



Dr. Valentina LAZAROVA

Language skills :

Professional language: French and English
Fluent in Spanish, Bulgarian and Russian

Dr. Lazarova is an international expert with over 30 years of research and practical experience in the field of Environmental Engineering, in particular wastewater treatment and reuse. Her career started as designer and project manager of wastewater treatment plants, followed by academic interdisciplinary research experience as project coordinator and manager, and culminating as technical expert and advisor for full-scale operations, new offers and policy development. During her carrier, she consistently demonstrates high performance on projects, meeting or exceeding client expectations. Dr. Lazarova is the former Chair of the IWA Water Reuse Specialist Group and Technical Adviser to European Commission and other International organisations. For her outstanding achievements, she received the distinguished French awards of CNRS Innovation Medal and the Legion of Honour in 2014.

Technical skills: Strong multidisciplinary technical knowledge on water reuse, global water cycle management, impacts of climate change, energy efficiency and environmental impacts of water and waste management, awareness on the role of economics and public perception; internationally recognized expertise in the field of advanced water and wastewater treatment and reuse.

Personal skills: Strong leadership and management skills: dynamic and energetic leader that is able to create synergy within the team and to work in a broad spectrum of cultural settings; excellent analytical and validation skills: high productivity and strong problem solving skills with a very good sense of quality; high reliability and flexibility, being able to work on different tasks under pressure and in a fast-moving environment; strong sales and communication skills, professional writing: great dynamism, perseverance, enthusiasm, creativity, openness, reliability and high motivation.

<p>Qualifications</p>	<p>Prof. Dr. Dipl.Eng.on Civil, Process and Environmental Engineering</p> <p>2002: Certification of Professorship, section 62 <i>Process Engineering</i>, French Ministry of Education</p> <p>2001: Habilitation to Direct Research (University Professor grade) – <i>Environmental Engineering</i>, University of Montpellier, France, 2001</p> <p>1991: Post-doctorate, National Institute of Applied Sciences, Toulouse (INSAT), France, <i>Environmental Engineering</i></p> <p>1987: Doctorate (Ph D), <i>Wastewater Treatment Process Engineering</i>, Technical University on Chemical Engineering, Sofia, Bulgaria</p> <p>1979: Master of Science (MS), <i>Environmental Engineering</i>, Leningradski Ordena Krasnova Znameni Ingenero-Stroiytelny Institut (equivalent to the French <i>Institut National des Ponts et Chaussées</i> or College on Civil Engineering), Leningrad, URSS</p> <p>1978: B. Sc. Degree in <i>Civil Engineering</i>, Leningradski Ordena Krasnova Znameni Ingenero-Stroiytelny Institut, URSS</p>
<p>Nominated Position</p>	<p>Senior Water Reuse Expert, Innovation & Business Performance Division, SUEZ</p>
<p>Experience</p>	<ul style="list-style-type: none"> ▪ Since 2014 Senior Expert and Technical Adviser for New Business Development ▪ Development of new business offers, training and services for all SUEZ subsidiaries ▪ 2009-2014 Senior Expert and Technical Adviser for Support to Operations ▪ Development of new offers and services: water reuse, odour management, energy efficiency, city of the future. ▪ Main consultant activities: Review and/or preparation of international bids, feasibility studies, technical assistance to plant designers, operators, master plans development, optimisation of capital investment and operation costs of wastewater treatment, odour control and water reuse (France, French Polynesia, Australia, Middle East, Latin America, South and North Africa, Asia, the UK and the USA). <p>International activities and communications: over 300 publications, associated editor of <i>Water, Science and Technology</i>, reviewer in leading Journals (<i>Water Research, Water reuse and Desalination, Desalination, Desalination and Water</i></p>

	<p>Treatment, Elsevier Landscape and Urban Planning, Elsevier Environment), chair of member of scientific committees of international conferences,</p> <p>Academic Position: affiliated professor and external lecturer (2nd and 3rd cycles, including doctoral and master courses) in French Engineering Schools</p> <ul style="list-style-type: none"> ▪ 2002- 2009 Project Manager and Technical Assistance for Support to Operations Technical assistance for all subsidiaries of Suez Environment: technical audits of wastewater treatment and reclamation facilities, energy audits, control of odour nuisance, environmental impacts, etc. Development of handbooks of good practices, process design guidelines, failure management protocols, state of the art review on emerging and innovative technologies. ▪ 2001-2002: Project Manager, Water Resource Division In charge of research projects and support to operations in the field of water reuse, including water quality control, process design and operation, risk assessment, socio-economic aspects, etc. Management and coordination of international R&D projects (WERF, AWWA, CEE); inter- and extra-company cross-section activities. ▪ 1997-2001: Head of Water Reuse Department Leadership, management and technical direction of interdisciplinary R&D projects, Master and Doctoral works (both fundamental and applied research) on advanced water and wastewater treatment and reuse: biofilm reactors, membrane filtration, MBR, activated carbon, UV and ozone disinfection, water quality (removal of trace organics, endocrine disruptors and pathogens), water reuse (social, economic, financial, regulatory and technical aspects of water reuse projects for agricultural and landscape irrigation, grey water recycling, indirect potable reuse, industrial uses) and resource management (surface reservoirs, storage, aquifer recharge, soil and environmental impacts). ▪ 1991-1997: Project Manager, Wastewater Treatment Department Planning, organisation and supervision of R&D projects on advanced biofilm wastewater treatment, budget management : 7 patents and a new process development. ▪ 1987-1990: Centre of Biotechnology, University of Sofia, Bulgaria Assistant Professor Teaching and training courses on Environmental and Sanitary engineering, water chemistry and water quality control, water and wastewater treatment. Management of international and national research projects on biological water and wastewater treatment. ▪ 1979-1983: National Engineering Institute “VODOKANALPROEKT”, Sofia, Bulgaria, Project Manager Design and construction of industrial wastewater treatment plants, including wineries, petro-chemical and pharmaceutical industries, as well as tertiary treatment for industrial wastewater reuse (project development, budget management, coordination of the activity of the specialized groups, negotiation with clients, supervision of construction and commissioning).
<p>Awards</p>	<ul style="list-style-type: none"> ▪ July 2014: Chevalier of the Legion of Honour, France ▪ May 2014: Innovation Award of CNRS (National Institute of Science), France ▪ 1995 and 2010: Suez Environnement Innovation Awards ▪ 1979 and 1981 : Goal Innovation Award of Bulgarian Gouvernement
<p>Professional Membership and collaborations</p>	<p>IWA, since 1991, Active member of Specialist Groups on Water Reuse, Membranes, Biofilms, Nutrient Removal and Disinfection.</p> <p>IWA since 2009, Chair of Water Reuse Specialist Group</p> <p>IWSA 1997-2000 Secretary of the Water Reuse Committee</p> <p>WEF1996-2002, Member of Water Reuse Committee</p> <p>WateReuse Association, CA, 1999-2002, member of Indirect Potable Reuse Committee</p> <p>Since 2001: Member of the EUREAU Water Reuse Group</p> <p>EU Commission: technical advisor and member of the external expert panel, 4th to 7th Framework R&D Programmes</p>

	<p>Collaboration with International Organisations:</p> <ul style="list-style-type: none"> ▪ Member of the expert task force group working on the new European Directive on Water Reuse “Development of minimum quality requirements at EU level for water reuse in agricultural irrigation and aquifer recharge” ▪ Participation as French representative expert in the task force for development of ISO Standards (since 2009): ISO 16075 "Guidelines for Treated Wastewater Use for Irrigation", ISO 20760 “Water Reuse in Urban Areas — Guidelines for Centralized Water Reuse System”, ISO 20761 “Water Reuse in Urban Areas—Guidelines for Water Reuse Safety Evaluation: Assessment Parameters and Methods”, ISO 20468 “Guidelines for Performance Evaluation of Treatment Technologies for Water Reuse Systems”, ISO 20426 "Guidelines for Health Risk Assessment and Treatment for Water Reuse" ▪ Chair and member of the Programme Committee and Scientific committees of a great number of international conferences (IWA Water Congress, IWA Reuse conferences, IDA Water Reuse conferences, etc.) ▪ Associated editor of Water, Science and Technology, reviewer in leading Journals (Water Research, Water reuse and Desalination, Desalination, Desalination and Water Treatment, Elsevier Landscape and Urban Planning, Elsevier Environment) ▪ Participation in the elaboration of the USEPA Water Reuse Guidelines 2004 (author of chapter 8 and reviewer of other chapters); ▪ Technical advisor of WHO (since 2002) for the elaboration of Mediterranean Water Reuse Guidelines and Codes of good practices for wastewater treatment and reuse ▪ Technical advisor of the European Commission for the evaluation of the international proposals for funding (since 2000) ▪ Expert for the review of the California guidelines for advanced disinfection ▪ Technical advisor of the Economic Council for Pacific region ▪ Technical water reuse advisor of the European Association of Irrigation and the French Golf Association ▪ Technical advisor for WERF R&D projects on wastewater treatment and reuse ▪ Technical advisor for European and LIFE projects on water reuse
<p>Publications: Key Figures</p>	<ul style="list-style-type: none"> ▪ Over 200 scientific and peer-reviewed publications, leading of more than 400 R&D projects, consultant reports and technical audits ▪ Edition of 3 handbooks ▪ 8 chapters in books on wastewater treatment & reuse, biofilm reactors, disinfection ▪ 7 patents on wastewater treatment ▪ Coordination of 5 large international projects including EU, WERF and other projects: coordinator of the first large EU project on water reuse CATCHWATER “Integrated water resource management with water reuse”
<p>Professional Recognition</p>	<p>Patents</p> <p>Patent FR C 02 F 3/08, EP 0 738 688 B1. (2001) Dispositif de traitement biologique de liquide notamment d'eaux résiduaires.</p> <p>Patent USA 5,698,094, Fr C 02F 3/08 (1997) Device for biological treatment of liquid.</p> <p>Patent FR C 12 N 11/04, 2.761.696, 97.042.273 (1997) Composition pour encapsuler des microorganismes ou des enzymes, produits flottants obtenus et leur utilisation.</p> <p>Patent FR C 02 F 3/00, 2.739.849 (1995) Procédé et dispositif de traitement biologique de liquides en présence de particules constituant un lit flottant.</p> <p>Patent FR C 02 F 3/08, 2.733.164 (1995) Dispositif de traitement biologique de liquide notamment d'eaux résiduaires..</p> <p>Patent FR C 02F 3/30, 2.707.183 (1993) Procédé de mise en mouvement de particules supports de microorganismes dans un liquide à traiter par voie biologique, et installation de mise en œuvre du procédé.</p> <p>Patent BG 75281 (1986) Process for organic pollution removal of waste water.</p>
<p>Selected Publications</p>	<p>Books and Chapters</p> <p>Lazarova V., T. Asano, A. Bahri and J. Anderson (eds) (2013) Milestones on Water Reuse: The Best Success Stories, IWA Publishing, London, UK</p> <p>Walters J., Oelker G. and Lazarova V. (2013) Producing designer recycled water tailored to customer needs. In: Milestones on Water Reuse: The Best Success Stories, Lazarova V., T. Asano, A. Bahri and J. Anderson (eds), IWA Publishing, London, UK, 37-52.</p> <p>Lazarova V., Sturny V. and Tong Sang G. (2013) The keys to success of water reuse in tourist areas – the case of Bora Bora. In: Milestones on Water Reuse: The Best Success Stories, Lazarova V., T. Asano, A. Bahri and J. Anderson (eds), IWA Publishing, London, UK, 127-136.</p> <p>Mazzini R., Pedrazzi L. and Lazarova V. (2013) Production of high quality recycled water for agricultural irrigation in Milan. In: Milestones on Water Reuse: The Best Success Stories,</p>

- Lazarova V., T. Asano, A. Bahri and J. Anderson (eds), IWA Publishing, London, UK, 175-190.
- Fazio A., Faucher N. and Lazarova V. (2013) Key to success of water reuse for agricultural irrigation in France. In: Milestones on Water Reuse: The Best Success Stories, Lazarova V., T. Asano, A. Bahri and J. Anderson (eds), IWA Publishing, London, UK, 191-199.
- Lazarova V., Choo K.H. and Cornel P. (eds) (2012) Water-Energy Interactions in Water Reuse, IWA Publishing, London, UK.
- Lazarova V., Peregrina C. and Dauthuille P. (2012) Toward energy self-sufficiency of wastewater treatment. In: Water-Energy Interactions in Water Reuse, eds Lazarova et al., IWA Publishing, chapter 6, pp 87-126.
- Lazarova V. and Bahri A. (2008) Water reuse practices for agriculture, In *International Survey of Wastewater Reclamation and Reuse*, ed. by B. Jimenez and T. Asano, IWA Publishing, London, UK.
- Ternes, T A., Kreuzinger, N. and Lazarova V. (2006) Indirect potable reuse, In *Human Pharmaceuticals, Hormones and Fragrances: The Challenge of Micropollutants in Urban Water Management*, eds. T. Ternes and A. Joss, IWA Publishing, ISBN: 1843390930, 323-352.
- Lazarova V. and A. Bahri, Eds, (2005) Irrigation with recycled water: agriculture, turfgrass and landscape, CRC Press, catalog n° L1649, ISBN 1-56670-649-1, Boca Raton, FL, USA.
- Lazarova V. (2002) Potentials of biotechnology in water and resource cycle management. In *Water and Resource Recovery in Industry*, ed. by P. Lens, L. Hulshoff Pol, P. Wilderer and T. Asano, IWA Publishing, 20pp.
- Lazarova V. (2000) Wastewater disinfection: assessment of the available technologies for water reclamation. Chapter In: «*Water Conservation vol. 3. Water Management, Purification and Conservation*», ed. by M.F.A. Goosen and W.H. Shayya, Technomic Publishing Co. Inc., 171-198.
- Lazarova V. and Manem J. (2000) Innovative biofilm treatment technologies for water and wastewater treatment. Chapter In : *Biofilms II: Process Analysis and Applications*, Ed. by J.D. Bryers, Wiley-Liss Inc., ISBN 0-471-29656-2, pp.159-206.

Selected peer reviewed papers

- Lazarova V., Liechti P.A., Savoye Ph. and Hausler R. (2013) Ozone disinfection: main parameters for process design in wastewater treatment and reuse. *Journal of Water Reuse and Desalination*, 3(4), 337-345.
- Lazarova V. (2013) Global milestones in water reuse: keys to success and trends in development, *Water 21*, August 2013, 12-22.
- Lazarova V., Abed B., Markovska G., Dezenclous Th. and Amara A. (2013) Control of odour nuisance in urban areas : the efficiency and social acceptance of the application of masking agents. *Wat. Sci. Tech.*, 68(3), 614-621.
- Barillon B., S. Martin Ruel, C. Langlais and V. Lazarova (2013) Energy efficiency in membrane bioreactors. *Wat. Sci. Tech.*, 67(12), 2685-2691.
- Lazarova V., Equihua L. and Rojas A. (2013) Sustainable water management with multi-quality recycled water production: the example of San Luis Potosí in Mexico. *Journal of Water Reuse and Desalination*, 4(1), 18-24.
- Lazarova V., Oelker G. and Won W. (2012) Production of custom-made recycled water for various reuse purposes: lessons learned from one of the world's largest recycling facilities. *Water Practice & Technology*, n° 052
- Lazarova V., S. Martin Ruel, B. Barillon and P. Dauthuille (2012) The role of MBR technology for the improvement of environmental footprint of wastewater treatment. , *Wat. Sci. Tech.*, 66(10), 2056-2064.
- Lazarova V., Sturny V. and Tong Sang G. (2012) The role of the community engagement towards the success of water reuse in isolated islands and tourist areas. *Journal of Water Reuse and Desalination*, 2(1), 1-12.
- Martin Ruel S., J. M. Choubert, M. Esperanza, C. Miège, P. Navalón Madrigal, H. Budzinski, K. Le Ménach, V. Lazarova and M. Coquery (2011) On-site evaluation of the removal of 100 micro-pollutants through advanced wastewater treatment processes for reuse applications, *Wat. Sci. Tech.*, 63(11), 2486-2497.
- Lazarova V., Emsellem Y., Paille J., Glucina K. and Gislette Ph. (2011) Water quality management of aquifer recharge using advanced tools, *Wat. Sci. Tech.*, 64(5), 1161-1168.
- Lazarova V., Gelego S., Garcia V., Rouge P. (2009) Problems of operation and main reasons for failure of membranes in tertiary treatment systems, *Wat. Sci. Tech.*, 57 (11), 1777-1783.
- Lazarova V. and Savoye P. (2004) Technical and Sanitary Aspects of Wastewater Disinfection by UV Irradiation for Landscape Irrigation, *Wat. Sci. Tech.*, 50 (2), 203-209.
- Lazarova V., S. Hills and R. Birks (2003) Using recycled water for non potable urban uses: a review with particular emphasis on toilet flushing. *Wat. Sci. Tech.: Water Supply*, 3 (4), 69-77.
- Lazarova V., P. Sheilds, B. Levine, P. Savoye, D. Hranisavljevic and P. Renaud (2003) Production of high quality water for reuse purposes: the West Basin experience, *Water Supply*, 3 (3), 167-175.
- Lazarova V., Nicolai M., Levine B., Saunders W., McGovern L., Sheilds P., Bancon-Montigny C. and Emsellem Y. (2002) Aquifer recharge: the relevance of boron isotopes as an environmental tracer of recycled water. *Proc. AWWA Conf. Water Source: Reuse, Resource, Conservation*, Jan 27-31, 2002, Las Vegas, USA, CD-rom, 18p.
- Lazarova, V. Levine, B. Sack, J. Cirelli, G. Jeffrey, P. Muntau, H. Brissaud, F. Salgot, M. & Brissaud, F. (2001) 'The role of water reuse for enhancing integrated water management in

	<p>Europe and Mediterranean countries. <i>Wat. Sci. Tech.</i>, 43 (10) 25-33.</p> <p>Lazarova V., Toupoul C., McGovern L., Reich K., Sheilds P., Levine B., Suffet I.H., Levine A., Haeffner H. and Emsellem Y. (2000) Control, management and optimization of indirect potable reuse in West Basin. <i>Proc. AWWA Water Reuse 2000 Conf.</i>, Jan 30-Febr 2, 2000, San Antonio, USA, CD-rom, 19p.</p> <p>Lazarova V., Savoye P., McGovern L., Sheilds P., Tchobanoglous G., Sakaji R. and Yates M.: (2000) Wastewater disinfection by UV: evaluation of the MS2 phages as a biosimulator for plant design. <i>Proc. WaterReuse Ass. Symp XV</i>, Sept 12-15, 2000, Napa, CA, CD-rom, communication n°14, 13p.</p> <p>Lazarova V. Perera J., Bowen M. and Sheilds P. (2000) Application of aerated biofilters for production of high quality water for industrial water reuse in West Basin. <i>Wat. Sci. Tech.</i>, 41, (4/5), 417-424.</p> <p>Lazarova V., Savoye P. Janex M.L., Blatchley III E.R. and Pommepuy M. (1999) Advanced wastewater disinfection technologies : state of the art and perspective. <i>Wat. Sci. Tech.</i>, 40, (4/5), 203-213.</p> <p>Lazarova V. and Manem J. (1995) Biofilm characterization and activity analysis in water and wastewater treatment: a review. <i>Wat. Res.</i>, 29, (10), 2227-2245.</p> <p>Lazarova V. and Manem J. (1994) Advances in biofilm aerobic reactors ensuring effective biofilm activity control. <i>Wat. Sci. Tech.</i> 29, (10/11), 319-327.</p>
<p>Selected Consulting Services for Wastewater Treatment and Reclamation Projects and Training Activities</p>	<p>United States (2015) Participation in tender proposal for storm and wastewater treatment and recycling for the airport of Indianapolis</p> <p>Australia (2015) Contribution to the development of a Master Plan for maximisation of water reuse and diversification of water reuse practices</p> <p>France (2015) Development of guidelines for internal water recycling in wastewater treatment works</p> <p>France (2015) Participation in tender proposal for water reuse and aquifer recharge</p> <p>France (2015) Stakeholder meeting and preparation of permit documents for urban water reuse</p> <p>Azerbaijan (2014) Development of training programme for the Baku Water Utility</p> <p>Malta (2013) Training course "Desalination and Water Reuse" (Water Treatment Academy)</p> <p>Qatar (2013) Training course for Qatar Foundation on "Membrane Desalination and Water Reuse"</p> <p>UK (2013) Evaluation of pretreatment facilities of Northumbrian Water and recommendations for equipment selection on the basis of efficiency, robustness and costs</p> <p>France (2013) Feasibility study and design of the water recycling facility for irrigation of one of the largest racetrack in Lyon d'Angers</p> <p>South Korea (2012) Training course "Optimisation of Energy Footprint and Performance of Reverse Osmosis for Desalination and Water Reuse", Busan</p> <p>France (2012) Feasibility study of water recycling for golf irrigation in Cannes, French Riviera</p> <p>France (2012) Technical assistance and preparation of a proposal for tender for operation of a wastewater treatment and reclamation plant with emphasis on removal of micropollutant and environmental restoration</p> <p>Australia (2011) Technical advisor for the proposal on management of wastewater treatment and reclamation facilities of Perth</p> <p>South Africa (2011) Technical assistance on a feasibility study and tender of direct potable reuse</p> <p>France (2011) Technical assistance of a project on greywater and rainwater recycling in a new eco-city in the Bordeaux area</p> <p>France (2011) Technical audit of a BRM facility and feasibility study of water reuse for golf irrigation</p> <p>Malta (2011) Technical assistance for the analysis of emerging pollutants in treated wastewater for evaluation of chemical risks for water reuse</p> <p>Macao (2011) Feasibility study for development of water reuse in a new urban settlement for toilet flushing and gardening</p> <p>France (2011) Technical audit and optimisation of UV disinfection facility</p> <p>French Polynesia (2010) Technical audit for optimisation of tertiary ultrafiltration for urban water reuse, specifications and design of plant extension</p> <p>Algeria (2010) Feasibility study of aquifer recharge and technical assistance for development of Wastewater Treatment and Reclamation Master Plan</p> <p>Saudi Arabia (2010) Feasibility study on water reuse in Jeddah: Assistance to NWC and JCBU</p> <p>Singapore (2010) Technical and energy audit of Ulu Pandan wastewater treatment and reclamation plant</p> <p>Macao (2010) Training course for Macao Government on water reuse: trends of development, major challenges and benefits</p> <p>Macao (2010) Training seminar for operators and managers on design and operation of water reuse facilities, dual distribution systems and risk management</p> <p>France (2009) Feasibility study of the industrial reuse of MBR effluents in Paris region</p> <p>France (2009) Review of the project design and water quality management for water reuse for snow making in French Alps</p> <p>Macao (2009) Feasibility study for water reuse for toilet flushing, landscape irrigation and other urban uses</p> <p>Algeria (2009) Project advisor for the design and implementation of a demonstration study on water reuse using 5 different tertiary treatment trains for various reuse applications</p>

Martinique Caribbean's (2009) Technical assistance and design of water reuse facility for subsurface irrigation of banana and sugar can

Croatia (2008) Training seminar on water reuse and best practices for irrigation with recycled water for the European Irrigation Association in Zagreb

France (2008) Review of design and operational policy of MBR facility for the upgrading of a 400,000 p.e. municipal wastewater treatment plant, odor control strategy, feasibility of water reuse for landscape irrigation and other urban uses

China (2008) Technical audit of natural treatment for water reuse designed by US consultants (13 mgd), assessment of health and environmental risks and impacts, feasibility study of irrigation with recycled water and industrial uses (process, cooling and boiler water)

France (2008) Technical advisor of R&D pilote plant project with selection of the best membrane pre-treatment before reverse osmosis for industrial water reuse (France, Spain, China)

France/Spain (2007/08) Survey of operation, failure modes, energy consumption and performance of MBR facilities and membrane tertiary treatment units in France, Spain and Polynesia

France (2008) Technical audit on oxygen transfer, membrane fouling and optimisation of energy consumption and operation of a full scale MBR municipal wastewater treatment plant in France (design capacity 2 mgd)

Australia (2007) Technical adviser within a large project for indirect potable reuse "Water Purification Alliance" (capacity 50 mgd)

Polynesia (2007) Development and design of Master Plan of integrated water management with water reuse in Bora Bora (urban uses, irrigation, aquifer recharge)

France (2007) Project design for golf course irrigation after wastewater treatment using MBR technology: water quality monitoring, emerging pollutants, risk assessment

France (2007) Design, equipment selection and cost evaluation of a MBR system for treatment and reuse of industrial wastewater

France (2007) Training seminar on water reuse and best practices for golf irrigation with recycled water for the French golf professionals (French Golf Association)

Algeria (2007) Review of a Master plan for water reuse and design of demonstration facility with advanced tertiary treatment

France (2006) Refurbishment of aeration system and operation policy of an industrial MBR reactor for water reuse

UK (2006) Development of operational policy for enhanced N and P removal for recreational water reuse

UK (2006) Training course (managers & operators) for estimation of operating costs of sewage treatment works (Northumbrian Water)

France (2006) Refurbishment of aeration system and operation policy of a 70,000 p.e. municipal wastewater treatment plant

France (2006) Review of design of Membrane Bioreactor technology for the upgrading of a 400,000 p.e. municipal wastewater treatment plant

UK (2005) Process evaluation and guidance for the choice of best option of tertiary treatment

UK (2005) Review of design, operation, capital and operation costs of aeration of all coastal wastewater treatment plants

France (2005) Design, cost estimation, evaluation of health and environment impacts of water recycling for artificial snow making in the French Alps

Australia (2004) Feasibility study for indirect potable reuse of 140,000 m³/d (design, cost estimation and health & environmental impacts)

UK (2004) Training course on design, operation and troubleshooting of UV disinfection facilities (Northumbrian Water)

UK (2004) Training course on risk assessment and review of operation of indirect potable reuse in Langford facility (Essex & Suffolk Water)

France (2004) Refurbishment of the Sahurs WWTP with a new floating bed process for denitrification (Turbo DN): design consideration, following of the start-up

Marocco (2004) Design of alternatives technologies for wastewater treatment and reuse in the suburbs of Casablanca

Bolivia (2003) Design of low cost decentralised system for wastewater treatment and reuse for poor population using an innovative financial mechanism

UK (2003) Review of operation&design for upgrading of 80 small-scale (<10,000 p.e.) WWTP in the UK to meet new EPA requirements for C, N and P removal

UK (2003) Review of the design, investment, O&M and life costs of several innovative options for wastewater treatment and reuse within a prospect of plant upgrading in 5-10 years

UK (2003) Critical analysis of performances and O&M costs of various aeration systems and proposal of innovative solutions

French Polynesia, Bora Bora (2003) Design, risk assessment and cost estimation of tertiary membrane ultrafiltration of secondary effluent for unrestricted urban reuse

French Polynesia, Moorea (2003) Design, water quality assessment and cost estimation of ultrafiltration for water supply (2400 m³/d)

France (2002) Start of the art review, analysis of the existing experience and preliminary project design for combined grey and rain water recycling in the frame of the sustainable development of the urban community of Bordeaux

France (2002) Directed state of the art studies on water reuse in France, Spain, Italy, United

Kingdom and Israel with emphasis on market prospects, basic economic indicators, regulations, existing infrastructure and administrative organization

USA (2001) West Coast Basin aquifer recharge tracer study: Directed a study in California on aquifer recharge and improvement of the management of the barrier against salt water intrusion, evaluation of the relevance of boron as a natural tracer, development of a new 3D GIS aquifer

USA (2000) Demonstration study on UV disinfection in West Basin: Directed a full-scale study on UV disinfection, including the comparison of 2 UV systems for the treatment of two effluents: Title 22 and MF/RO; health aspects, hydraulics and process design; collaboration with Degremont

European Commission (2000) Evaluation of 11 full-scale studies to identify the most appropriate treatment schemes for various reuse applications: irrigation, aquifer recharge, greywater recycling, and drinking water augmentation

South Africa (1999) Evaluation of the feasibility and viability of wastewater recycling for potable and industrial water augmentation in the Durban Metro area, identification of treatment options