

**Proposed Role in the Project : Wastewater/Sludge Treatment/Process Expert**

- 1. Family Name : BLANCHE
- 2. First Name : Mathias
- 3. Date of Birth : 1962
- 4. Nationality : German
- 5. Residence : Eisensteinfeld 19  
56368 Katzenelnbogen

<http://www.blanche-waterengineering.de>

**6. Education**

Institution: [Date from – Date to]	Degree(s) or Diploma(s) obtained:
University of Applied Sciences in Wiesbaden, Germany (1984-1990)	MSc. in Civil Engineering
Peter-Paul-Cahensly-Schule (high school) in Limburg, Germany (1982)	A-level graduate (Abitur), technical major in Mechanical Engineering

**7. Language skills** Indicate competence on a scale of 1 to 5 (1-excellent; 5-basic)

Language	Reading	Speaking	Writing
German	Mother Tongue		
English <sup>1</sup>	1	1	1

<sup>1</sup> Cambridge A-Level Certificate

**8. Membership of professional Bodies** [www.blanche-waterengineering.de](http://www.blanche-waterengineering.de)

Chamber of Engineers Rheinland-Pfalz ([ING](#)), Germany - ID 94081  
 German Association for Water Pollution Control (DWA/ATV) –ID 2566  
 DVGW German Association of Gas and Water e. V. – ID 532584  
 International Water Association (IWA) - ID 01048648  
 Water Environmental Foundation (WEF), Alexandria, VA

**9. Other skills** (e.g. Computer literacy, etc.):

Office Software: MS-Office, iWork, Omni-Package  
 Database: Filemaker Pro Advanced  
 CAD & Grafic: Vectorworks, SketchUp Pro, Diverse  
 Special Software: AquaDesigner/Aero, DWA (A131-2016), BaSyS Package, etc.  
 Project Management: MS-Project, Merlin, Concept Draw-Office  
 Others: Mechanical Engineering (AP courses at high school)

**10. Present position** Water/Wastewater/Sludge Treatment Expert/Process Engineer  
Independent Consulting Engineer since 2004

**11. Years within the firm:** **XXXX**

## 12. Key qualifications

Mathias Blanche has grown up in the field of plant engineering and DWTP/WWTP equipment manufacturing industry due to parental and family background and the business environment of former PASSAVANT WERKE AG – MICHAELBACHER HÜTTE in Germany. The professional background is resulting in more than 30 years of professional experience in water, hydraulic & process engineering. More than 25 years in consultancy design, administration, tendering and supervision of water & wastewater treatment plants and sludge treatment facilities on the national and international level in Europe, South-East-Europe, the Middle East as well as in China, including infrastructure development of residential areas and spatial planning in Germany.

- Senior Water Expert with more than 30 years of relevant national and international professional experience (post-graduate) in various external assistance programmes (EU ISPA/IPA, KfW, UNDP, World Bank);
- Extensive international design experience for DWTP & WWTP, incl. process, hydraulic, mechanical (preliminary electrical/SCADA) designs, incl. sludge treatment, on conceptual, final and detailed/execution design level;
- Specialised in Process Design, Hydraulic and Mechanical Engineering for Drinking Water and Waste Water Treatment Plants (DWTP & WWTP) and Sludge Treatment Facilities (stabilisation & dewatering) and Biogas utilisation;
- Long term expertise in Advanced Sludge Treatment & Disposal Technologies (Sludge management Strategy Ramnicu Valcea, Macedonia), extensive expertise for sludge digestion (Mila Mia Haspolat, Cyprus) regarding sludge drying, mono/co-incineration;
- Long-term experience in elaboration and contribution to Feasibility Studies and Tender Elaboration for FIDIC works contracts (P&DB - Yellow Book and Red Book) for EU/KfW/WB financed projects (ISPA/IPA and Cohesion Fund Applications);
- Familiar with all major process relevant electro-/mechanical equipment [MEICA] in the field of water & wastewater engineering projects. Familiar with HAZOP studies for process design and electro-/mechanical equipment designs;
- Long-term and extensive working experience in Works Supervision and project management of FIDIC works contracts (Yellow Book and Red Book) under PRAG (Practical Guide to Contract Procedures);
- Long-term experience in Procurement (elaboration of tender dossiers with conceptual designs, cost estimations, Employers Requirements and BoQ's) and Tender Evaluation (position of non-key expert to CFCU/RO, UNDP-PFF);
- Latest design projects in the project area: Sub-Consultant for preparation of Conceptual Designs with preparation of Tender Dossiers (Vol. 3-5, FIDIC YB) for Darkhan WWTP in Mongolia, Podgorica WWTP in Montenegro as well as Nizip WWTP in Turkey, incl. architectural, process & hydraulic design, selection of MEICA equipment and elaboration of BoQ's with cost estimation, elaboration of design drawings including 3D visualization;
- Latest supervision projects: FIDIC works contracts: Zugdidi WWTP in Georgia and Darkhan WWTP in Mongolia, incl. review of Contractors main/detailed process, hydraulic design with senior expertise for selection of MEICA equipment. Inspections and tests on completion during commissioning and trial operation;

- Knowledge of relevant EU Directives in the water/environmental sector, incl. Procurement Directive (2004/18/EC), Water Framework Directive, Urban Waste Water Directive, Sludge Directive, Bathing Water Directive, etc.;
- Knowledge of state of the art design standards in the EU (DWA) and international design regulations (US-EPA, Metcalf & Eddy, IWA-ASM, etc.) and familiar with latest development in process design (MBR and MBBR/IFAS technology, "C-Tech Process" (<http://www.sfcu.at>) or the BIOCOS® process (<http://www.zwt.de>) as well as the newly developed SBR/FBAS process (<http://www.organicawater.com>)) and advanced tendencies in energy efficiency management & optimization of WWTP's;
- In deep knowledge and experience of relevant software tools and professional software packages; incl. waste water treatment design software such as [AquaDesigner](#) and [AquaAero](#) as well as [DWA-Belebungs-Expert](#).;
- Familiar in Asia, Europe, the Mediterranean and the Near East. Very good knowledge of water sectors in the Balkans.

Extensive design, supervision and working experience in the water/wastewater engineering sector with strong organisational capabilities and leadership. Used to work interdisciplinary and team informed in international teams.

**14. Employment Record**

From: 2004 - ongoing  
Employer: EPTISA, FICHTNER, IGIP, MVV, GAUFF, UNDP  
Municipality of Girne in North-Cyprus  
Position held: Independent Consultant Engineer

From: 2003 - 2004  
Employer: MVV Consultants and Water Engineers GmbH, Mannheim - Germany  
Position held: Project Manager & Consultant, Deputy Head of Infrastructure Department

From: 2000 - 2002  
Employer: PASSAVANT ROEDIGER PRODUCTS GmbH, Germany  
Position held: Sales Manager, Areas Sales Director Europe

From: 1999 - 2000  
Employer: OMS KLÄRANLAGEN GmbH, Wiesbaden - Germany  
Position held: Project Manager and Project Engineer, Consultant

From: 1993 - 1998  
Employer: BLANCHE & SOEHNE WATERENGINEERING GmbH, Germany  
Position held: Project Manager and Project Engineer, Business Manager

From: 1990 - 1992  
Employer: ROEDIGER ANLAGENBAU GmbH, Hanau - Germany  
Position held: Sales Manager, Project & Process Engineer

From: 1984 - 1990  
Employer: BLANCHE & SOEHNE WATERENGINEERING GmbH in cooperation with  
PASSAVANT WERKE AG, GERMANY and THEMELIODOMI, Greece  
Position held: Junior Engineer, Mechanical Technician

**15. Specific Experience in the Region****a. Europe**

Country	Period	Keywords (Wastewater Treatment Plants)
Albania	2011 (ongoing)	Velipoje II & III (Shkoder)
Bosnia-Hercegovina	2011/2012	Bihac
Bulgaria	1992 - 1995	Samokov & Borovetz, Pravetz and others
Cyprus (North)	2004 up to date	Girne & Nicosia, Morphou
Croatia	1994, 2000, 2005 (ongoing)	Slavonski Brod, Rijeka, Sisak
Czech Republic	1997, 2002	Decin
Germany	1990 up to date	Hahnstätten, Wiesbaden, Schmalkalden, aso
Greece	1984-1990	Trikala, Rethimnon, Komotini, aso
Kosovo	2005 and 2011/2012	Gjakova, Pleja, Prizren
Montenegro	2012, 2016	Plav, Kotor Bay, Podgorica
Poland	1993, 2002	Zielona Gora
Portugal	1994 up to date	Penice, Torres do Mondego and others

Romania	1995, 2004 up to date	Botosani, Constanta, Eforie, Craiova, Ramnicu Valcea, Suceava, 5 Counties
Russian Federation	2005	Kaliningrad/Gussew
Serbia & Montenegro	1984-1990, 2003, 2011	National Sludge Management Strategy, Krajujevac, Krusevac, Vranje, Usice, Plav and others
Slovenia	2001	Tolmin, Ljubljana
Turkey	2003 – up to date	Corlu, Sivas, Sirte, Nizip

### b. International

Country	Period	Keywords (Wastewater Treatment Plants)
Azerbaijan	2011	Baku
China	1997	Jiaxing
For Libya	2002	Ain Zara, Sirte
For Nigeria	1999 - 2001	Abuja
Mongolia	2016	Darkhan
Palestine/Jordan	1995 - 2017	Al Bireh, Salfeet, Wadi Arab, Gaza City
For Vietnam	2015/2016	Dong Tap Province

### c. Ongoing Projects

Location	Date from - date to	Company	Position	Description
Republic of Serbia	02/2020 – <i>Suspended Covid19</i>	CESTRA d.o.o. 11000 Belgrade	Sludge Process Expert	<b>Novi Sad WWTP</b> (200.000 P.E.), WB15-SRB-ENV-01 Task: Preliminary Design for WWTP Position: Sludge Management Expert (inter. Process Expert)
Northern Cyprus	12/2019 – ongoing	UNDP - Cyprus	WWTP/Procurement Expert	<b>Morphou WWTP</b> (Stage II: 21.500 P.E.) Tasks: Employer's Requirements for FIDIC Yellow Book works contract.
Georgia	10/2019 - ongoing <i>Suspended Covid19</i>	Posch & Partner <i>preinstorfer@pap.co.at</i>	WWTP/Mechanical Expert	Construction Supervision under USIIP, Tranche 5 Projects in Georgia for <b>Mestia WWTP</b> . Tasks: Review of Contractors Mechanical design for the WWTP's (appr. 60.000 P.E.).
Moldova R 1	08/2019 - ongoing Short-term	FWT – Fichtner <i>christian.koopmann@fwt.fichtner.de</i>	WWTP/Process Expert	<b>Cahul WWTP</b> (30/48.000 P.E.) KfW-Project Tasks: Process definition and presentation, Process design with M&E design for FIDIC YB Conditions of Contract. Sludge management conception. Tender elaboration, evaluation and works supervision.
Georgia	01/2018 - ongoing <i>Delayed Covid19</i>	Posch & Partner <i>preinstorfer@pap.co.at</i>	WWTP/Mechanical Expert	Construction Supervision under USIIP, Tranche 5 Projects in Georgia for <b>Zugdidi WWTP</b> . Tasks: Review of Contractors Mechanical design for the WWTP's (appr. 60.000 P.E.).

Location	Date from - date to	Company	Position	Description
Mongolia R 2	11/2016 - Ongoing <i>Delayed Covid19</i>	FWT – Fichtner <i>christian.koopmann@fwt.fichtner.de</i>	Process Expert	<b>Darkhan</b> WWTP (120.000 P.E.) ADB-Project Tasks: Process definition and presentation, Process design with M&E design for ADB Conditions of Contract (similar to FIDIC YB, Vol. 3-5). Tender elaboration, evaluation and works supervision.

## 16. Professional Experience

Date from - date to	Location	Company	Position	Description
07/2019 - 02/2020	D/Malawi	KfW Bankengruppe <i>Nils.Meyer@kfw.de</i>	Water Treatment Expert	GRENZÜBERSCHREITENDES SCHUTZGEBIET MALAWI-SAMBIA TFCA UND WEITERE TFCA VORHABEN IN DER SADC REGION Design Review.
11/2019 - 12/2019 Short-term	Republic of Serbia	Brooks Hannas & Partners Consortium <i>dejan@interaqua-consulting.com</i>	Process/Procurement Expert	International Wastewater Treatment Expert, EISP2/28 for <b>Kraljevo</b> WWTP Donor: SIDA under Environmental Infrastructure Support Programme, Phase 2 (EISP2) Task: FIDIC YB Tender review under PRAG conditions.
09/2018 - 09/2019 Short-term R 3	Republic of Serbia	Brooks Hannas & Partners Consortium <i>dejan@interaqua-consulting.com</i>	Process Expert	Feasibility Study for Wastewater Collection and Treatment Project for the City of <b>Kragujevac</b> (200.000 P.E.) Donor: SIDA under Environmental Infrastructure Support Programme, Phase 2 (EISP2) Task: Process, hydraulic and MEICA design on conceptual design level for 2 variants. CAPEX/OPEX, PID's and presentations. Tertiary treatment (BNR, acc. UWWD) with sludge digestion, dewatering and power recovery (CCHP), solar sludge drying.
02-04/2019	Montenegro	FWT – Fichtner <i>christian.koopmann@fwt.fichtner.de</i>	Process Expert	Location Study for Wastewater Treatment for the Municipality of <b>Bar</b> , KfW-Project 201266196 Tasks: Preliminary design for 3 WWTP's (Bar 60.000 P.E./Sutomore 20.000 P.E./Cranj 5.000 P.E.) comprising 2 process variants with CAPEX/OPEX estimate, process design and drawings.
08/2017 - 03/2019 R 4	Republic of Serbia	ETI Consulting SAS, Paris <i>stevan@eti-consulting.net</i>	Sludge Process Expert	"National Sludge Management Strategy for <b>Serbia</b> (Lot 6)", EU-Framework Tasks: Calculation of sludge quantities, definition of appropriate technologies for additional treatment, selection of sludge disposal routes, cost estimates, presentations. Workshops and elaboration of training guides.

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08/2018 - 09/2018	Nicaragua	FWT – Fichtner <a href="mailto:marcus.poeppke@fwt.fichtner.de">marcus.poeppke@fwt.fichtner.de</a>	Process Expert	Planta de Tratamiento de las Aguas Residuales (PTAR) de la <b>Ciudad de Masaya</b> (160.000 PE); Design of tertiary treatment facilities (filtration & UV), incl. process design review, detailed design and FIDIC YB specifications for Variation Order procedure.
04/2017 - 06/2017 Short-term  R 5	Macedonia	EPTISA SEE  Mr. Alvaro Diez Santaclara <a href="mailto:adiez@eptisa.com">adiez@eptisa.com</a>	Sludge Process Expert	Development of National Water Study for <b>Macedonia</b> , EU 136505/IH/SER/MK Tasks: Determination of sludge quantities for additional treatment, selection of appropriate technologies, definition of sludge disposal routes, cost estimates for the Sludge Management Strategy.
09/2016 – ongoing short term	North-Cyprus	Municipality of Girne/Kyrenia Mr. Ahmet Turker <a href="mailto:ahmturker@yahoo.com">ahmturker@yahoo.com</a>	Wastewater Treatment Expert	WWTP Kyrenia/ <b>Girne</b> Final design for upgrade of mechanical treatment facilities. <b>Activities:</b> Final Design and Equipment Specifications for FIDIC RB Tender. Advisor to the Municipality.
11/2016 - 05/2017 Short-term	Kenya	Posch & Partner <a href="mailto:preinstorfer@pap.co.at">preinstorfer@pap.co.at</a>	Process & Mechanical Expert	Rehabilitation <b>Limuru</b> WWTP (7.000 P.E.) AfDB Project Final and Tender Design, Tender elaboration.
06/2016 - 06/2017  R 6	Montenegro	FWT – Fichtner <a href="mailto:stepane.meistermann@fwt.fichtner.de">stepane.meistermann@fwt.fichtner.de</a>	Process Expert	<b>Podgorica</b> WWTP (Phase 1: 200.00 PE); Upgrade of Feasibility Studies (Component A), KfW funded project. Task: Process, hydraulic and Meica design on conceptual design level (for FIDIC YB Tender – Component B) for the updated Feasibility Study. Project Data: WWTP design capacity 200.000 P.E (Phase I) for tertiary treatment (BNR acc. UWWD) with sludge digestion, dewatering and power recovery (CCHP).
01/2015 - 04/2016	Vietnam	FWT – Fichtner <a href="mailto:marcus.poeppke@fwt.fichtner.de">marcus.poeppke@fwt.fichtner.de</a>	Process Expert	<b>Cao Lanh City</b> WWTP (28.500 PE); Contract - process design review and assessment of Contractors Variant Proposal for SBR system. Soc Trang Leachate Treatment; design review and final design of constructed wetland system.
05/2015 - 06/2017 Short-term  R 7	Albania	EPTISA SEE <a href="mailto:ddibra@eptisa.com">ddibra@eptisa.com</a>	Process & Wastewater Treatment Expert	Supervision of Construction and of Supplies for Sewerage System and Wastewater Treatment Plant in <b>Velipoja</b> area – <b>Phase III</b> , EuropeAid/133963/C/SER/AL Tasks: Review of Contractors Process, M&E installations for the WWTP

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07/2013 - 08/2017 Short-term	Croatia	EPTISA SEE  <i>Mr. Alvaro Diez Santaclara</i> <i>adiez@eptisa.com</i>	Process Expert	Supervision of construction of the water supply and sewerage system with wastewater treatment plant for <b>Sisak</b> , 132999/D/SER/HR Tasks: Review of Contractors Process, M&E design for the WWTP (appr. 60.000 P.E). FIDIC YELLOW Book
01/2014 - 10/2015 Short-term R 8	Turkey	FWT – Fichtner <i>christian.koopmann</i> <i>@fwt.fichtner.de</i>	Process Expert	Conceptual design for <b>Nizip</b> WWTP (140.000 P.E.) EU-Project Tasks: Process, M&E design for the WWTP for FIDIC YELLOW Book Tender (Vol. 3-5).
05/2015 – 12/2016 Short-term R 9	Palestine/ Gaza	Dorsch International <i>Tanja.Baur@dorsch.de</i>	Wastewater Treatment and Tender Expert	KfW; <b>Central Gaza</b> WWTP (Phase 1: 600,000 P.E./ 30.000 m <sup>3</sup> /day), KfW Project. Indicative budget: NN Implementation 600.000 P.E. with additional Phase 1 (2025) 1.000.000 PE and Phase 2 (2042) 1.500.000 PE. Position: Process Expert for WWTP and Sludge Treatment and FIDIC YB Tender Elaboration and Evaluation. Senior Process Expert for Contractors design review.
08/2015 – 03/2016 Short-term	Montenegro	FWT – Fichtner <i>stephane.meistermann@fwt.fichtner.de</i>	Process Expert	Adriatic Coast IV; KfW Project Tasks: Process, M&E design for several small WWTP for FIDIC YELLOW Book Tender preparation.
06/2014 - 09/2015 Short-term R 10	Cyprus	UNDP PFF  <i>Mrs. Tiziana Zerzano</i> <i>tiziana.zerzano@undp.org</i>	Process Expert	NWWTP <b>Mia Milia</b> , Cyprus (Phase 1: 270,000 P.E./ 30.000 m <sup>3</sup> /day), MBR type WWTP (tertiary treatment). Indicative budget: 30 Mio. EUR Position: Process Engineering Specialist for WWTP and Sludge Digestion during Supervision (FIDIC) of commissioning and performance testing.
10/2013 - 10/2015 Short-term	Croatia	EPTISA SEE  <i>Mr. Alvaro Diez Santaclara</i> <i>adiez@eptisa.com</i>	Process Expert	Works Supervision for the Construction of County Waste Management Centre <b>Marišćina</b> in Primorsko-Goranska County, Republic of Croatia, Europe Aid / 130888/D/SER/HR Tasks: Review of Contractors Process Design, M&E installations for the WWTP acc. FIDIC Yellow Book.
04/2012 - 08/2017 Short-term	Croatia	EPTISA SEE  <i>Mr. Alvaro Diez Santaclara</i> <i>adiez@eptisa.com</i>	Process Expert	Supervision of construction of the water supply and sewerage system with wastewater treatment plant for <b>Slavonski Brod</b> , 2008HR16IPR003/1 Tasks: Review of Contractors Process, M&E design for the WWTP (appr. 60/80.000 P.E). FIDIC YELLOW Book, DNP Supervision.

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08/2012 - 04/2014 Short-term  R 11	Albania	EPTISA SEE  <i>Mr. Alvaro Diez Santaclara</i> <a href="mailto:adiez@eptisa.com">adiez@eptisa.com</a>	Process & Wastewater Treatment Expert	Supervision of the sewerage systems construction in <b>Velipoja</b> and <b>Shkodra</b> , EuropeAid/128827/C/SER/AL Tasks: Review of Contractors Process, M&E installations for the WWTP (appr. 48.000 P.E). Partial re-design of plant acc. FIDIC RED Book
08/2012 - 10/2013 Short-term	Montenegro	ETI Consulting SAS 75002 Paris, France	Civil Engineer	EU-framework; FCW BENE 2009, 2013/325417 Preparation of Technical Documentation for contracting of new sewerage network in municipalities of <b>Bijelo Polje</b> and <b>Cetinje</b> .
04/2012 - 04/2013 Short-term  C_41	Montenegro	Alternative Consulting, Belgrade  <i>Ms. Radmila Stanisavljevic</i> <a href="mailto:radmila@alternative-consulting.com">radmila@alternative-consulting.com</a>	Process & Wastewater Treatment Expert	Preparation of Preliminary design for the construction of waste water treatment plant and sewerage network in the Municipality of <b>Plav</b> and the urban settlement of Gusinje, EC Framework Contract N° 2011/279306-1 Tasks: Design for WWTP Plav (18.000 P.E) and Pumping Stations. Process, M&E Design, etc.; <i>Collaboration and management of sewerage network design team.</i> Estimated budget for WWTP: appr. 5 Mio. €
11/2011 - 05/2012 Short-term  C_40	Bosnia and Herzegovina	FWT – Fichtner Water Transportation GmbH, Freiburg  <i>Mr. Christian Koopmann</i> <a href="mailto:christian.koopmann@fwt.fichtner.de">christian.koopmann@fwt.fichtner.de</a>	Wastewater Treatment Expert	Feasibility Study <b>WWTP Bihac</b> German Bank of Development, KfW Elaboration of conceptual design documentation, incl. designers cost estimate, variant solutions. Process design, incl. hydraulic, architectural and MEICA design, etc., elaboration of presentation doc's (charts and drawings) and price breakdown for civil and M&E works. FIDIC YELLOW Book Tender Assistance (Vol. 3-5) and backstopping during tender evaluation.
01/2011 - 03/2012 Short-term  C_39 C_38	Azerbaijan	H.P. Gauff Ingenieure GmbH  <i>Dr. Joachim Glasenapp</i> <a href="mailto:jglasenapp@gauff.com">jglasenapp@gauff.com</a>	Design Review Expert	Second National Water Supply and Sanitation Project - Construction Supervision in 16 Counties. <b>Activities performed:</b> Works supervision for 8 Plant & Design Build Contracts covering the implementation of water supply & sewerage networks with pumping stations & reservoirs and waste water treatment plants in 16 Rayons (districts) of the country. Chief design review expert for WWTP designs. Total budget appr. 500 Mio. USD.

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08/2011 – 02/2012 Short-term  R_13	Kosovo	FWT – Fichtner Water Transportation GmbH, Freiburg  <i>Mr. Christian Koopmann</i> <a href="mailto:christian.koopmann@fwt.fichtner.de">christian.koopmann@fwt.fichtner.de</a>	Wastewater Treatment Expert	Feasibility Study <b>SEWERAGE DISPOSAL KOSOVO SOUTHWEST</b> German Bank of Development, KfW Conceptual design of 3 WWTP's for the cities of <b>Prizren, Peja and Gjakova</b> (appr. 50.000 P.E. per each). Elaboration of conceptual design documentation, incl. designers cost estimate and least-cost-analysis for 3 variant solutions. <b>Activities performed:</b> Process design, incl. hydraulic, architectural and MEICA design, etc., elaboration of presentation doc's (charts and drawings) and CAPEX/OPEX of civil and M&E works.
06 - 11 /2010 short term  C_36	Equatorial-Guinea	Fichtner Water & Transportation GmbH  <i>Dr. Wolf Meinken</i> <a href="mailto:wolf.meinken@fwt.fichtner.de">wolf.meinken@fwt.fichtner.de</a>	Process & Wastewater Treatment Expert, Designer	WWTP <b>Sipopo</b> ; 12,000 P.E. MBR; CNP-Removal by tertiary treatment acc. 91/271/EEC and bathing water directive. MBR system with simultaneous sludge stabilisation and sludge dewatering. Estimated budget 5 Mio. EUR. <b>Activities performed:</b> Final design of the WWTP, incl. hydraulic & process design, civil and mechanical design, co-ordination of electrical design. Elaboration of drawings and BoQ's for civil and M&E works for tendering on turnkey basis, acc. German Standards (analogous RB).
09 - 10/2009 short term  C_35	Cyprus	UNDP PFF  <i>Mrs. Tiziana Zerrano</i> <a href="mailto:tiziana.zerrano@undp.org">tiziana.zerrano@undp.org</a>	Process Expert	WWTP <b>Mia Milia</b> , Cyprus (Phase 1: 270,000 P.E.), MBR type wastewater treatment plant (tertiary treatment). Indicative budget: 30 Mio. EUR Expert to the UN/EU and Member of Evaluation Committee. <b>Activities performed:</b> Review & assessment of Tender's proposed process design, plant design and mechanical equipment (MBR system).
10-12/2008 short term	Germany	Fichtner Water & Transportation GmbH  <i>Mr. Christian Koopmann</i> <a href="mailto:christian.koopmann@fwt.fichtner.de">christian.koopmann@fwt.fichtner.de</a>	Wastewater & Sludge Treatment Expert	<b>Lake Sevan</b> Project; 3 WWTP's up to 30.000 P.E. Type: WWTP - Mechanical Treatment <b>Activities performed:</b> Backstopping services (home office) for Conceptual Design and Tender Elaboration.

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06/2008 - 12/2010 short term  R 12/14	Romania	EPTISA Proyectos Internacionales S.A.  <i>Mrs. Cristina Chiolom</i> <a href="mailto:cristina.chiolom@piu.aquarim.ro">cristina.chiolom@piu.aquarim.ro</a> <i>Mr. Ion Tiana</i> <a href="mailto:itaina@eptisaromania.com">itaina@eptisaromania.com</a>	Wastewater & Sludge Treatment Expert, Mechanical Supervisor	Technical Assistance for Project Implementation and Works Supervision for the ISPA Contracts in <b>Ramnicu Valcea</b> , Romania, EuropeAid/120969/D/SV/RO: WWTP <b>Ramnicu Valcea</b> 130,000 P.E. Rehabilitation and upgrade for CNP-Removal by secondary treatment acc. 91/271/EEC. Indicative budget: 11 Mio. EUR <b>Activities performed:</b> Works Supervision for Process & Hydraulic Design and Mechanical Works acc. FIDIC P&DB. Tests on and after Completion, Commissioning. Proposal for digester rehabilitation and draft Sludge Management Strategy.
08/2007 - 12/2011 short term  R 15	Romania	IGIP GmbH (PLAN-CENTER/IGIP)  <i>Mr. Bogdan Oprea</i> <a href="mailto:bogdan.oprea@mfinite.ro">bogdan.oprea@mfinite.ro</a> <i>Mr. Hartmut Beck</i> <a href="mailto:Hartmut.Beck@IGIP.COM">Hartmut.Beck@IGIP.COM</a>	Process Engineer	Technical Assistance for the Management and Supervision of ISPA Contracts in Constanta, 2000/RO/16/P/PE/ 003-01: WWTP <b>Constanta Nord</b> 355,000 P.E. and WWTP <b>Eforie South</b> 140,000 P.E. Rehabilitation and upgrade for CNP-Removal by secondary/tertiary treatment acc. 91/271/EEC with simultaneous aerobic sludge stabilisation and sludge dewatering. Indicative budget: 28 + 11 Mio. EUR <b>Activities performed:</b> Works Supervision for Process & Hydraulic Design, Design Review acc. FIDIC P&DB 5.2 plus Tests on and after Completion, Commissioning.
07/2008 – 08/2009 short term  R 16	Romania	Romania EPTISA Proyectos Internacionales S.A.  <i>Mr. Ion Tiana</i> <a href="mailto:itaina@eptisaromania.com">itaina@eptisaromania.com</a>	Process Engineer	Technical Assistance for the Management and Supervision of ISPA Contracts in <b>Craiova</b> , 2000/RO/16/P/PE/002 WWTP Craiova 350,000 P.E. Rehabilitation and upgrade for CNP-Removal by secondary/tertiary treatment acc. 91/271/EEC with sludge digestion with sludge dewatering and digester gas utilisation by CHP. Indicative budget: 29 Mio. EUR <b>Activities performed:</b> Works Supervision and Design Review for Process & Hydraulic Design as well as Design Review for Mechanical Works, acc. FIDIC P&DB. Review of procedures for Test on Completion. Supervision of Commissioning and Tests after Completion.

Date from - date to	Location	Company	Position	Description
02/2006 – 02/2010 short term  C_25	North-Cyprus	Independent Consultant Engineer for the Municipality of Girne  <i>Mr. Ahmet Turker</i> <a href="mailto:ahmet_turker@hotmail.com">ahmet_turker@hotmail.com</a>	Wastewater & Sludge Treatment Expert	WWTP Kyrenia/ <b>Girne</b> , 8,000 P.E.; Technical Assistance for Tender Evaluation and “Technical Contract Negotiations”, acc. to <i>FIDIC Yellow Book</i> . Assessment of Final Design and Equipment Specifications. SBR-System for CNP-Removal, acc. 91/271/EEC with simultaneous aerobic sludge stabilisation and sludge dewatering. Indicative budget: 3 Mio. EUR <b>Activities performed:</b> TA for Tender Evaluation and “Technical Contract Negotiations”. Design Review acc. FIDIC P&DB, Assessment & review of Final Design and Equipment Specifications. Inspections, Review procedures for Tests on and after Completion, Commissioning. Advisor to the Engineer.
04-10/2006  C_28 C_23	Romania	MVV Consulting GmbH <i>Mr. Liviu Stefan</i> <a href="mailto:Instefan@yahoo.com">Instefan@yahoo.com</a> <i>Mr. Andreas Koch</i> <a href="mailto:a.koch@mvv-de-con.com">a.koch@mvv-de-con.com</a>	Procurement Expert	Technical Assistance for Project Preparation in the Environment Sector in <b>Botosani</b> : ISPA; Indicative budget: 14 Mio. EUR <b>Activities performed:</b> Assistance during Tender Phase and Tender Evaluation; Technical Advisor WWTP “Rachiti” 130,000 P.E., Member of Evaluation Committee.
06/2006 – 10/2007  C_28	Romania	MVV Consulting GmbH  <i>Mr. Andreas Koch</i> <a href="mailto:a.koch@mvv-de-con.com">a.koch@mvv-de-con.com</a>	Procurement Expert	Technical Assistance for Project Preparation in the Wastewater and Drinking Water Sector in Romania ISPA 2003/RO/16/P/PA/013-05 “ <b>Five Counties</b> ”. Master Plan Development on County Level, Feasibility Studies and Tender documents for 5 identified Projects, Cohesion Fund Applications. Indicative budget: 400 Mio. EUR <b>Activities performed:</b> Elaboration of a Unit Cost Database (UCD), Detailed Cost Estimates, Procurement Plan, experts contribute to Vol. 3-5 for FIDIC YB/RB tender dossiers for various projects.
03-08/2006  R 17	Romania	Consulaqua Hamburg GmbH  <i>Dr. Joachim Glasenapp</i> <a href="mailto:jglasenapp@gauff.com">jglasenapp@gauff.com</a>	Procurement Expert, Wastewater & Sludge Treatment Expert	WWTP <b>Suceava</b> ; 140,000 P.E., ISPA/KfW; Indicative budget: 15 Mio. EUR Rehabilitation and upgrade for CNP-Removal by secondary/tertiary treatment with optional UV, acc. 91/271/EEC with sludge digestion and sludge dewatering. <b>Activities performed:</b> Review of conceptual design. Tender elaboration; responsible for Volumes 3-5 in accordance to FIDIC Yellow Book (P&DB).

Date from - date to	Location	Company	Position	Description
11/2005-12/2006  R 18	Turkey	H.P. Gauff Ingenieure GmbH  <i>Dr. Joachim Glasenapp</i> <a href="mailto:jglasenapp@gauff.com">jglasenapp@gauff.com</a>	Procurement Expert, Wastewater & Sludge Treatment Expert	WWTP <b>Sivas</b> ; 345,000 P.E., KfW; WWTP for CNP-Removal by secondary/tertiary treatment acc. 91/271/EEC with simultaneous aerobic sludge stabilisation and sludge dewatering. Indicative budget: 30 Mio. EUR <b>Activities performed:</b> Review of conceptual design and elaboration of Volumes 3-5 for <i>FIDIC Yellow Book (Plant and Design, Build)</i> . Backstopping and assistance during Tender Period & Evaluation.
05-09/2005  C_28 C_26	Russia	MVV Consulting GmbH  <i>Mr. Andreas Koch</i> <a href="mailto:a.koch@mvv-de-con.com">a.koch@mvv-de-con.com</a>	Process Engineer	<b>Kaliningrad</b> Waste Water Investment Phase I: Feasibility Study for 28 towns; Preliminary Design of 4 WWTP's incl. Cost Estimates. Indicative budget: 5 Mio. EUR <b>Activities performed:</b> Conceptual Design of 4 WWTP's, incl. Cost Estimates (Capex & Opex). Final Design, acc. local standards, for process, hydraulic and E&M engineering, incl. architectural and civil design (without structural) for the town of Gussev 25,000 P.E. for Tender, acc. FIDIC P&DB.
06/2004 – 12/2004 and 2005  C_24	North-Cyprus	Independent Consultant Engineer for UNDP  <i>Mrs. Tiziana Zer-rano</i> <a href="mailto:tiziana.zerrano@undp.org">tiziana.zerrano@undp.org</a>  <i>Mr. Ali Caglar</i> <a href="mailto:ali.caglar@undp-pff.org">ali.caglar@undp-pff.org</a>  <i>Mr. Ahmet Turker</i> <a href="mailto:ahmet_turker@hotmail.com">ahmet_turker@hotmail.com</a>	Wastewater & Sludge Treatment Expert	Consultancy Services and Process Assessment of the WWTP <b>Kyrenia</b> , 8,000 P.E.; Feasibility Study for rehabilitation or extension of the WWTP up to 15,000 P.E. Tender design, Tendering (RFP) & Tender Evaluation, acc. UNCRITAL. <b>Activities performed:</b> Inspection and analysis of the wastewater treatment facilities, collection and disposal systems; Masterplan for sewerage disposal. Conceptual design proposal and cost analysis. Sustainability assessment for the proposed measures. Tender Design (process & hydraulic design with Electro/Mechanical Engineering, incl. SCADA); Tender Elaboration and experts contribute for Process Requirements, Civil and M&E Requirements, acc. to FIDIC Yellow Book; Tender Evaluation.

Date from - date to	Location	Company	Position	Description
01/2004 – 09/2005  R 19	Romania	MVV Consulting GmbH  <i>Mr. Andreas Koch</i> <a href="mailto:a.koch@mvv-de-con.com">a.koch@mvv-de-con.com</a>	Wastewater Treatment Expert, Mechanical Expert	TA for Project Preparation in the Environment Sector in <b>Botosani</b> , EUROPEAID 114408/D/SV/RO. Conceptual design for rehabilitation and upgrade of WWTP <b>CNP</b> -Removal by secondary/tertiary treatment, acc. 91/271/EEC with <i>sludge digestion</i> and sludge dewatering, incl. main Pumping Station. Indicative budget: 40 Mio. EUR <b>Activities performed:</b> Conceptual Designs with Cost estimates for Feasibility Study & Masterplan. Elaboration of Volumes 3-5 for FIDIC Yellow Book (P&DB) Tender (Process, Hydraulic and Electro-/Mechanical Design) for WWTP " <b>Rachiti</b> " 130,000 P.E.
			Water Treatment Expert, Mechanical Expert	TA for Project Preparation in the Environment Sector in <b>Botosani</b> , EUROPEAID 114408/D/SV/RO. Rehabilitation and upgrade of two drinking water treatment plants (DWTP). <b>Activities performed:</b> Conceptual Designs with Cost estimates for Feasibility Study & Masterplan. Elaboration of Volumes 3-5 for FIDIC Yellow Book (P&DB) Tender (Process, Hydraulic and Electro-/Mechanical Design) for Drinking Water Treatment Plants " <b>Buceca</b> ", 444 l/s and DWTP " <b>Catamaresti</b> ", 590 l/s.
10/2003 – 01/2005  C_28 C_22	Turkey	MVV Consulting GmbH  <i>Mr. Andreas Koch</i> <a href="mailto:a.koch@mvv-de-con.com">a.koch@mvv-de-con.com</a>	Team Leader & Wastewater & Sludge Treatment Expert	Consulting Services for <b>Corlu</b> Organised Industrial Zone, Industrial WWTP Project; 40,000 m <sup>3</sup> /d; Senior Consulting Services during Final Design & Works Completion, FIDIC P&DB. Indicative budget: 10 Mio. USD + <b>Activities performed:</b> Coordination of the team of experts for process and civil design approval, incl. design & safety evaluation (HAZOP). Assistance to the client in all technical aspects (i.e. hydraulic calculations, dimensioning of equipment).
03-06/2003  C_28	Germany	MVV Consulting GmbH  <i>Dr. J. Glasenapp</i> <a href="mailto:jglasenapp@gauff.com">jglasenapp@gauff.com</a>	Sludge Treatment Expert	Wastewater Treatment Plant <b>Sana'a</b> , Yemen; Extension of existing Sludge Drying Beds. <b>Activities performed:</b> Final Design and Tender Elaboration according to <b>FIDIC Red Book</b> .

Date from - date to	Location	Company	Position	Description
C_28 C_21	Serbia	MVV Consulting GmbH  <i>Mr. Andreas Koch</i> <a href="mailto:a.koch@mvv-de-con.com">a.koch@mvv-de-con.com</a>	Mechanical Expert, Wastewater & Sludge Treatment Expert	Improvement of the Water Supply and Wastewater Disposal Systems of the City of <b>Kragujevac</b> – Serbia and Montenegro; Municipality of Kragujevac, Local Utility ViK - Vodovod i Kanalizacija Kragujevac; Pre-feasibility study with technical appraisal of the DWT and WW disposal systems for the City of Kragujevac. <b>Activities performed:</b> Inspection and Analysis of existing WWTP; Elaboration of a rehabilitation concept & cost estimation.
R 20	China	Passavant Roediger Products  <i>Mr. Philippe Anstotz</i> <a href="mailto:Philippe.Anstotz@passavant-geiger.de">Philippe.Anstotz@passavant-geiger.de</a>	Project Manager, Sludge Treatment Expert	Sludge Dewatering Facilities for WWTP <b>Jiaying</b> (1,000,000 P.E.): Sludge Dewatering Facilities (Chamber Filter Press) Indicative budget: 10 Mio USD <b>Activities performed:</b> Project Management on contractor's side with Process and Mechanical Engineering, incl. specifications of mechanical equipment and Procurement.
R 21	Germany	Passavant Roediger Products  <i>Mr. Philippe Anstotz</i> <a href="mailto:Philippe.Anstotz@passavant-geiger.de">Philippe.Anstotz@passavant-geiger.de</a>	Project Manager, Sludge Treatment Expert	Wastewater Treatment Plant <b>Wiesbaden</b> (325,000 P.E.): New Sludge Dewatering Facilities (Chamber Filter Press). Indicative budget: 7 Mio. DM <b>Activities performed:</b> Detailed Design of sludge dewatering and conditioning facilities. Project Management on contractor's side. Detailed process and mechanical engineering, incl. detailed specifications of mechanical equipment and procurement. Coordination of electro- & Scada design. Project Management, incl. O&M Documentation, testing & commissioning.
2001	Germany/ Turkey	Passavant Roediger Products  <i>Mr. Philippe Anstotz</i> <a href="mailto:Philippe.Anstotz@passavant-geiger.de">Philippe.Anstotz@passavant-geiger.de</a>	Sales Manager - Technical Expert	Thermal Power Plant <b>CCPP Ankara</b> (1,300 m <sup>3</sup> /h) – Turkey for Balcke-Dürr Engineering GmbH, Germany; Design Proposal for chill water intake and mechanical pre-treatment for thermal power plant; inlet stoplog, coarse bar screen, cable operated bar screen, microsieving unit, coagulator, sludge dewatering. <b>Activities performed:</b> Elaboration of the Design Proposal for turn-key-quotation, bidding documents.

Date from - date to	Location	Company	Position	Description
10/1999 - 12/2000  C_18	Germany/ Nigeria	Independent Consultant Engineer for OMS Kläranlagen GmbH  <i>Mr. Norbert Schifferer</i> <a href="mailto:info@oms-klaelagen.de">info@oms-klaelagen.de</a> <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	<b>Abuja</b> Wastewater Treatment Plant Project: WWTP for C-Removal by secondary treatment, incl. disinfection (UV), acc. local standards with simultaneous aerobic sludge stabilisation and sludge dewatering (700,000 P.E.). Indicative budget: 100 Mio. USD <b>Activities performed:</b> Process, hydraulic and mechanical design, coordination of architectural, civil and electro/Scada design. Detailed design for tendering on turnkey basis, acc. German Standards (analogous YB). Tender elaboration (Vol. 3-5) for process and mechanical specifications. Designers cost estimate for mechanical equipment and support to construction company.
10/2000 - 03/2001  C_18 C_17	Germany/ Jordan	Independent Consultant for Passavant Roediger Maschinen-technik GmbH  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	<b>Irbid</b> Wastewater Treatment Plant Project (100,000 P.E.) for Bilfinger & Berger Bauaktiengesellschaft, Germany. Pre-Feasibility Study for Commercial Park WWTP for CNP-Removal, incl. disinfection (UV), analogous 91/271/EEC, with simultaneous aerobic sludge stabilisation and sludge dewatering. <b>Activities performed:</b> Conceptual design, incl. process, hydraulic and mechanical design, draft architectural, civil and electro/Scada design. Bill of Quantities (acc. <i>FIDIC Red Book</i> ) for Civil-, M+E-Works, incl. designers cost estimate for M&E and support to construction company.
04 - 06/1999	Germany	Independent Consultant for Passavant Maschinentchnik GmbH  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	<b>Zeil/Main</b> , 15,000 P.E.: CNP-Removal by secondary/tertiary treatment with extended aeration and sludge dewatering. Tender Proposals for several projects in Germany; analogous to FIDIC P&DB (functional tender), incl. architectural and civil design, process design, mechanical and hydraulic engineering, coordination of special and local inputs for E&Scada, cost estimates and tendering assistance for project calculation of Contractors proposals.

Date from - date to	Location	Company	Position	Description
12/1997 - 12/2000  C_16 C_15	Palestine	Independent Consultant Engineer for Passavant Maschinen-technik GmbH  <i>Mr. Philippe Anstotz</i> <a href="mailto:Philippe.Anstotz@passavant-geiger.de">Philippe.Anstotz@passavant-geiger.de</a>  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Process Engineer, Wastewater Treatment Expert	<b>Al-Bireh</b> (50,000 P.E.), FIDIC P&DB: WWTP secondary treatment for C-Removal, incl. disinfection (UV), acc. local standards with simultaneous aerobic sludge stabilisation and sludge dewatering. Indicative budget: 18 Mio. DM Tender Proposal acc. FIDIC P&DB: Final & Detailed Design, incl. architectural and civil design, hydraulic & process design, mechanical engineering and co-ordination of special designers for electrical & Scada as well as structural engineering, support of local designers. <b>Activities performed:</b> Hydraulic & process design, mechanical engineering.
1998-1999  C_14	Germany	Independent Consultant Engineer  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Civil Engineer	Urban development planning „Hinterm Dorf II“ for the town of Schiesheim/VG <b>Hahnstätten</b> , 5 ha (old village and new building area); Application for permission; Infrastructure design for water supply, sewers and roads for the new area (1.5 ha); Execution design and detail engineering, tender and works supervision, check and audit of invoices.
01 - 07/1998  C_13	Portugal	Independent Consultant Engineer for Passavant Maschinen-technik GmbH  <i>Mr. Jose Ribeiro</i> <a href="mailto:jribeiro@passavante-portuguesa.pt">jribeiro@passavante-portuguesa.pt</a> <i>Mr. Philippe Anstotz</i> <a href="mailto:Philippe.Anstotz@passavant-geiger.de">Philippe.Anstotz@passavant-geiger.de</a>	Wastewater Treatment Expert	<b>Peniche</b> Wastewater Treatment Plant (35,000 P.E.). CNP-Removal by secondary/tertiary treatment, acc. 91/271/EEC with extended aeration and sludge dewatering. <b>Activities performed:</b> Tender Proposal analogous to FIDIC P&DB (concept construction), incl. architectural and civil design, process design, mechanical and hydraulic engineering, coordination of special and local inputs for E&Scada, cost estimates and tendering assistance for project calculation of main and/or alternative proposal. (Obrecol S.A./Passavante Portuguesa, Lisboa).
1998	Portugal	Independent Consultant Engineer	Water Treatment Expert	Upgrade of Pre-treatment Facilities of <b>Porto</b> Waterworks – Portugal for PASSAVANT WERKE AG, Aarbergen, Germany; Elaboration of a turn-key price proposal for additional mechanical pre-treatment by microsieves.

Date from - date to	Location	Company	Position	Description
12/1997 - 03/1998  C_11	Czech Republic	Independent Consultant Engineer  <i>Mr. Philippe Anstotz</i> <a href="mailto:Philippe.Anstotz@passavant-geiger.de">Philippe.Anstotz@passavant-geiger.de</a> <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	<b>Decin</b> Wastewater Treatment Plant (60,000 P.E.). CNP-Removal by secondary/tertiary treatment, acc. 91/271/EEC with <i>sludge digestion</i> and sludge dewatering. (IKSE-Programme). <b>Activities performed:</b> Tender Proposal acc. FIDIC P&DB, incl. architectural and civil design, process design, mechanical and hydraulic engineering, coordination of special inputs for E&Scada, cost estimates and tendering assistance for project calculation of main and alternative proposal.
02 - 05/1997	Palestine	Consultant Engineer for Passavant - Werke AG  <i>Mr. Philippe Anstotz</i> <a href="mailto:Philippe.Anstotz@passavant-geiger.de">Philippe.Anstotz@passavant-geiger.de</a> <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	<b>WWTP's Al-Bireh, Salfeet, Wadi-Arab;</b> Tender Proposal acc. FIDIC P&DB, incl. architectural and civil design, process design, M&E and hydraulic engineering, cost estimates and tendering assistance. <b>Activities performed:</b> Process technology with electro-mechanical engineering. Bill of Quantities for mechanical supplies, project calculation of contractor's alternative proposal.
08/1995 - 10/2000  C_13	Portugal	Independent Consultant Engineer for Passavant - Werke AG <i>Mr. Jose Ribeiro</i> <a href="mailto:jribeiro@passavante-portuguesa.pt">jribeiro@passavante-portuguesa.pt</a> <i>Mr. Philippe Anstotz</i> <a href="mailto:Philippe.Anstotz@passavant-geiger.de">Philippe.Anstotz@passavant-geiger.de</a> <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	WWTPs <b>Torres do Mondego</b> , 3.500 P.E., <b>Mirando do Doro</b> , 4,500 P.E., <b>Chernace</b> 7,000 P.E.: CNP-Removal by secondary/tertiary treatment, acc. 91/271/EEC with extended aeration and sludge dewatering. Elaboration of the <b>BioCompact</b> series. <b>Activities performed:</b> Tender Proposals for several projects in Portugal; analogous to FIDIC P&DB (concept construction), incl. architectural and civil design, process design, mechanical and hydraulic engineering, coordination of special and local inputs for E&Scada, cost estimates and tendering assistance for project calculation of main and/or alternative proposal. Final Design and PM for WWTP Torres do Mondego.
05-08/1997	Luxembourg	Independent Consultant Engineer	Wastewater Treatment Expert	Wastewater treatment plant <b>Schifflange</b> (98,000 P.E.). Basic design with Bill of quantities for alternative quotation.

Date from - date to	Location	Company	Position	Description
1997  C_12	Germany	Independent Consultant Engineer  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Project Manager Design Engineer	Urban development planning for building area „Im Schiebenacker II“ for the town of Netzbach/ <b>VG Hahnstätten</b> , 1.5 ha; Infrastructure design for water supply, sewers and roads. <b>Activities performed:</b> Final design and detail engineering, tender and works supervision, check and audit of invoices.
11/1996 - 07/1997  C_11	Libya	Independent Consultant Engineer  <i>Mr. Philippe Anstotz</i> <a href="mailto:Philippe.Anstotz@passavant-geiger.de">Philippe.Anstotz@passavant-geiger.de</a> <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	WWTP <b>Ain Zara</b> /Tripolis (600,000 P.E.). WWTP for C-Removal by secondary treatment, incl. sludge digestion and sludge dewatering, acc. local standards. <b>Activities performed:</b> Tender design for Contractors turn-key proposal, including revision and upgrade of origin design with regard on process, hydraulic and mechanical design, coordination of civil and electro/Scada designs. Preparation of bidding documents and documentation.
1996  C_10	Germany	Independent Consultant Engineer  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Project Manager Design Engineer	Project “Schaumburger Straße” for the town of Flacht/ <b>VG Hahnstätten</b> . Redevelopment sewer ND 300. Sewer design, street and road works. <b>Activities performed:</b> Final design and detail engineering, tender and works supervision, check and audit of invoices.
1996	Jordan/ Yugoslavia	Independent Consultant Engineer	Wastewater Treatment Expert	WWTP - <b>Petra, Jordan</b> (3,000 P.E.). Basic design for turn-key-quotation; <b>Activities performed:</b> Process design with electro-mechanical engineering, BoQ. Client: ENERGOPROJECT, Belgrade
01/1996 - 05/1996  C_11	Yugoslavia	Independent Consultant Engineer	Wastewater & Sludge Treatment Expert	WWTP - <b>Gornij Milanovac</b> (appr. 100,000 P.E.): Study for reconstruction of sludge digestion facilities, incl. sludge dewatering and biogas utilisation CHP. <b>Activities performed:</b> Conceptual design, incl. process design, mechanical and hydraulic engineering, coordination of special and local inputs for E&Scada, BoQ with cost estimates and documentation. Client: ROEDIGER/PASSAVANT/ENERGOPROJECT

Date from - date to	Location	Company	Position	Description
01/1995 - 12/1996  C_11	Germany	Independent Consultant Engineer  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	Diverse WWTP: <b>Werneuchen</b> , 7,500/5,000 P.E. (11/1996 - 05/1997)/ <b>Weissenfels</b> , 15,000 P.E. (09-12/1996)/ <b>Stadtilm</b> 2 x 7,500/2 x 5,000 P.E (03-07/1996)/ <b>Wiehe</b> , 3,500 P.E./ <b>Ruppachtal-Esterau</b> , 6,000 P.E. (01-05/1995) CNP-Removal by secondary/tertiary treatment, acc. 91/271/EEC; extended aeration and sludge dewatering. <b>Activities performed:</b> Tender Proposals for several projects in Germany; analogous to FIDIC P&DB (functional tender), incl. architectural and civil design, process design, mechanical and hydraulic engineering, coordination of special and local inputs for E&Scada, cost estimates and tendering assistance for project calculation of Contractors proposals.
11/1995 - 07/1996  R 22	Germany	Independent Consultant Engineer	Wastewater Treatment Expert	<b>Schmalkalden</b> Wastewater Treatment Plant (50,000 P.E.). <b>Activities performed:</b> Detailed hydraulic engineering for waste water treatment line. Detailed & workshop design of sludge digestion plant, digester gas storage tank and CHP.
1995	Germany	Independent Consultant Engineer  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Project Manager Design Engineer	Building area "Auf dem Röhling II" for the town of Muderhausen/ <b>VG Hahnstätten</b> , 1.5 ha; Infrastructure design for water supply, sewers and roads; <b>Activities performed:</b> Detailed design and detail engineering, tender and works supervision, audit of invoices.

Date from - date to	Location	Company	Position	Description
11/1992-09/1995  C_9 C_8	Bulgaria	Independent Consultant Engineer  <i>Mr. Philippe Anstotz</i> <a href="mailto:Philippe.Anstotz@passavant-geiger.de">Philippe.Anstotz@passavant-geiger.de</a> <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	<b>Samokov</b> Wastewater Treatment Plant (60,000 P.E.): WWTP C-Removal, acc. local standards with simultaneous aerobic sludge stabilisation and sludge dewatering. 2 <sup>nd</sup> Phase: Mechanical and biological treatment 3 <sup>rd</sup> Phase: Chemical treatment and sludge dewatering 1.Tender Proposal analogous to. FIDIC P&DB, incl. architectural and civil design, process design, M&E and hydraulic engineering, cost estimates and tendering assistance. 2.Final & Detailed Design, incl. architectural and civil design, hydraulic & process design, mechanical engineering and co-ordination of special designers for electrical & scada as well as structural engineering, support of local designers. 3.Project & site management, documentation (O&M, as-built), testing and commissioning. <b>Activities performed:</b> Hydraulic & process design, mechanical engineering for 1/2/3, in addition: ref.1 Preparation of bidding documents. ref. 2 Design reports, O&M report, documentation, etc.
II/1995	Germany /Slovenia	Consultant for Passavant-Werke AG	Sludge Treatment Expert	WWTP <b>Ljubljana</b> (appr. 350,000 P.E.): Sludge digestion facilities, incl. sludge dewatering and biogas utilisation CHP. <b>Activities performed:</b> Tender Proposal analogous to. FIDIC P&DB, incl. civil design, process design, M&E and hydraulic engineering, cost estimates and tendering assistance. Client: ROEDIGER Anlagenbau GmbH - PASSAVANT-WERKE AG
1994  C_11	Germany	EAM-Umwelt GmbH  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater & Sludge Treatment Expert	Study for redevelopment of three WWTP's <b>Nörten Hardenberg</b> , Uslar, Moringen (appr. 5,000 - 30,000 P.E.); Assessment of existing treatment plants, assessment and evaluation of measures for upgrade and rehabilitation, incl. Consultants recommendation and cost estimates.

Date from - date to	Location	Company	Position	Description
10/1993 - 05/1995  C_7	Germany	Consultant for Passavant-Werke AG  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	<b>Hahnstätten</b> Wastewater Treatment Plant (15,000 P.E.): CNP-Removal by secondary/tertiary treatment, acc. 91/271/EEC with extended aeration and sludge dewatering. Indicative budget: 15 Mio. DM 1.Administrative and Final & Detailed Design, incl. architectural and civil design, hydraulic & process design, mechanical engineering and co-ordination of special designers for electrical & scada as well as structural engineering. 2.Project & site management, documentation (O&M, as-built), testing and commissioning. <b>Activities performed:</b> Hydraulic & process design, mechanical engineering, testing, documentation.
10/1992 - 04/1993	Germany	Consultant for Passavant-Werke AG  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	WWTP <b>Puerto la Cruz</b> , Venezuela (Phase 1: appr. 150,000 P.E.): C-Removal by secondary treatment. with sludge digestion and sludge dewatering. Final Design, incl. architectural and civil design, hydraulic & process design, mechanical engineering and co-ordination of special designers for electrical & scada as well as structural engineering. Documentation and design drawings. <b>Activities performed:</b> Hydraulic & process design, mechanical engineering, BoQ's, tender assistance.
II/1993	Germany	Consultant for Passavant-Werke	Wastewater Treatment Expert	WWTP <b>Zielona Gora</b> , Poland (appr. 100,000 P.E.) - Tender proposal; basic design with design report and Bill of Quantities for contractors price proposal, analogous to FIDIC.
1993	Germany	Consultant  <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Wastewater Treatment Expert	AZV-WAZOR - Oberes Rinnetal, WWTP <b>Köditz &amp; Rottenbach</b> (appr. 25,000 P.E.) - Study for decantral sewage treatment by small WWTP's. Final and administrative design (planning permit) with study for redevelopment, tender preparation.
1992-1994	Germany	Passavant Werke AG and Roediger Anlagenbau GmbH	Wastewater Treatment Expert	Development and process design for wastewater and sludge treatment plants, sludge digestion dewatering facilities and CHP-power plants. Elaboration of Bill of Quantities for M+E Supplies. Budget and final calculations of projects, presentation and negotiation with the client.

Date from - date to	Location	Company	Position	Description
1992	Germany/ Bulgaria	Consultant for Passavant-Werke AG	Sludge Treat- ment Expert	Sludge Treatment Plant <b>MIHALOWGRAD</b> (appr. 200.000 PE); Pre-feasibility study for re-construction of sludge digestion facilities, incl. sludge dewatering and biogas utilisation by CHP. <b>Activities performed:</b> Conceptual design, incl. process design, mechanical and hydraulic engineering, coordination of special and local inputs for E&Scada, BoQ, cost estimates and documentation.
1990-1992	Germany	Roediger Anla- genbau GmbH	Wastewater and Sludge Expert	Sales Department, international projects on sludge digestion and aeration process. Specialization on process design for sludge digestion and sludge dewatering facilities.
1985-1990  C_6	Greece / Yugoslavia	THEMELIODOMI, Thessaloniki  <i>Prof. Dr. E. Papa- christos</i> <a href="mailto:papch@civil.auth.gr">papch@civil.auth.gr</a> <i>Mr. Thomas Blanche</i> <a href="mailto:thomas.blanche@gmx.de">thomas.blanche@gmx.de</a>	Resident Jun- ior Engineer	<b>TRIKALA</b> WWTP's for the cities of <b>Trikala, Kastoria, Komotini, Rethimnon</b> and others CNP-Removal by secondary/tertiary treatment, analogous 91/271/EEC with extended aeration and sludge dewatering. 1.Tender Proposal analogous to. FIDIC P&DB, incl. architectural and civil design, process design, M&E and hydraulic engineering, cost estimates and tendering assistance. 2.Final & Detailed Design, incl. architectural and civil design, hydraulic & process design, mechanical engineering and co-ordination of special designers for electrical & scada as well as structural engineering, support of local designers. 3.Project & site management, documentation (O&M, as-built), testing and commissioning. <b>Activities performed:</b> Hydraulic & process design, mechanical engineering for 1/2/3, in addition: ref.1 Preparation of bidding documents, incl. support to construction company. ref. 2 Design reports, O&M report, documentation, etc. ref. 3 Coordination of testing & training, commissioning. Assistance representation for Passavant-Werke AG in Greece and Yugoslavia.

C\_1 - C\_40 - Employers Certificate available

**17. Other relevant information (e.g., publications, etc.)**

Year	Description (Institution, Degrees, Diplomas obtained)
2017	BEW training "The new DWA A131 Design Guideline for Wastewater Treatment Plants" (11.05.2017 Essen)
2014	IWA World Water Congress & Exhibition, 21-26 Sept. 2014 in Lisbon, Portugal
2013	DWA Seminar "Kläranlagentage – Bad Soden" 10KA201/13, 18/19.06.2013
2012	DWA Seminar "Energy transition and water management" 10EN001/12, 29-30.10.2012
2012	DWA Training "Optimization of Energy efficiency of WWTP's" 10EN003/12, 22.03.2012
2011	Seminar "Energy efficient aeration technology" at Passavant-Inntech, Würzburg
2009	FIDIC Training Course, Darmstadt 28-29 Sept. 2009
2005	Seminar Membrane Technology; "Membrantechnik in der Wasser- und Abwasserbehandlung" 6. Aachener Tagung, Oktober 2005
2005	Elaboration of BioCompactModular BCM® Design Tool and UCD (Unit Cost Database); Application of Filemaker 8.5 Database Development & Management Software
2003	Seminar Surface Aeration; "Oberflächenbelüftung" der TAH Technische Akademie Hannover e.V. am 18.03.2003
2003	Expert lecturer for InWent program "Integrated Management of Water Supply and Wastewater Disposal" during 02-05/2003 for Module B/C (C_20)
2001	Seminar Compressed Air Aeration Technology; "2. Hannoversche Belüfvertagung" der Firma Ott-System GmbH & Co. KG am 17.05.2001
1987	Regular visitor of IFAT (international trade fair for environmental technology) Munich, Germany, since 1987
1985 - 1988	Permanent assignment as technician and junior engineer for BLANCHE & SOEHNE GmbH being regional representation for PASSAVANT WERKE AG in Yugoslavia, Greece, Romania and Bulgaria during university education.
1985 - 1988	Abroad short-term assignments as trainee and technician in consulting & engineering for PAPA-CHRISTOS Engineering in Thessaloniki, Greece.
1984	Abroad internship in Greece, as trainee in construction industry working for THEMELIODOMI SA, Thessaloniki during university education.
1981	A level degree (general qualification for university) master courses in Mechanics and Physics.