRM: Ingenieurbuero fuer Baugeologie
YEARS WITH FIRM: 29



KEY QUALIFICATIONS:

- experience in in hydropower developments, dam foundations, grouting, tunnelling since 1980.
- continuous work on Hydropower and Tunnelling Projects since 1983: arch dams, gravity dams, embankment dams, headrace tunnelling (D&B, TBM, double shield TBM), pressure shafts, caverns, foundations, grouting, reservoir slope stability
- freelance consulting engineering geologist since 1991
- expert witness for the Austrian Water Authorities and Federal Water Authorities from 1991 on:
 - 5-years-surveillance of 17 arch/arch gravity dams, 18 gravity dams, 23 embankment dams on behalf of the Austrian Committee on Dams and Reservoirs; long-term behaviour evaluation
 - 10-years surveillance of 10 River Drau run-off-the-river schemes as external expert on behalf of Verbund Hydropower
 - 5-years surveillance of ESB dams, Rep.of Ireland, External Dam Safety Committee; 2020-

COUNTRIES OF WORK EXPERIENCE:

Albania, Austria, Bhutan, Brasil, Bulgaria, Germany, Greece, Hungary, India, Rep. of Ireland, North-Macedonia, Montenegro, Myanmar

EDUCATION:

XII/1982 PhD Degree Geology, Leopold-Franzens University Innsbruck, Austria.
Thesis on 186m Zillergruendl arch dam foundation (fault gauges and their consequences for the foundation)

LANGUAGES:

	Speaking	Reading	Writing
German	Mother tongue		
English	Business fluently	Excellent	Excellent
French	Some	Fair	Some

MEMBERSHIPS:

Member of the Austrian Commission on Reservoirs and Dams since 1991
(panel of experts on behalf of the Ministry for Agriculture, Forestry, Water and Environment)
Member of board of the Austrian Committee on Large Dams (ATCOLD) ICOLD

LECTURES:

- Geomechanik Kolloquium Salzburg 1987 on TBM-tunneling under adverse conditions, 1994 on hydrogeological case studies related to TBM-tunnelling in karstic bedrock.
- Engineering Geologists and “geologying engineers” – half way of both worlds? application lecture as Professor for Engineering Geology at Vienna Technical University, 1997
- Dam Foundations and reservoirs. ICOLD/ATCOLD Experts Seminar “Dam Surveillance Practice”, Kaprun, (2000, 2005). Published in the Proceedings of the Conference.
- Long term deformation of Zillergründl bedrock foundation. 2nd ICOLD International Conference on Long Term Behaviour of Dams (Graz, 2009) Published in the Proceedings of the Conference
- Engineering Geology and Hydropower Technical University of Munich (TUM), lecture for graduates and alumni of the Department of Engineering Geology. 2006, 2008, 2010, 2012)
- The relevance of underground investigations in hydropower planning and design. VÖBU lectures Deutschlandsberg October 2010
- Geological information and data collection for Grouting measurements VÖBU lectures Brixen/ Italy 2009
- Engineering Geology and Hydropower Polytechnical University of Tirana (PTU), Albania; lecture for graduates and alumni of the Department of Engineering Geology. May 2012
- Small Dams, Geological Aspects. ATCOLD/OEWAV Workshops for Designers and Operators of Small Dams (flood & protection, artificial snow reservoirs, dam Surveillance (2001 to 2019 yearly, ongoing). Published in the proceedings of the workshops.
- Dams and Reservoirs, Geological Aspects. ATCOLD Workshops on Dam Surveillance for Designers, Operators and Dam Attendants (2001 to 2009, 2014, 2017, 2019). Published in the proceedings of the workshops.

EMPLOYMENT RECORD 1983 - 1991:

I/1983 – IV/1985 kelag, Kaerntner Elektrizitaets AG

V/1985 – V/1988 TIWAG Tiroler Wasserkraftwerke AG

VI/1988 – V/1991 kelag, Kaerntner Elektrizitaets AG

FREELANCE:

1991 – to date Ingenieurbuero fuer Baugeologie (freelancing civil engineer)
Company owner, Senior Engineering Geologist

EXPERIENCE/NOTABLE ASSIGNMENTS HYDROPOWER ABROAD:

2013 – 2019 Devoll Hydropower Development, Albania
Client: Devoll Hydropower (Statkraft)
Contribution: 30 man-months

2016 - 2017 Irrigation Project (Brazil, Jaguaruana / Fortaleza province)
Client: Meri Pobo Agropecuària LTDA,
Contribution: 3 man-months

2015 - 2017	HPP Upper Keng Tawng, Myanmar (Shan State) Client: Ministry of Electric Power, Dep.of Hydropower Implementation DHPI, (Technical Assistance Program of the Ministry of Foreign Affairs of Norway) Contribution: 6 man-months
2012 - 2014	HPP Dugar Hydropower Development, India (Himachal Pradesh) Client: Dugar Hydropower Limited (JV SN Power and Tata Industries) Contribution: 6 man-months
2012	Vjosa River Hydropower Development, Albania Client: Verbund Hydropower Contribution: 4 man-months
2011 - 2013	Pesocani HPP, FYROM (Macedonia) Client: EVN Macedonia Contribution: 5 man-months
2010 - 2013	Matka HPP, FYROM (Macedonia) Client: EVN Macedonia Contribution: 6 man-months
2008 - 2011	Ashta I and II Hydropower Scheme, Albania Client: Verbund Hydropower and EVN AG Contribution: 3 years, one employee at site for 12 months
2007 - 2013	Devoll Hydropower Development, Albania Client: EVN AG, Devoll Hydropower (JV of Statkraft & EVN AG) Contribution: 6 years (2009-2011 two employees on site)
2008 – 2015	Drin River Hydropower Development, Albania Client: 2007: EVN AG, 2008-2009 Statkraft Norway, 2016 AF Consult Madrid Contribution: 4 man-months
2007 - 2008	Vjosa River Hydropower Development, Albania Client: EVN AG Contribution: 4 man-months
2007 - 2008	Osum River Hydropower Development, Albania Client: EVN AG Contribution: 4 man-months
2009 - 2010	Gorna Arda Cascade – Bulgaria Client: EVN AG Contribution: 6 man-months
2008	Moraca River Cascade - Montenegro Client: EVN AG Contribution: 2 man months
1992 - 1993	Tashigang HPP – Bhutan, Province of Tashigang Baso & Ruri Chhu HPP – Bhutan, Province of Wangdue Phodrang Client: Austrian Development Agency (ADA) Contribution: 4 man-months

EXPERIENCE/NOTABLE ASSIGNMENTS HYDROPOWER IN AUSTRIA:

2016 - to date	KW Rosenberg, run-of-river scheme along Kamp river Client: EVN AG <i>Contribution: eight man-months</i>
2012 - 2016	Sulzberg pumped storage plant, Austria Client: EVN AG <i>Contribution: 18 man-months</i>
2012 - 2014	Waldviertel pumped storage plant, Austria Client: EVN AG <i>Contribution: 10 man-months</i>
1991 – to date	Kamp development, HP Erlaufklause and Stierwaschboden Client: EVN AG <i>Contribution: continuously since 1991</i>
2010	Pumped storage plants Niederoesterreich Client: EVN AG <i>Contribution: four man months</i>
1999 - to date	KW Zwettl, KW Rosenberg, KW Hohenstein, KW Erlauf run-of-river schemes along Kamp river and Erlauf river Client: EVN AG <i>Contribution: continuously since 1999</i>
1993 - 2012	KW Pack, KW Hierzmann, KW Arnstein storage power plants Teigitsch River: Client: STEWEAG / Verbund Hydropower <i>Contribution: continuously between 1993 and 2004, occasionally until 2012</i>
1992 - 2003	KW Salza, KW Sölk, KW Hieflau storage power plant Enns-River: Client: STEWEAG <i>Contribution: continuously between 1992 and 2003</i>
1995 - 1996	KW Gulling Client: STEWEAG <i>Contribution: 8 man months</i>

EXPERIENCE/NOTABLE ASSIGNMENTS HYDROPOWER FOR AUSTRIAN WATER AUTHORITIES:

2017 – to date	PSW St.Georgen Client: BMNT, Austrian Commission on Reservoirs and Large Dams <i>Contribution: 2 man months, design for approval ongoing</i>
2016 – to date	PSW Koralpe Client: Federal State of Styria <i>Contribution: 12 man months, expert for the approval process, licensing process completed 2019</i>
2014 – 2021	GKI Grenzkraftwerk Inn Client: Federal State of the Tyrol <i>Contribution: continuous survey, monthly site inspection, reporting to Federal Water Authorities of the Tyrol</i>

2010 – to date	Illwerke Hydropower Projects Client: Federal State of Vorarlberg Contribution: 12 man months
2005 – 2016	Verbund HP Pumped Storage Plants Client: Federal State of Salzburg Contribution: 6 man months
2005 – to date	Pumped Storage Plants Client: Federal State of Oberoesterreich (Upper Austria) Contribution: 4 man months
1998 - to date	Five years surveillance of Large Dams: Client: BMNT Austrian Ministry for Sustainability and Tourism as Supreme Water Authority Responsibility/performance: assessment of longterm behaviour of underground/structure of 45 large dams Contribution: continuously since 1998
1991 – to date	Expertises for evaluation and licencing process of all planned/submitted hydropower projects of Verbund HP, Illwerke/VKW, Salzburg-AG, E-AG: Client: BMNT Austrian Ministry for Sustainability and Tourism as Supreme Water Authority Contribution: continuously since 1991

NOTABLE ASSIGNMENTS TUNNELLING:

1991 – 2016	Investigations and engineering geological design and documentation of tunnelling works for railway and motorway tunnels Claim consultancy for contractors / construction companies Clients: ASFINAG, BEG, ÖBB, Fed Gov. of the Tyrol, PORR Tunnelling, OESTU-STETTIN, BEMO, ALPINE Tunnelbau, MAYREDER, HOFMAN MACULAN
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CERTIFICATION:

I, the undersigned certify that, to the best of my knowledge and belief, this Curriculum Vitae correctly describes myself as well as my qualifications and experience (focussed on Hydropower and Tunnelling).

I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if called as expert.

Date of signing: 2020-01-18

Signature:

