

Present	Positions	Chief Executive Officer , KWR Water Research Institute, Nieuwegein, the Netherlands (2018 – present)
		Professor of Hydroinformatics , College of Engineering, Mathematics and Physical Sciences (CEMPS), University of Exeter (2001 - present)
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Date of birth		22 April 1960
Nationality		Dual Serbian and British

ACADEMIC QUALIFICATIONS

Dipl. Ing (MEng equivalent, Civil Engineering) University of Belgrade, Yugoslavia	(1978-1983)
Master of Science (Civil Engineering) University of Belgrade, Yugoslavia	(1984-1987)
Ph.D. (Civil Engineering) University of Manitoba, Canada	(1987-1990)

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APPOINTMENTS (PROFESSIONAL)

Chief Executive Officer	KWR Water Research Institute, the Netherlands	(2018-present)
Strategic Advisory Board Member	Research Hub 'Sustainable Cities' Utrecht University	(2020-present)
Board Member	Wateropleidingen (Water Training Organisation), the Netherlands	(2018-2021)
Partner	Exeter Advanced Analytics LLP, UK	(2011-2015)
Non-Executive Director	Ewan Optimal Solutions Ltd, UK	(2001-2003)
Project Manager	Energoprojekt Hidroinzenjering, Plc, Belgrade, Yugoslavia	(1991-1993)
Hydrologic/Hydraulic Engineer	KGS Group Inc., Winnipeg, Manitoba, Canada.	(1990-1991)
Design Engineer	Energoprojekt Hidroinzenjering, Plc, Belgrade, Yugoslavia	(1983-1987)

APPOINTMENTS (ACADEMIC)

Professor	College of Engineering, Mathematics and Physical Sciences (CEMPS), University of Exeter	(2001-present)
Head of Engineering	CEMPS, Department of Engineering, University of Exeter	(2010-2014)
Senior Lecturer/ Lecturer/ Research Fellow	CEMPS, Department of Engineering, University of Exeter	(1994-2000)
Assistant Professor	Faculty of Technical Sciences, Industrial Building Department, University of Novi Sad, Serbia	(1992-1993)
Teaching/ Research Associate	Department of Civil Engineering, University of Manitoba, Winnipeg, Canada	(1987-1990)

Prof. Savić is the Director/Chief Executive Officer of the KWR Water Research Institute in the Netherlands and the Professor of Hydroinformatics in the College of Engineering, Mathematics and Physical Sciences at the University of Exeter in the UK.

After successfully establishing and leading the Centre for Water Systems at Exeter for 25 years, during which the team has grown to about 80 researchers, in July of 2018 Prof. Savić was appointed the CEO of KWR Water Research Institute, an independent research organisation employing about 200 scientists. The Institute is a publicly owned, not-for-profit company (B.V.) involved in a water-wise world research programme, with a circular economy as a key driver and the UN's Sustainable Development Goals in mind. Research at KWR is guided by its scientific vision, which is embodied in five research programmes (<https://www.kwrwater.nl/en/about-kwr/>).

Prof. Savić has been honoured both nationally and internationally for his outstanding research contributions and leadership in water science and engineering. He is elected Fellow of the Royal Academy of Engineering (FREng) and a member of the European Academy of Sciences (EUR-ASC). He is also a Fellow of the Institution of Civil Engineers (UK), Fellow of the Chartered Institution of Water and Environmental Management (UK), and Fellow of the International Water Association (IWA).

Prof. Savić holds a part-time Chair at Exeter where recent work has concentrated on the theoretical development and application of Artificial Intelligence methods in many fields of water and environmental science. He has published over 400 research/professional papers and reports, co-authored 24 books and book chapters and holds 2 patents. His papers have been published in the Journal of Hydrology, Science of the Total Environment, Water Resources Research, the Journal of Water Resources Planning and Management, the Journal of Hydroinformatics, the Journal of Hydraulic Research, Hydrological Sciences Journal, Urban Water and others. With over 24,000 citations to his name (source: Google Scholar) and h-index of 78, Prof. Savić is among the top 10 most cited scholars in the world in the areas of: 'hydroinformatics', 'water resources systems', 'water engineering' and 'floods': <http://tinyurl.com/dragan-scholar>

As an educator, mentor, author and speaker, Professor Savić has directly or indirectly influenced and inspired many of the scientists, water engineers and policymakers responsible for water management in all parts of the world. With such broad expertise, experience and reputation, Prof. Savić is a sought after expert, popular coach, teacher and public speaker who advocates placing water in the wider context of governance, policy, leadership and social resilience - challenges that cannot be addressed by science and technology alone. He has lectured extensively abroad and given research presentations at institutions on all continents. He has held Visiting Professor appointments at the Universities of Bari (Italy), Novi Sad (Serbia), King Abdulaziz University (Jeddah, Saudi Arabia) and Harbin Institute of Technology (Harbin, China). He is currently a Visiting Professor at the University of Belgrade (Serbia), UNESCO-IHE (Delft, The Netherlands) and a Distinguished International Professor at the National University of Malaysia.

ADMINISTRATION ROLES

October 1995-2000	Director of Building, School of Engineering, University of Exeter
August 1998-present	Founder and Director of the Centre for Water Systems, University of Exeter
November 1999-2005	Head of the Computational Engineering Research Group, School of Engineering, Computer Science and Mathematics.
June 2004-2005	Deputy Head of Research, Department of Engineering, School of Engineering, Computer Science and Mathematics
August 2005-2011	Head of the Informatics Research Institute, College of Engineering, Mathematics and Physical Sciences
August 2010-2013	Academic Lead (Water and Environmental Engineering), College of Engineering, Mathematics and Physical Sciences
August 2010-2014	Head of Engineering Department, College of Engineering, Mathematics and Physical Sciences
2016-2018	Member of the Senate, University of Exeter

EXTERNAL RECOGNITION - Awards

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- Energoprojekt PhD Postgraduate Studentship (1987-1990)
 - IWEX Highly Commended Award for water distribution model calibration software developed during an industry based project (1999)
 - Highly Commended Award for the paper "Hydroinformatics, data mining and the maintenance of UK water networks", MCB University Press (2000)
 - EPSRC Advanced Research Fellowship (2001-2005)
 - Royal Society Industry Fellowship (2001-2002, but could not hold concurrently with the EPSRC ARF)
 - CIWEM Ken Roberts Award – Ewan Associates Ltd. received the award for innovation in the water industry based on the work done by PhD student James Fullerton (2006)
 - The top prize in the business intelligence category of the Information Management Awards in 2006 (for the work on Fastnett done by PhD student James Fullerton)
 - Patent (WO/2010/131001) Real-time anomaly detection in water distribution systems (international filing date 19.5.2009).
 - Patent (WO/2010/061157) Real-time fault management in water distribution systems (international filing date 12.5.2010).
 - 'People Initiative of the Year' for 2011 as part of the team responsible for the STREAM Industrial Doctorate Centre, the annual UK Water Industry Achievement Awards 29 March 2012.
 - The best paper award at the Water Distribution Systems Analysis conference, Adelaide, Australia, 24-27 Sept 2012.
 - The winner of the "Battle of the Water Networks" competition at the Water Distribution Systems Analysis conference, Adelaide, Australia, 24-27 Sept 2012.
 - The IWA Publishing Prize for 2014, International Water Association, IWA Congress, Lisbon, Portugal.
 - Named in top 25 leaders in worldwide water industry 2016, by Water and Wastewater International Magazine (WWi), a PennWell International title.
 - The finalist of the Water Industry Achievement Awards 2017, with ICS Consulting Ltd. for the 2D flood simulation software.
 - The winner of the US Environmental and Water Resources Institute 2017 Best Policy-Oriented Paper Award for the paper "Effectiveness of Smart Meter-Based Consumption

EXTERNAL RECOGNITION - Awards

- Feedback in Curbing Household Water Use: Knowns and Unknowns” by A.L. Sønderslund, J.R. Smith, C.J. Hutton, Z. Kapelan and D. Savic.
- Best Seminal Paper Award, American Society of Civil Engineers, World Environmental Resources Congress, 2018 for the paper “Genetic Algorithms for Least-Cost Design of Water Distribution Networks”, by Savic and Walters.
- Winner of the EUvsVirus Hackaton, April 2020.
- Winner of the Royal Academy of Engineering President’s Award for “Pandemic Services”, August 2020.

EXTERNAL RECOGNITION - Memberships

- Elected Fellow of the Royal Academy of Engineering (UK), 2013
- Elected Member of the European Academy of Sciences, 2014
- Chartered Engineer CEng (UK), since 1999
- Fellow of the Institution of Civil Engineers (UK), since 2005
- Fellow of the Chartered Institution of Water and Environmental Managers (UK), since 2009
- Elected Fellow of the International Water Association, IWA (since 2010)
- Elected Chair of the Joint Committee on Hydroinformatics (IWA/IAHR), 2013-2015
- Member of the ASCE Engineering Modeling Applications Committee Calibration Subcommittee (2014-present)
- Member of the ASCE/EWRI Water Distribution Systems Analysis History Committee (2015-present)
- Member of the Incident Management and Modelling (IMM) R&D Technical Advisory Group, The UK Environment Agency (2014-present)
- Member of the KWR Peer Review Committee, Utrecht, The Netherlands (2014)
- Elected Member of the IWA Strategic Council (2011-2014)
- Member of the Joint Board of Moderators for the Institution of Civil Engineers, the Institution of Structural Engineers, the Institution of Highways and Transportation, and the Institute of Highway Incorporated Engineers (2010-present).
- Member of the British Hydrological Society (1994-present) and former member of the BHS South Western Section Committee
- Member of the International Association of Hydrological Sciences (IAHS), 1995-present
- Member of the International Association of Hydro-Environment Engineering and Research, 1999-present
- Member of the British Section Committee member (IAHR), 2008-2012.
- Member of the Engineering and Physical Sciences Research Council (EPSRC) Peer Review College (1995-present)
- Member of the Peer Review College - The Danish Council for Strategic Research
- Member of the Task Committee on Evolutionary Computation, American Society of Civil Engineers (ASCE)
- Member of the American Geophysical Union (AGU)
- Member of American Society of Civil Engineers (ASCE), since 1988
- Member of the of the International Advisory Board of “Laboratorio a Rete regionale per le Acque” (LARA) - the virtual network for water resources, the Emilia-Romagna Region, Italy (2005-2008)
- Elected Vice-Chair of the IWA/IAHR/IAHR Joint Committee on Hydroinformatics (2009-2013)

EXTERNAL RECOGNITION – Appointments / Invited Lecture / Courses

- Appointed Visiting Professor (2003-2006), Technical University of Bari, Italy.
- Appointed Visiting Professor (2003-present), Faculty of Civil Engineering, University of Belgrade, Serbia.
- Appointed Visiting Professor (2007-2009), Harbin Institute of Technology, Harbin, China.
- Appointed Visiting Professor King Abdulaziz University, Jeddah, Saudi Arabia (2010).
- Appointed Visiting Professor (2013-2015), University of Novi Sad, Subotica, Serbia.

EXTERNAL RECOGNITION – Appointments / Invited Lecture / Courses

- Appointed Distinguished International Professor (2020-present), National University of Malaysia.
- Appointed Non-executive Director of Ewan Optimal Solutions Ltd. (2001-2003).
- Partner, Exeter Advanced Analytics LLP (2011-2015), Exeter, UK.
- Invited lecturer, Genetic Algorithms and their Applications to the Water Industry Problems, Faculty of Civil Engineering, Slovenia, Ljubljana, 16-17 May 2000.
- Invited lecturer, Optimised Model Calibration and Pipe Sizing, Haestad Methods, Inc., Waterbury, USA, 28-29 July 2000.
- Co-authored an invited chapter on “Urban water as a part of integrated catchment management”, for the International Hydrologic Programme, 2001 International Symposium on “Frontiers in Water Management in Urban Environment: Deadlock or Hope?” Marseilles, France 18-20 June 2001.
- Invited lecturer, “Genetic Algorithms as an Optimization Technique for Water Supply Systems, Pretoria, South Africa, 22-23 November 2001.
- Invited lecturer, Optimization applications, Indian Institute of Management, Calcutta, India (February 2001).
- Invited lecturer, Water distribution systems, WARREDOC (Water Resources Research and Documentation Centre), Perugia, Italy (18-20 November 2002)
- Invited speaker, “Environmental Informatics” at HELECO '03, The 4th International Exhibition and Conference on Environmental Technology, Athens, Greece, 30 Jan- 2 Feb 2003.
- Keynote speaker, “Urban Water System Management: Hydroinformatic/ Emergent Technologies”, at the Computing and Control for the Water Industry Conference: Advances in Water Supply Management, London, 15-17 Sept 2003.
- Invited lecturer, Urban Water Systems Management, Technical University of Bari, Taranto, Italy, 1-5 Sept, 2003.
- Invited speaker, “Scenarios for urban water management in Europe and developing countries” the international workshop on “European Water Scenarios: from the Mediterranean Sea to Central Asia - State of the art and perspectives”, Brussels, 30 June – 1 July 2003.
- UK representative to the Management Committee of COST Action C19 (“Risk and Crisis management of urban infrastructures”), 2004-present.
- Invited lecturer, “Optimal Urban Water Management” at the University of Sao Paulo, at Sao Carlos, 29 March 2005.
- Key note speaker at the 1st Italian Conference on Urban Hydraulics: “Water and Cities” (Acqua e Città - I Convegno Nazionale di Idraulica Urbana), Sorrento, Italy, 28-30 September (2005).
- Keynote speaker, the 1st Italian Urban Hydraulics Conference “Acqua e Città - I Convegno Nazionale di Idraulica Urbana – Sorrento, Italy, 28-30 September 2005.
- Invited speaker, “Leakage 2006”, the Water Loss Management Strategies Conference supported by the IWA “Water Loss Task Force”: Water Loss Management: Network Modelling for Rehabilitation, Ferrara, Italy, 17-19 May, 2006.
- Member of the European Science Foundation Pool of Referees, 2006-present.
- Invited speaker, the NATO Advanced Research Workshop “Dangerous Pollutants (Xenobiotics) in Urban Water Cycle”, Lednice, Czech Republic, 2-6 May 2007.
- Invited speaker, the Italian Water Supply and Distribution Conference: Experience, Research and Innovation, Ferrara, 28-29 Jun 2007.
- Keynote speaker, Water Distribution Symposium WDSA2008 (17-20 August 2008) Kruger National Park, South Africa.
- Appointed Visiting Professor (2008-present), UNESCO-IHE, Delft, The Netherlands.
- Invited speaker, Sensors for Water Interest Group (SWIG) meeting on Sensor Networks and Grid Computing, 10 Mar 2009, Lancaster.
- Member of IntelliCIS COST action and Working Group Chair for “Health monitoring and control of water systems” (2009-present).
- Invited speaker, the Joint BHS-CIWEM meeting “Research for Water Resources Planning – current issues, future needs”. The talk is titled “Water resources systems modelling beyond simple simulation and cost optimisation – the need”, 8th June 2009, ICE, London.

EXTERNAL RECOGNITION – Appointments / Invited Lecture / Courses

- Invited keynote speaker, the World City Water Forum, Incheon, Korea, 18-21 August (2009).
- Invited keynote speaker, the 9th International Conference on Hydroinformatics 2010 in Tianjin, China, 7-11 September 2010.
- Invited speaker, the Workshop on industrial research related to Water services technological area carried out by Iren Group, Genova, Italy, 29 Oct 2010.
Invited presenter, the New Scientist webinar on Water and Energy Supergrids, 23 Nov 2010.
- Invited speaker, the Business Leaders Forum (5 April 2011), Exeter.
- Invited speaker, UKTI/British Water & Indian Water Industry Roundtable (4 March 2011), London.
- Invited speaker, the 5th EWRA/ASCE International Perspective on Water Resources & the Environment Conference (IPWE 2012), Marrakech, Morocco, 5-7 Jan.
- Invited speaker and chair of the Water Loss UK (2012) workshop on “Using Smart systems to better understand water loss”, Birmingham, UK, 27 March.
- Invited speaker, World Water Day, University of Belgrade, 22 March 2012.
- Invited Chair, the workshop on “Using Smart Systems to Better Understand Water Loss”, Water Loss UK, Birmingham, 26 March 2012.
- Invited keynote speaker, the 10th International Conference on Hydroinformatics 2012 in Hamburg, Germany, 14-18 July 2012.
- Invited guest speaker, CIWEM SW Branch, Annual Dinner, Taunton, UK, 12 October 2012.
- Invited presenter, Water Showcase, London, UK, 27 March 2013.
- Invited speaker, the Smart Water Systems conference, London, UK, 28-29 April 2014.
- Invited keynote speaker, the Water Distribution Systems Analysis Conference, Bari, Italy, 14-17 July 2014.
- Invited keynote speaker, the IWA WaterIDEAS Conference, Bologna, Italy, 22-24 October 2014.
- Invited keynote speaker, 2014 International Workshop on Typhoon and Flood (IWTF), Taipei, Taiwan, 4-5 November, 2014.
- Invited seminar speaker at the Hong Kong University of Science at Technology, Hong Kong, 6 November 2014.
- Invited speaker, the Industry workshop celebrating 20th Anniversary of the PAVCO Chair sponsorship at the Universidad de los Andes, Bogota, Colombia, 27 November, 2014.
- Invited lead contributor to the IWA White Paper on “Water and Natural Disasters” for the 7th World Water Forum, Daegu and Gyeongju, South Korea, 12-17 April 2015.
- Invited keynote speaker, Smart Water Networks (SWAN) Conference, London, UK, 29-30 April 2015.
- Invited talk - the launch of Leverhulme Trust Doctoral Scholarships programme on Mathematics for A Sustainable Society, University of Nottingham, 4 November 2015.
- Invited keynote speaker at the Life project SWSS - Smart Water Supply System, Lisbon, Portugal, 30 June 2016.
- Invited speaker at Flood Expo 2016, 12-13 October, at ExCeL, London.
- Invited keynote speaker, Hydroinformatics Conference (HIC2016), Incheon, South Korea, 21-26 August 2016.
- Invited speaker at the RGS-IBG Annual International Conference 2016, a session “Water Energy and Food Nexus: Dealing with a wicked problem?”, London, 30 August 2016.
- Invited keynote speaker at the 15th Iran Hydraulic Conference, 15-16 December, 2016, Qazvin, Iran.
- Invited speaker/expert at the US-China water management comparison workshop, 4-6 January, 2017 Wuhan, China.
- Reviewer of research proposals for the National Research Foundation (NRF), South Africa, 2012.
- Reviewer of research proposals for the National Science Foundation (NSF), USA, 2014.
- Reviewer of research proposals for the Dutch Technology Foundation STW, 2013-present.
- Reviewer of research proposals for the Research Grants Council (RGC) of Hong Kong, 2016.

EXTERNAL RECOGNITION – Appointments / Invited Lecture / Courses

- Reviewer of research proposals for the Department of Natural Science and Sustainable Development, Ministry of Science and Technology, Taiwan R.O.C., 2016.
- Reviewer of research proposals for the Austrian Science Fund (FWF), 2015.
- Reviewer of research proposals for the Natural Sciences and Engineering Research Council of Canada (NSERC), 2012-present.
- Reviewer of research proposals for the Australian Research Council, 2010-present.
- Reviewer of the Kuwait Foundation for the Advancement of Sciences (KFAS), 2016-present.
- Invited keynote speaker at the 37th IAHR World Congress, 13-18 August, 2017, Kuala Lumpur, Malaysia.
- Invited keynote speaker at the Hydroinformatics conference HIC2018, 1-6 July, 2018, Palermo, Italy.
- Invited keynote speaker at the IWA China Water Loss Conference, 8 November, 2018, Shenzhen, China.
- Invited keynote speaker at the 10th International Perspectives on Water Resources and the Environment (IPWE) congress, 5 December 2018, Cartagena, Colombia.
- Invited keynote speaker at the Dutch Water Industry Annual Conference, 11 January 2019, Delft, the Netherlands.
- Invited speaker at the European Geophysical Union, General Assembly, 11 April 2019, Vienna, Austria.
- Invited keynote speaker at the Water Supply and Sanitation Technology Platform Annual Conference - Water Innovation Europe, 13 June 2019, Brussels, Belgium.
- Invited keynote speaker at the Computing and Control in the Water Industry (CCWI2019) Conference, 3 September 2019, Exeter, UK
- Invited to deliver a Distinguished Lecture at the KIOS Research and Innovation Centre of Excellence (KIOS CoE), 11 September 2019, Nicosia, Cyprus.
- Invited keynote speaker at the IWA Leading Edge Strategic Asset Management and Performance Indicators Conference, LESAM/PI, 23-27 Sep 2019, Vancouver, Canada.
- Invited speaker at the New Civil Engineer Future of Water Conference, 17 September 2019, London, UK.
- Invited keynote speaker at the Nanjing Singapore-Chinese Water Summit, 16 October 2019, Nanjing, China.
- Invited keynote speaker at the Spanish National Water Engineering Conference, 23 October 2019, Toledo, Spain.
- Invited talk at the Danish Technical University High Tech Summit, 31 October 2019, Copenhagen, Denmark.
- Invited keynote speaker at the Serbian Water Fair and Exhibition, 20 November 2019, Belgrade, Serbia.
- Invited as an opinion leader to the Novo Nordisk Fonden Water Summit, 15-16 January 2020, Hillerød, Denmark.
- Invited to deliver a plenary talk at the Water Security Symposium "70 years of water and environmental research and teaching at Newcastle University", 23-24 January 2020, Newcastle, UK.
- Invited panel member and speaker at the WEX Global conference, 2-4 March 2020, Valencia, Spain.
- Invited keynote speaker at the WWT Smart Water 2020 Conference, 11 March 2020, Birmingham, UK.
- Invited keynote speaker at the Arsenic AS2021 Conference, 6 June 2021, Wageningen, the Netherlands.
- Invited speaker at the Malaysia International Water Convention 2021 (virtual) 20-24 September 2021.
- Invited keynote speaker at the European Wastewater Management Conference 28-29 September 2021, Birmingham, UK.

EXTERNAL RECOGNITION – Media Invitations

- Contributed to an article in the Engineer: "Neptune project could help water firms spot leaks", 25 July 2010 (<https://www.theengineer.co.uk/issues/26-july-2010/neptune-project-could-help-water-firms-spot-leaks/>).

EXTERNAL RECOGNITION – Media Invitations

- Invited panellist - interview and discussion on “Supergrids - moving electricity and water over large distances”, live streaming video, New Scientist Magazine, 23 November 2010.
- Invited panellist on the Forum programme (radio) – Grandiose plans to reroute rivers, BBC World Service, 22 January 2011 (<http://www.bbc.co.uk/programmes/p00d279t>).
- Contributed to an article in the Western Morning News: “Pipe pioneers' new weapon to tackle leakages”, 6 September 2011.
(<http://www.bbc.co.uk/programmes/p00d279t>).
- Contributed to an article in The Engineer: “Computer game technology helps to spot leaking pipes”, 6 September 2011
(<http://www.theengineer.co.uk/civil-and-structural/news/computer-game-technology-helps-to-spot-leaking-pipes/1009906.article#ixzz38nsVwLhx>).
- Contributed to an article in the Daily Mail: “Computer game AI technology finds a new use - fixing leaky pipes”, 9 September 2011
(<http://www.dailymail.co.uk/sciencetech/article-2034287/Computer-game-AI-technology-finds-new-use--fixing-leaky-pipes.html>).
- An invited article published in Western Morning News on “Artificial intelligence will predict flood sites”, 27 March 2013 (<http://www.westernmorningnews.co.uk/Artificial-intelligence-predict-flood-sites/story-18532568-detail/story.html>).
- Interview for the German broadcaster ARD TV on flooding in the UK, 10 February 2014.
- Interview for the BBC television, Spotlight, on flooding in the South West UK, 12 February (broadcasted on the 13th) 2014.
- Interview for the BBC Radio Cornwall on flooding in the South West UK, 12 February 2014.
- Interview for Sky News on flooding and flood management in the UK, 16 February 2014.
- An invited article published in Western Morning News on “Living with floods”, 24 February 2014.
- An invited article in Western Daily Press “United response to flood defence”, 24 February 2014
(<http://www.westerndailynews.co.uk/United-response-flood-defence/story-20688481-detail/story.html>).
- Invited contributor to “The water-energy-food nexus: where are we now?” live chat, Guardian Sustainable Business, Guardian Newspaper, 13 March 2014
(<http://www.theguardian.com/sustainable-business/water-energy-food-nexus-live-chat>).
- Contributed to an article in The Independent: “UK weather: Britain must be prepared for 'worst droughts in modern times'”, 20 September 2014
(<http://www.independent.co.uk/news/uk/home-news/uk-weather-britain-must-be-ready-for-worst-droughts-in-modern-times-9746455.html>).
- Contributed to an article in The Independent: “Water firms to pipe biomethane gas generated at sewage-treatment works into Britain's homes”, 27 September 2014
(<http://www.independent.co.uk/environment/green-living/water-firms-to-pipe-biomethane-gas-generated-at-sewage-treatment-works-into-britains-homes-9760084.html>).
- Contributed to an article that appeared on OilPrice.com: “‘Poo Power:’ Gas From Human Waste Will Heat British Homes”, 2 October 2014 (<http://oilprice.com/Latest-Energy-News/World-News/Poo-Power-Gas-From-Human-Waste-Will-Heat-British-Homes.html>).
- Contributed to an article in the Western Morning News: “Virtual world simulation game could help to avoid flooding”, 11 October 2014
(<http://www.westernmorningnews.co.uk/Virtual-world-simulation-game-help-avoid-flooding/story-23099690-detail/story.html>).
- Authored an article in the Water and Sewerage Journal: “Smart water metering: more than a widget”, 20 October 2015 (<http://www.eaem.co.uk/news/smart-water-metering-more-widget>).
- Authored an article in The Conversation: “How to save underground railways from climate change flooding”, 11 May 2016 (<https://theconversation.com/how-to-save->

EXTERNAL RECOGNITION – Media Invitations

- [underground-railways-from-climate-change-flooding-58907](#)).
- Authored an article in The Conversation: “Why the world needs to get smarter about water consumption”, 20 June 2017 (<https://theconversation.com/why-the-world-needs-to-get-smarter-about-water-consumption-74129>).
- Authored an article in the Source magazine: “A smart approach to urban wastewater”, 3 October 2017 (<https://www.thesourcemagazine.org/smart-approach-urban-wastewater>).
- Authored an article in the Independent: “Taps need technology too”, 21 June 2017 <http://www.independent.co.uk/environment/why-the-world-needs-to-get-smarter-about-water-consumption-a7800861.html>
- Authored an article in the Revolve Magazine: “Water challenges for the 21st century”, 5 January 2021, <https://revolve.media/water-challenges-for-the-21st-century/>
- Contributed to the article “How to Build a Water-Smart City”, Bloomberg, 02 August 2021, <https://www.bloomberg.com/news/features/2021-08-02/how-to-build-a-water-smart-city>; <https://www.elfinanciero.com.mx/tech/2021/08/05/queremos-ciudades-inteligentes-aprendamos-a-usar-el-agua-mas-de-una-vez/>; <https://valor.globo.com/mundo/noticia/2021/08/03/cidades-inteligentes-precisam-reciclar-agua-dizem-especialistas.ghtml>;
- Authored an article in the Revolve Magazine: “Safeguarding water’s digital transformation”, 10 May 2021, <https://revolve.media/safeguarding-waters-digital-transformation>
- Contributed to an article in WIRED on “The race to save the Underground from flooding” 02 August 2021, <https://www.wired.co.uk/article/london-underground-flooding>
- Contributed to an article about flood risk in London, Daily Express, 5 October 2021, <https://www.express.co.uk/news/science/1501044/sadiq-khan-map-london-underground-stations-high-risk-flooding-climate-change>

EXTERNAL RECOGNITION – Editorial Board Membership

- Editor-in-Chief, *Journal of Hydroinformatics*, International Water Association – IWA, (2009-2015).
- Associate Editor, *Journal of Water Resources Planning and Management*, American Society of Civil Engineering (ASCE), 2000-2008.
- Associate Editor, *Journal of Hydroinformatics*, International Association for Hydraulic Research – IAHR, and International Water Association – IWA, 2007-2009.
- Editor, *Hydrology and Earth System Sciences*, European Geosciences Union, 2005-2007.
- *Water Engineering Journal*, Part of the Proceedings of the Institution of Civil Engineers, published in association with IAHR, 2001-2005.
- *Acta Hydrotechnica*, 2001-2005.
- *Water International*, International Water Resources Association, 1999-2003.
- Associate Guest Editor for a special issue of the *Urban Water Journal* (2:2): “Water Distribution Modelling and Optimisation”, 2000.
- Associate Guest Editor for a special issue of the *Civil Engineering and Environmental Systems Journal*, 2006.

EXTERNAL RECOGNITION – Consultative work

Recognition of the expertise in civil engineering systems and optimisation resulted in a close working relationship with industry. Clients include British (South West Water Plc., United Utilities Plc., Yorkshire Water Plc., Mouchel, RPS Water, Halcrow, SEAMS Ltd.) and overseas companies (IDModeling, USA; Consumers Utilities, Canada; Roy F. Weston, Inc, USA). Recent projects include:

- Temperature sensing for sewer infiltration assessment; client: Thames Water, 2106-19.
- Predicting the confidence in support costs; DSL (Defence, Support & Logistics), Arke Ltd., 2015.
- Lower Thames Control Diagram optimization; client: Oxford Scientific and Thames Water, 2015-2016.

EXTERNAL RECOGNITION – Consultative work

- Reservoir Operation Study, Monte Grande Multi-Purpose Dam Project; client: Water Resources Associates and the Instituto Nacional de Recursos Hidráulicos, Santo Domingo, Dominican Republic, 2014.
- Local Flood Risk Research Framework; client: CH2MHill and Environment Agency, 2014.
- Risk Study of the Elan Valley Aqueduct; Severn Trent Water and IC Consultants Ltd, 2013.
- Sedaru (online water distribution system portal) project development; client: IDModeling (USA), 2013.
- Lower Thames Control Diagram optimization; client: Thames Water, 2013.
- Pump scheduling optimisation; client: Water Supply Department, Government of Hong Kong, 2010/12.
- Real-time Machine Learning Approach to Near-term Assessment of Risk Flooding in Urban Areas; client: HR Wallingford and UKWIR, 2011/12.
- Inverness-Nairn Water Resource Zone optimisation; client: Scottish Water and Water Resources Associates, 2012.
- Sustainability Optimisation for Water Resource Planning; client: Arup, 2012.
- Water supply reservoir operation planning – control curve optimisation (Phase 2); clients: Oxford Scientific Software and United Utilities (UK), 2012.
- Whole system optimisation for the North Eryri-Ynys Môn water resource zone; client: Dŵr Cymru Welsh Water and Atkins, 2011.
- Marine mammal habitat modelling in the Gulf of Mexico; client: RPS Water (UK), 2010.
- Expert services for future flood management; client: Living with Environmental Change (LWEC), 2010.
- Reservoir control curve optimisation; clients Oxford Scientific Software and the Environment Agency South West, 2010.
- Water supply reservoir operation planning – control curve optimisation; clients: Oxford Scientific Software and Scottish Water (UK), 2009.
- Clean and wastewater pipe deterioration modelling for establishing a ‘risk to service’, to support business planning processes at Anglian Water (UK), 2008.
- Water mains burst model development to predict the likelihood of pipes failing; clients: Mouchel and South West Water (UK), 2008.
- Water distribution modelling: calibration review; client: Malcolm Pirnie, Inc (USA), 2008.
- Modelling factors affecting natural rate of rise (NRR) in leakage: clients: RPS and UKWIR (UK), 2008.
- Water supply reservoir operation planning – control curve optimisation (Phase 1); clients: Oxford Scientific Software and United Utilities (UK), 2008.
- Sewer blockage model for developing frequency-of-failure models for the gravity sewer asset group; clients: Wessex Water and Mouchel Parkman (UK), 2007.
- Development of a process and methodology to model the deterioration of sewer performance to be used in the business planning process to determine appropriate future investment strategies and for sewer operational management; clients: Ewan Group and UKWIR (UK), 2006.

EXTERNAL RECOGNITION – Scientific Committees

- Scientific Committee member, *Hydroinformatics* conference, Copenhagen, Denmark (1998)
- Committee member, British Hydrological Society, South West Branch, UK (1998-present)
- Co-chair *Computing and Control for the Water Industry* conference, Exeter, UK (1999)
- Technical Committee member, *Computing and Control for the Water Industry* conference, Leicester, UK (2001)
- Technical Committee member, *World Water & Environmental Resource Congress: Water Distribution System Analysis* in Orlando, Florida, USA (2001).
- Scientific Committee member, *Adaptive Computing in Design and Manufacture* – ACDM 2002, April 16th - 18th, Exeter, UK.
- Scientific Committee member, *1st Annual Environmental & Water Resources Sys-*

EXTERNAL RECOGNITION – Scientific Committees

- tems Analysis (EWRSA) Symposium*, In conjunction with *A.S.C.E. Environmental & Water Resources Institute (EWRI) Annual Conference: Water Distribution System Analysis* held in Roanoke, Virginia, USA, 19-22 May (2002)
- Scientific Committee member, *Hydroinformatics* conference, Cardiff, UK, 1 – 5 July (2002)
- Scientific Committee member, *Sewer Operation and Maintenance* conference, Bradford, UK, 26 – 28 November (2002).
- Scientific Committee member, *Adaptive Computing in Design and Manufacture – ACDM 2004*, April 20th – 22nd, Bristol, UK.
- Technical Committee member, *Computing and Control for the Water Industry* conference, London, UK, 15 – 17 September (2003)
- International Advisory Committee member, *Hydroinformatics* conference, Singapore, 21-24 June, (2004)
- Special Session organiser “Evolutionary Computing Methods for Environmental Modelling and Software Development”, The International Environmental Modelling and Software Society Conference: Complexity and Integrated Resources Management, Osnabrück, Germany, 14-17 June (2004)
- Scientific Committee member, Flood Risk Assessment Conference, Bath, UK, 7 – 8 September (2004)
- Programme Committee member, Fourth International Workshop on Environmental Applications of Machine Learning, Bled, Slovenia, 27 – 29 Sept (2004)
- International Program Committee member, Modelling and Control for Participatory Planning and Managing Water Systems, IFAC Workshop, Venice, Italy, 29 Sept – 1 Oct (2004)
- Programme Committee member, Fourth European Conference on Ecological Modelling, Bled, Slovenia, 29 Sept – 1 Oct (2004)
- Scientific Committee member, International Conference on Decision-Making in Urban and Civil Engineering, Porto, Portugal, 28-30 October (2004)
- International Program Committee member, International Symposium on Systems Analysis and Integration Assessment WATERMATEX 2004, IWA, Beijing, China, 3 - 5 November (2004)
- Convener, Symposium S#2: “Sustainable Water Management Solutions for Large Cities” (ICWRS), 7th IAHS Scientific Assembly, Foz do Iguaçu (Brazil), 3-9 April (2005)
- International Expert Committee member, International Conference on “Integrated Concepts in Water Recycling”, 14-17 February, Wollongong, NSW Australia (2005).
- Co-chair *Computing and Control for the Water Industry* conference, CCWI 2005, 5-7 September, Exeter, UK (2005).
- Editorial Committee member, International Conference on *Adaptive Computing in Design and Manufacture – ACDM 2006*, April 25th - 27th, Bristol, UK (2006).
- Invited member of the International Advisory Board of Laboratorio a Rete regionale per le Acque (LARA), “The virtual network for water resources”, the Region of Emilia-Romagna, Italy (2005)
- International Program Committee member, International Conference on Water Distribution Systems Analysis (WDSA-2006), August 27-30, Cincinnati, Ohio, USA (2006).
- Member of the International Programming Committee of Evolutionary Multi-Criterion Optimization 2007 (EMO 2007), March 5-8, 2007 Matsushima, Japan.
- Member of the International Programming Committee of the 7th International IWA Symposium on Systems Analysis and Integrated Assessment in Water Management, WATERMATEX, 7-9 May, Washington, DC (2007).
- Member of the executive committee, 12th International Conference on Urban Drainage, ICUD2008, August, Edinburgh, UK (2008).
- Member of the International Advisory Panel, International Conference on Water Distribution Systems, Kruger National Park, South Africa, August (2008).
- Member of the International Scientific Committee, Water Down Under 2008: the 4th International Conference on Water Resources and Environment Research and the 31st Hydrology and Water Resources Symposium, 15-17 April 2008, Adelaide, Australia.
- Technical Committee member, Computing and Control for the Water Industry con-

EXTERNAL RECOGNITION – Scientific Committees

- ference, Sheffield, UK, 1-3 September (2009).
- Member of International Scientific Advisory Board for the World City Water Forum, Incheon, Korea 18-21 August (2009).
- Member of the Scientific Committee of the 9th International Conference on Hydroinformatics 2010, Tianjin, China, 7-11 September 2010.
- Member of the Scientific Advisory Committee of SIMHYDRO 2010, Hydraulic modelling and uncertainties, Nice, France, 2-4 June (2010).
- Member of the Oversight Committee for the Water Distribution Systems Analysis symposia series, 2009-present.
- IAHR Congress, Brisbane, Australia, 26 Jun – 1 Jul 2011.
- Conference co-chair, Computing and Control for the Water Industry conference, Exeter, UK, 5-7 September (2011).
- Member of the Scientific Committee for the VI EWRA International Symposium, Water Engineering and Management in a Changing Environment, 29 June – 2 July (2011), Catania, Italy.
- Member of the Scientific Committee for the Young Scientist Workshop, International Water Week, Amsterdam, The Netherlands, 31 Oct – 4 Nov 2011.
- International committee member, the 5th EWRA/ASCE International Perspective on Water Resources & the Environment Conference (IPWE 2012), Marrakech, Morocco, 5-7 Jan.
- Vice Chair, the 10th International Conference on Hydroinformatics, HIC2012, Hamburg, Germany, 14-18 July 2012.
- Scientific committee member, the conference on “Asset management for enhancing energy efficiency in water and wastewater systems” Marbella (Spain), 17-19 April 2013.
- Steering committee member, the 12th International Conference - Computing and Control for the Water Industry, Perugia, Italy, 2-4 Sept 2013.
- Member of the organising committee for the 7th International meeting for sewer processes and networks (SPN), Sheffield, UK, 28-30 August 2013.
- Vice Chair, the 11th International Conference on Hydroinformatics, HIC2014, New York, USA, 17-21 August 2014.
- Scientific Committee member, The 2nd EWaS International Conference: “Efficient & Sustainable Water Systems Management toward Worth Living Development”, Chania, Crete, Greece, 1-4 June 2016.
- Scientific Committee member, The Symposium and Summer School: “Smart Systems for Water Management”, Monte Verità – Switzerland, 21 – 25 August 2016.
- Vice-Chair and Scientific Committee member, Hydroinformatics Conference (HIC2016), Incheon, South Korea, 21-26 August 2016.
- Scientific Committee member, IWA WaterIDEAS 2016 conference, Bologna, Italy, 20-21 October 2016.
- Steering Committee member, Computing and Control for the Water Industry (CCWI2016), Amsterdam, The Netherlands, 7-9 November, 2016
- Scientific Committee member, The 7th International Conference on Flood Management (ICFM7), Nice, France, 14-16 June 2017.
- Scientific Committee member, SYMOHYDRO 2017, Leeds, UK, 5 -7 September 2017.
- International Advisory Scientific Committee member, WDSA/CCWI2018, Kingston, Canada, 23-25 July 2018.
- Steering Committee member, WDSA/CCWI2018, Kingston, Canada, 23-25 July 2018.
- International Programme Committee member, Hydroinformatics Conference HIC2018, Palermo, Italy, 1-6 July 2018.

1. **Savić, D.A.**, D.H. Burn, and Z. Zrinji, (1989), A Comparison of Streamflow Generation Models for Reservoir Capacity-Yield Analysis, *Water Resources Bulletin*, Vol.25, No.5, pp.977-983.
2. Simonovic, S.P., and **D.A. Savić**, (1989), Intelligent Decision Support and Reservoir Management and Operations, *ASCE Journal of Computing in Civil Engineering*, Vol.3, No.4, pp. 367-385.
3. **Savić, D.A.**, and W. Pedrycz, (1991), Evaluation of Fuzzy Linear Regression Models, *International Journal for Fuzzy Sets and Systems*, Vol.39, No.1, pp. 51-63.
4. **Savić, D.A.**, and S.P. Simonovic, (1991), Selecting Risk Levels in Chance-Constrained Reservoir Operation Modeling: A Fuzzy Set Approach, *Water Resources Management*, Vol.4, No.4, pp. 251-271.
5. **Savić, D.A.**, (1991), Using Artificial Intelligence and Fuzzy Sets in Reservoir Analysis, *Vodoprivreda (Water Resources Development*, in Serbo-Croat), Vol.23, 133-134 (1991/5-6), pp. 289-304.
6. **Savić, D.A.**, and S.P. Simonovic, (1991), An Interactive Approach to Selection and Use of Single Multipurpose Reservoir Models, *Water Resources Research*, Vol.27, No.10, pp. 2509-2521.
7. **Savić, D.A.**, (1992), Instream Flow Need Analyses, *Vodoprivreda (Water Resources Development*, in Serbo-Croat), Vol.24, 137-140 (1992/3-6), pp. 147-156.
8. **Savić, D.A.**, G.A. Walters and J. Knezevic, (1995), Optimal Opportunistic Maintenance Policy Using Genetic Algorithms, 1: Formulation, *Journal of Quality in Maintenance Engineering*, Vol. 1, No. 2, pp. 34-49.
9. **Savić, D.A.** and G.A. Walters, (1995), An Evolution Program for Optimal Pressure Regulation in Water Distribution Networks, *Engineering Optimization*, Vol. 24, No. 3, pp. 197-219.
10. **Savić, D.A.**, G.A. Walters and J. Knezevic, (1995), Optimal Opportunistic-Maintenance Policy Using Genetic Algorithms, 2: Analysis, *Journal of Quality in Maintenance Engineering*, Vol. 1, No. 3, pp. 25-34.
11. **Savić, D.A.** and G.A. Walters, (1996), Integration of a Model for Hydraulic Analysis of Water Distribution Networks with an Evolution Program for Pressure Regulation, *Microcomputers in Civil Engineering*, Vol. 11, No. 2, pp. 87-97.
12. **Savić, D.A.**, and G.A. Walters, (1996), Comment on "Optimal Design of Water Distribution Networks" by Eiger, G., Shamir, U., and Ben-Tal, A., *Water Resources Research*, Vol. 32, No. 6, pp. 1899-1901.
13. **Savić, D.A.**, G.A. Walters, P.G. Ashcroft and A. Arscott, (1997), Hydroinformatics Technology and Maintenance of UK Water Networks, *Journal of Quality in Maintenance Engineering*, Vol. 3, No. 4, pp. 289-301.
14. Halhal, D., G.A. Walters, D. Ouazar, and **D.A. Savić**, (1997), Multi-Objective Improvement of Water Distribution Systems Using a Structured Messy Genetic Algorithm Approach, *ASCE Journal of Water Resources Planning and Management*, Vol. 123, No. 3, pp. 137-146.
15. **Savić D.A.** and G.A. Walters, (1997), Evolving Sustainable Networks, *Hydrological Sciences Journal*, Vol. 42, No. 4, pp. 549-564.
16. **Savić, D.A.** and G.A. Walters, (1997), Genetic Algorithms for the Least-cost Design of Water Distribution Networks, *ASCE Journal of Water Resources Planning and Management*, Vol. 123, No. 2, pp. 67-77.
17. **Savić, D.A.** (1998), Data Mining for the Water Industry Applications, *Water & Waste Treatment*, Vol. 41, No. 10, pp. 48-51.
18. **Savić, D.A.**, K.E. Evans and T. Silberhorn, (1999), A Genetic Algorithm Based System for the Optimal Design of Laminates, *Computer-Aided Civil and Infrastructure Engineering*, Vol. 14, No. 3, pp. 187-197.
19. Schneider, O., M.R. Belmont and **D.A. Savić**, (1999), Implementation of Generalised Cross-Correlation with Large Changes in Parameters using Genetic Algorithms, *Engineering Optimization*, Vol. 31, No. 4, pp. 489-513.
20. **Savić, D.A.**, G.A. Walters and J.W. Davidson (1999), A Genetic Programming Approach to Rainfall-Runoff Modelling, *Water Resources Management*, Vol. 13, No. 3, pp. 219-231.

21. Halhal, D., G.A. Walters, **D.A. Savić** and D. Ouazar, (1999), Scheduling of Water Distribution System Rehabilitation using Structured Messy Genetic Algorithms, *Evolutionary Computation*, Vol. 7, No. 3, pp. 311-329.
22. **Savić, D.A.**, G.A. Walters, R.M. Atkinson, M. Randall-Smith (1999), Genetic Algorithm Optimization of Large Water Distribution System Expansion, *Journal of Measurement and Control*, Vol.32, No.4, pp.104-109.
23. Walters, G.A., D. Halhal, **D.A. Savić** and D. Ouazar (1999), Improved Design of “Anytown” Network Using Structured Messy Genetic Algorithms, *Urban Water*, Vol. 1, No. 1, pp. 23-38.
24. **Savić, D.A.** and G.A. Walters, (1999), Hydroinformatics, Data Mining and Maintenance of UK Water Networks, *Journal of Anti-Corrosion Methods and Materials*, Vol. 46, No. 6, pp. 415-425.
25. Davidson, J.W., **D.A. Savić**, and G.A. Walters, (1999), Method for Identification of Explicit Polynomial Formulae for the Friction in Turbulent Pipe Flow, *Journal of Hydroinformatics*, Vol. 1, No. 2, pp. 115-126.
26. Engelhardt, M.O., P. J. Skipworth, **D.A. Savić**, A.J. Saul, and G.A. Walters, (2000), Rehabilitation Strategies for Water Distribution Networks: A Literature Review with a UK Perspective, *Urban Water*, Vol. 2, No. 2, pp. 153-170.
27. De Schaetzen, W.B.F., G.A. Walters and **D.A. Savić**, (2000), Optimal Sampling Design for Model Calibration Using Shortest Path, Genetic and Entropy Algorithms, *Urban Water*, Vol. 2, No. 2, pp. 141-152.
28. Keedwell, E., Narayanan, A. and **D.A. Savić**, (2000), Creating Rules from Trained Neural Networks Using Genetic Algorithms, *International Journal of Computers, Systems and Signals*, Vol. 1. No. 1, pp. 30-42.
29. **Savić, D.A.**, (2001), Application of Genetic Algorithms to Large Water Distribution Network Optimisation, *Vodoprivreda (Water Resources Development, in Serbo-Croat)*, 33 (2001), pp. 21-26.
30. Morley, M.S., R.M. Atkinson, **D.A. Savić** and G.A. Walters, (2001) GAnet: Genetic Algorithm platform for pipe network optimisation, *Advances in Engineering Software*, Vol. 32. No. 6, pp. 467-475.
31. Engelhardt, M., Skipworth, P., Cashman, A., **D.A. Savić**, Walters, G.A and Saul, A.J., (2002) Determining Maintenance Requirements of a Water Distribution Network Using Whole Life Costing, *Journal of Quality in Maintenance Engineering*, Vol. 8, No. 2, pp. 152-164.
32. Marsalek, J., Q. Rochfort and **D.A. Savić** (2002) Frontiers in Urban Water Management: Urban water as a part of integrated catchment management *Water Intelligence Online*, IWA Publishing, March 2002.
33. Davidson, J.W., **D.A. Savić**, and G.A. Walters, (2003), Symbolic and Numerical Regression: Experiments and Applications, *Information Sciences*, 150 (1/2), pp. 95-117.
34. Thorne, J.M., **D.A. Savić** and A. Weston, (2003) Optimised Conjunctive Control Rules for a System of Water Supply Sources: Roadford Reservoir System (UK), *Water Resources Management*, Vol. 17, No. 3, pp. 183-196.
35. Bessler, F., **D.A. Savić**, G.A. Walters (2003) Water Reservoir Control with Data Mining, *Journal of Water Resources Planning and Management*, ASCE, Vol. 129, No.1, pp. 26-34.
36. Kapelan, Z., **D.A. Savić**, G.A. Walters (2003) A Hybrid Inverse Transient Model for Leakage Detection and Roughness Calibration in Pipe Networks, *Journal of Hydraulic Research IAHR*, Vol. 41, No. 5, pp. 481-492.
37. Kapelan, Z., **D.A. Savić**, G.A. Walters (2003) Multiobjective Sampling Design for Water Distribution Model Calibration, *Journal of Water Resources Planning and Management*, ASCE, Vol. 129, No. 6, pp. 466-479.
38. Engelhardt, M., **D.A. Savić**, Skipworth, P., Cashman, A., Saul, A.J. and Walters, G.A (2003) Whole life costing: application to water distribution network, *Water Science and Technology: Water Supply*, IWA, Vol. 3, No. 1-2, pp. 87-93.
39. Van Zyl, J., **D.A. Savić**, G.A. Walters (2004) Operational Optimization of Water Distribution Systems Using a Hybrid Genetic Algorithm Method, *Journal of Water Resources Planning and*

- Management*, ASCE, Vol. 130, No. 2, pp. 160-170.
40. Farmani, R., J.A. Wright, G.A. Walters and **D.A. Savić** (2004) Self-adaptive fitness formulation: Theory and Application. *WSEAS transactions on circuits and systems*, Vol.3, No. 1, pp. 189-197.
 41. Tumula, D.P., G.A. Walters and **D.A. Savić** (2004), Booster Disinfection of Water Supply Networks: A Multi-Objective Approach, *ASCE Journal of Water Resources Planning and Management*, Vol. 130, No. 5, pp. 367-376.
 42. Kapelan, Z., **D.A. Savić** and G.A. Walters (2004) Incorporation of prior information on parameters in inverse transient analysis for leak detection and roughness calibration, *Urban Water*, Vol. 1, No. 2, pp. 129-143.
 43. Kapelan, Z., Babayan, A. V., **D.A. Savić**, Walters, G. A., and Khu, S. T. (2004) Two new approaches for the stochastic least cost design of water distribution systems, *Water Science & Technology: Water Supply*, 4(5-6), 355-363.
 44. Farmani, R., **D.A. Savić** and G.A. Walters (2005), Evolutionary multi-objective optimization in water distribution network design, *Engineering Optimization*, Vol. 37, No. 2, pp. 167-183.
 45. Kapelan, Z., **D.A. Savić**, G.A. Walters (2005) Optimal Sampling Design Methodologies for Water Distribution Model Calibration, *Journal of Hydraulic Engineering*, ASCE, Vol. 131, No. 3, pp.190-200.
 46. Farmani, R., J.A. Wright, **D.A. Savić** and G.A. Walters (2005) Self-Adaptive Fitness Formulation for Evolutionary Constrained Optimization of Water Systems, *ASCE Journal of Computing in Civil Engineering*, Vol. 19, No. 2, pp. 212-216.
 47. Bixio, D., De hyeder, B., Cikurel, H., Muston, M., Miska, V., Joksimovic, D., Schafer, A.I., Ravazzini, A., Aharoni, A., **D.A. Savić** and Thoeve, C. (2005), Municipal wastewater reclamation: where do we stand? An overview of treatment technology and management practice, *Water Science and Technology: Water Supply*, 5(1), 77-85.
 48. Farmani, R., G.A.Walters, **D.A. Savić**, (2005) Trade-off between Total Cost and Reliability for Anytown Water Distribution Network, *ASCE Journal of Water Resources Planning and Management*, Vol. 131, No. 3, pp. 161-171.
 49. Babayan, A.V, Z. Kapelan, **D.A. Savić**, and G.A. Walters (2005), Least Cost Design of Robust Water Distribution Networks Under Demand Uncertainty, *Journal of Water Resources Planning and Management*, ASCE, Vol. 131, No. 5, pp. 375-382.
 50. Djordjević, S., Prodanović, D., Maksimović, Č., Ivetić, M. and **D.A. Savić** (2005) SIPSON - Simulation of Interaction between Pipe flow and Surface Overland flow in Networks, *Journal Water Science and Technology*, IWA, 55(5), pp. 275-283.
 51. di Pierro, F., Djordjević, S., Kapelan, Z., Khu, S.-T., **D.A. Savić** and Walters, G.A. (2005) Automatic calibration of urban drainage model using a novel multi-objective genetic algorithm, *Water Science and Technology*, IWA, 55(5), pp. 43-52.
 52. Vamvakieridou-Lyroudia, L.S., G.A. Walters, **D.A. Savić** (2005), Fuzzy Multiobjective Optimisation of Water Distribution Networks, *Journal of Water Resources Planning and Management*, ASCE, Vol. 131, No. 6, pp. 467-476.
 53. Kapelan, Z., **D.A. Savić** and Walters, G.A. (2005), Strengths and Weaknesses of Decision Support Tools for Sustainable Urban Development, *Engineering Sustainability (ICE)*, Vol. 158, No. 3, pp. 135-142.
 54. Reis, L.F.R., Walters, G. A., **D.A. Savić** and Chaudhry, F. H. (2005), Multi-Reservoir Operation Planning using Hybrid Genetic Algorithm and Linear Programming (GA-LP): An Alternative Stochastic Approach, *Water Resources Management*, Vol. 19, No. 6, pp. 831-848.
 55. Kapelan, Z., A.V. Babayan, **D.A. Savić**, G.A. Walters and S.T. Khu (2005) Two new approaches for the stochastic least cost design of water distribution systems, *Water Science & Technology: Water Supply*, IWA, Vol. 4, No. 5-6, pp. 355-363.
 56. **Savić, D.A** Djordjevic, S., Dorini, G., Shepherd, W., Cashman, A. and Saul, A. (2005), COST-S: a new methodology and tools for sewerage asset management based on whole life costs, *Water Asset Management International* 1.4, pp. 20-24.
 57. Kapelan, Z., **D.A. Savić** and G.A. Walters (2005) Multiobjective Rehabilitation of Water Distribution Systems under Uncertainty, *Water Resources Research* Vol. 41, No. 11, W11407.

58. Van Zyl, J., **D.A. Savić**, G.A. Walters (2005), Extended period Modeling of Water Pipe Networks - A new Approach, *Journal of Hydraulic Research IAHR* Vol. 43, No. 6, pp. 677-687.
59. Kapelan Z., **D.A. Savić**, Walters, G.A. and A.V. Babayan (2005) Risk and Robustness based Solutions to a Multiobjective Water Distribution System Rehabilitation Problem under Uncertainty, *Water Science & Technology*, IWA, Vol. 53, No. 1, pp. 61-75.
60. Bixio, D., C. Thoeye, J. De Koning, D. Joksimovic, **D.A. Savić**, T. Wintgens, T. Melin (2006) Wastewater Reuse in Europe, *Desalination*, Vol. 187, pp. 89-101.
61. Reis, L.F.R., Bessler, F.T, Walters, G. A. and **D.A. Savić** (2006), Water Supply Reservoir Operation by Combined Genetic Algorithm – Linear Programming (GA-LP) Approach, *Water Resources Management*, Vol. 20, No. 2, pp. 227-255.
62. Joksimovic, D., J. Kubik, P. Hlavinek, **D.A. Savić**, G. Walters (2006) Development of an Integrated Simulation Model for Treatment and Distribution of Reclaimed Water, *Desalination*, Vol. 188, pp. 9-20.
63. **Savić, D.A.**, Giustolisi, O., Berardi, L., Shepherd, W., Djordjevic, S. and Saul, A. (2006), Sewers Failure Analysis Using Evolutionary Computing, *Water Management Journal*, ICE, Vol 159, No 2, pp. 111-118.
64. Giustolisi, O. and **D.A. Savić** (2006) A Symbolic Data-Driven Technique Based on Evolutionary Polynomial Regression, *Journal of Hydroinformatics*, Vol. 8, No. 3, pp. 207-222.
65. Babayan, A.V., Kapelan, Z., **D.A. Savić**, and Walters, G.A. (2006), Comparison of Two Approaches for the Least Cost Rehabilitation of Water Distribution Systems under Uncertainty, *Engineering Optimization*, 38 (3), pp. 281-297.
66. Khu, S.-T., F. di Pierro, **D.A. Savić**, S. Djordjevic and G.A. Walters (2006), Incorporating Spatial and Temporal Information for Urban Drainage Model Calibration: An Approach Using Preference Ordering Genetic Algorithm, *Advances in Water Resources*, 29(8), pp. 1168 – 1181.
67. Farmani, R., G.A. Walters, **D.A. Savić**, (2006) Evolutionary multi-objective optimization of the design and operation of water distribution network: Total cost vs. reliability vs. water quality, *Journal of Hydroinformatics*, Vol. 8, No. 3, pp. 165-179.
68. Giustolisi, O., D Laucelli and **D A Savić** (2006) Development of Rehabilitation Plans for Water Mains Replacement Considering Risk and Cost-Benefit Assessment, *Civil Engineering and Environmental Systems*, Vol. 23, No. 3., pp. 175-190.
69. Tricarico, C., R. Gargano, Z Kapelan, **D Savić** and G de Marinis (2006) Economic Level of Reliability for the Rehabilitation of Hydraulic Networks, *Civil Engineering and Environmental Systems*, Vol. 23, No. 3, pp. 191-207.
70. Vamvakieridou-Lyroudia, L.S., **D.A. Savić** and G.A. Walters (2006) Fuzzy Hierarchical Decision Support System for Water Distribution Network Optimisation, *Civil Engineering and Environmental Systems*, Vol. 23, No. 3, pp. 237-261.
71. di Pierro, F., Khu, S-T. and **D.A. Savić** (2006) From Single-Objective to Multiple-Objective Multiple-Rainfall Events Automatic Calibration of Urban Storm Water Runoff Models Using Genetic Algorithms, *Water Science & Technology IWA*, Vol. 54, No. 6-7, pp. 57-64.
72. Makropoulos, C., Morley, M., Memon, F.A., Butler, D., **D.A. Savić** and Ashley, R.M. (2006) A Decision Support Framework for Sustainable Urban Water Planning and Management in New Urban Areas, *Water Science & Technology IWA*, Vol. 54, No. 6-7, pp. 451-458.
73. Joksimovic, D., **D.A. Savić** and G.A. Walters (2006) An integrated approach to least-cost planning of water reuse schemes, *Water Science & Technology: Water Supply*, IWA, Vol. 6, No. 5, pp 93–100.
74. Van Zyl, J., **D.A. Savić**, G.A. Walters (2006) Explicit Integration Method for Extended-Period Simulation of Water Distribution Systems, *Journal of Hydraulic Engineering, ASCE*, Vol. 132, No. 4, pp. 385-392.
75. Giustolisi, O., A. Doglioni, **D.A. Savić** and B.W. Webb (2007) A multi-model approach to analysis of environmental phenomena, *Environmental Modelling Systems Journal*, Vol. 22, No. 5, pp. 674-682.
76. Ivetić, M and **D.A. Savić** (2007) Practical implications of using induced transients for leak detection, *Journal of Urban and Environmental Engineering*, Vol. 1, No.1, pp 36–43, doi:

- 10.4090/juee.2007.v1n1.036043.
77. Dorini, G., di Pierro, F., **D.A. Savić** and A.B. Piunovskyi (2007) Neighbourhood Search for Constricting Pareto Sets, *Mathematical Methods of Operations Research*, Vol. 65, pp. 315-337.
 78. Hochstrat, R., Joksimovic, D., Wintgens, T., Melin, T. and **D.A. Savić** (2007) Economic considerations and decision support tool for wastewater reuse scheme planning, *Water Science and Technology*, Vol. 56, No. 5, pp. 175-182.
 79. Babayan, A.V., **D.A. Savić**, G.A. Walters and Z. Kapelan (2007) Robust Least-Cost Design of Water Distribution Networks Using Redundancy and Integrated Based Methodologies, *Journal of Water Resources Planning and Management*, ASCE, Vol. 131, No. 1, pp. 67-77.
 80. Vamvakieridou-Lyroudia, L.S., **Savić D.A.** and G.A. Walters (2007) Tank Simulation for the Optimisation of Water Distribution Networks, *Journal of Hydraulic Engineering*, ASCE, Vol. 133, No. 6, pp. 625-636.
 81. Farmani, R., R. Abadia and **Savić D.A.** (2007) Optimum Design and Management of Pressurized Branched Irrigation Networks, *Journal of Irrigation and Drainage Engineering*, ASCE, Vol. 133, No. 6, pp. 528-537.
 82. di Pierro F., Khu S. T. and **Savić D.A.** (2007) An Investigation on Preference Ordering Ranking Scheme in Multiobjective Evolutionary Optimization, *IEEE Transactions on Evolutionary Computation*, Vol. 11, No. 1, pp. 17-45.
 83. Kapelan, Z., **D.A. Savić** and Walters, G.A. (2007), Calibration of WDS Hydraulic Models using the Bayesian Recursive Procedure, *ASCE Journal of Hydraulic Engineering*, Vol. 133, No. 8, pp. 927-936.
 84. Farmani, R., P. Ingeduld, **D.A. Savić**, G.A. Walters, Z. Svitak and J. Berka (2007), Hydraulic water quality and realtime control model of South West Moravian regional water supply system, *Water Management Journal*, ICE, Vol. 160 (WM2), pp. 103-108.
 85. Kapelan, Z., **D.A. Savić**, Giustolisi, O. and Berardi, L., (2007), Development of Clean and Waste Water Pipe Failure Prediction Models Using EPR, *Voda i Sanitarna Tehnika* 2, pp. 47-56, (in Serbian).
 86. Cutore, P., Campisano, A., Kapelan, Z., Modica, C. and **D.A. Savić** (2007) Probabilistic Prediction of Urban Water Consumption using the SCEM-UA Algorithm, *Urban Water Journal*, Vol. 5, No. 2, pp. 125-132.
 87. Giustolisi, O. Doglioni, A., **D.A. Savić** and F. di Pierro (2008) An evolutionary multiobjective strategy for the effective management of groundwater resources, *Water Resources Research*, Vol. 44, No. W01403, doi:10.1029/2006WR005359.
 88. Doglioni, A., O. Giustolisi, **D.A. Savić**, B.W. Webb (2008) An Investigation on Stream Temperature Analysis Based on Evolutionary Computing, *Hydrological Processes*, Vol. 22, No. 3, pp. 315-326.
 89. Berardi, L., Z. Kapelan, O. Giustolisi and **D.A. Savić** (2008) Development of Pipe Deterioration Models for Water Distribution Systems using EPR, *Journal of Hydroinformatics*, Vol. 10, No. 2, pp. 113-126.
 90. Joksimovic, D., **D.A. Savić**, Walters, G. A., Bixio, D., Katsoufidou, K. and Yiantsios, S. G. (2008) Development and validation of system design principles for water reuse systems, *Desalination*, Vol. 218, No. 1-3, pp. 142-153.
 91. Giustolisi, O., Z. Kapelan, **D.A. Savić** (2008) An algorithm for automatic detection of topological changes in water distribution networks, *Journal of Hydraulic Engineering*, ASCE, Vol. 134, No. 4, pp. 435-446.
 92. Dawson, R.J., L. Speight, J.W. Hall, S. Djordjevic, **D.A. Savić**, J. Leandro, (2008) Attribution of flood risk in urban areas, *J. Hydroinformatics*, Vol. 10, No. 4, pp. 275-288.
 93. Giustolisi, O., **D.A. Savić** and Z. Kapelan (2008) Pressure-Driven Demand and Leakage Simulation for Water Distribution Networks, *Journal of Hydraulic Engineering*, ASCE, Vol. 134, No. 5, pp. 626-635.
 94. Jonkergouw, P., Khu, S-T., Kapelan, Z., **D.A. Savić** (2008) Water Quality Model Calibration under Unknown Demands, *Journal of Water Resources Planning and Management*, ASCE, Vol. 134, No. 4, pp. 326-336.

95. Giustolisi, O., **D.A. Savić** and Z. Kapelan (2008) Extended Period Simulation Analysis Considering Valve Shutdowns, *Journal of Water Resources Planning and Management*, ASCE, Vol. 134, No. 6, pp. 527-537.
96. Ostfeld, A., Uber, J.G., Salomons, E., Berry, J.W., Hart, W.E., Phillips, C.A., Watson, J-P., Dorini, G., Jonkergouw, P., Kapelan, Z., Di Pierro, F. Khu, S-T., **D.A. Savić**, Eliades, D., Polycarpou, M., Ghimire, S.R., Barkdoll, B.D., Gueli, R., Huang, J.J., McBean, E.A., James, W., Krause, A., Leskovec, J. Isovitsch, S., Xu, J., Guestrin, C., VanBriesen, J., Small, M., Fischbeck, P., Preis, A., Propato, M., Piller, O., Trachtman, G.B., Wu, Z.Y. and Walski, T., (2008), The Battle of the Water Sensor Networks (BWSN): A Design Challenge for Engineers and Algorithms, *ASCE Journal of Water Resources Planning and Management*, Vol 134, No 6, pp. 556-568.
97. Farmani, R., Henriksen, H.J. and **D.A. Savić** (2009) An evolutionary Bayesian belief network methodology for optimum management of groundwater contamination, *Environmental Modelling & Software*, Vol. 24, No. 3, pp. 303-310.
98. Tabesh, M., Soltani, J., Farmani, R. and **D.A. Savić** (2009) Assessing Pipe Failure Rate and Mechanical Reliability of Water Distribution Networks Using Data Driven Modelling, *J. of Hydroinformatics*, Vol 11, No 1, pp. 1-17.
99. **Savić, D.A.**, Z. Kapelan and P. Jonkergouw (2009) Quo vadis water distribution model calibration? *Urban Water Journal*, Vol. 6, No. 1, pp. 3 - 22.
100. di Pierro, F., Khu, S.T., **D.A. Savić** and Berardi, L (2009) Efficient Multi-Objective Optimal Design of Water Distribution Networks on a Budget of Simulations Using Hybrid Algorithms, *Environmental Modelling & Software*, Vol. 24, No. 2, pp. 202-213.
101. Behzadian, K., Z. Kapelan, **D.A. Savić** and A. Ardeshtir (2009) Stochastic Sampling Design using Multiobjective Genetic Algorithm and Adaptive Neural Networks, *Environmental Modelling & Software*, Vol. 24, No. 4, pp. 530-541.
102. Olsson, R.J, Kapelan, Z., and **D.A. Savić** (2009), Probabilistic Building Block Identification for the Design and Rehabilitation of Water Distribution Systems, *Journal of Hydroinformatics*, Vol. 11, No. 2, pp. 89-104.
103. Jonkergouw, P., D. Zhong , X.Q. Huo, S-T. Khu, **D.A. Savić** and H-B. Zhao (2009) A variable rate coefficient chlorine decay model, *Environmental Science & Technology*, Vol. 43, No. 2, pp. 408-414.
104. Leandro, J., A. Chen, S. Djordjević and **D.A. Savić** (2009) A Comparison of 1D/1D and 1D/2D Coupled (Sewer/Surface) Hydraulic Models for Urban Flood Simulation, *Journal of Hydraulic Engineering*, ASCE Volume 135, Issue 6, pp. 495-504.
105. **Savić, D.A.**, Giustolisi, O. and Laucelli, D.B. (2009) Asset performance analysis using multi-utility data and multi-objective data mining techniques, *J. of Hydroinformatics*, Vol. 11, No. 3-4, pp. 211-224.
106. Giustolisi, O. and **D.A. Savić** (2009) Advances In Data-Driven Analyses and Modelling Using EPR-MOGA, *J. of Hydroinformatics*, Vol. 11, No. 3-4, pp. 225–236.
107. Berardi, L., Giustolisi, O., **D.A. Savić** and Kapelan, Z. (2009) An effective multi-objective approach to prioritisation of sewer pipe inspection, *Water Science & Technology*, Vol.60, No.4, pp. 841-850.
108. Markus, M., Hejazi, M., Bajcsy, P., Giustolisi, O. and **D.A. Savić** (2010) Prediction of Weekly Nitrate-N Fluctuations in a Small Agricultural Watershed in Illinois, *Journal of Hydroinformatics*, Vol. 12, No. 3, pp. 251-261.
109. Giustolisi, O. and **D.A. Savić** (2010) Identification of Segments and Optimal Isolation Valve System Design in Water Distribution Networks, *Urban Water Journal*, Vol. 7, No. 1, pp. 1-15.
110. El-Baroudy, I., Elshorbagy, A., Carey, S. K., Giustolisi, O. and **D.A. Savić** (2009) Comparison of Three Data-Driven Techniques in Modelling the Evapotranspiration Process, *Journal of Hydroinformatics*, Vol. 12, No. 4, pp. 365-379.
111. Puust R., Kapelan, Z., **D.A. Savić** and Koppel, T. (2010) A Review of Methods for Leakage Management in Pipe Networks, *Urban Water Journal*, Vol. 7, No. 1, pp. 25 - 45.
112. Nicklow, J.W., P. Reed, **D.A. Savić**, T. Dessalegne, L. Harrell, A. Chan-Hilton, M. Karamouz, B. Minsker, A. Ostfeld, A. Singh and E. Zechman (2010) State of the Art for Genetic Algorithms and Beyond in Water Resources Planning and Management, *ASCE Journal of Water Resources*

- Planning and Management*, Vol. 136, No. 4, pp. 412-432.
113. Dorini, G., Jonkergouw, P., Kapelan, Z., and **D.A. Savić** (2010) SLOTS: An Effective Algorithm for Sensor Placement in Water Distribution Systems, *Journal of Water Resources Planning and Management*, Vol. 136, No. 6, pp. 620-628.
 114. Weickgenannt, M., Z. Kapelan, M. Blokker and **D.A. Savić** (2010) Risk-Based Sensor Placement for Contaminant Detection in Water Distribution Systems, ASCE, *Journal of Water Resources Planning and Management* Vol.136, No.6, pp. 629-636.
 115. **Savić, D.A.**, J. Bicik and M.S. Morley (2011) GANetXL: A DSS generator for multiobjective optimisation of spreadsheet-based models, *Environmental Modelling & Software*, Vol. 26, 551-561.
 116. Chen, A., Djordjević, Leandro, J., and **D.A. Savić** (2011) An analysis of the combined consequences of pluvial and fluvial flooding, *Water Science & Technology*, Vol 62, No 7, pp 1491-1498.
 117. Bicik, J., Kapelan, Z., Makropoulos, C. and **D.A. Savić** (2011) Pipe burst diagnostics using evidence theory, *Journal of Hydroinformatics*, Vol 13, No 4, pp. 596-608.
 118. Leandro, J., S. Djordjević, A. S. Chen, **D.A. Savić** and M. Stanić (2011) Calibration of a 1D/1D urban flood models with a 1D/2D model results in the absence of field data, *Water Science & Technology*, Vol 64, No 5, pp 1016-1024.
 119. Pulido-Calvo, I., J.C. Gutiérrez-Estrada and **D.A. Savić** (2012) Heuristic Modelling of the Water Resources Management in the Guadalquivir River Basin, Southern Spain, *Water Resources Management*, Vol. 26, No. 1, 185-209.
 120. Chen, A., Evans, B., Djordjević, and **D.A. Savić** (2012) A coarse-grid approach to representing building blockage effects in 2D urban flood modelling, *Journal of Hydrology*, Vol. 426-427, pp 1-16.
 121. Farmani, R., Henriksen, H.J., **Savić, D.A.** and Butler, D. (2012) An evolutionary Bayesian belief network methodology for participatory decision making under uncertainty: An application to groundwater management, *Integrated Environmental Assessment and Management*, Vol. 8, Issue 3, pp. 456–461.
 122. Giustolisi, O., Laucelli, D., Berardi, L. and **Savić D. A.** (2012) A computationally efficient modeling method for large size water network analysis, *Journal of Hydraulic Engineering, ASCE*, Vol. 138, no. 4, pp. 313-326.
 123. Ostfeld, A., Salomons, E., Ormsbee, L., Uber, J.G., Bros, C.M., Kalungi, P., Burd, R., Zazula-Coetzee, B., Belrain, T., Kang, D., Lansey, K., Shen, H., McBean, E., Wu, Z.Y., Walski, T., Alvisi, S., Franchini, M., Johnson, J.P., Ghimire, S.R., Barkdoll, B.D., Koppel, T., Vassiljev, A., Kim, J.H., Chung, G., Yoo, D.G., Diao, K., Zhou, Y., Li, J., Liu, Z., Chang, K., Gao, J., Qu, S., Yuan, Y., Devi Prasad, T., Laucelli, D., Vamvakeridou-Lyroudia, L.S., Kapelan, Z., **D.A. Savić**, Berardi, L., Barbaro, G., Giustolisi, O., Asadzadeh, M., Tolson, B.A., and McKillop, R. (2012), The Battle of the Water Calibration Networks (BWCN), *Journal of Water Resources Planning and Management*, Vol. 138, No. 5, pp. 523-532.
 124. Chen, A., Evans, B., Djordjević, and **D.A. Savić** (2012) Multi-layered coarse grid modelling in 2D urban flood simulations, *Journal of Hydrology* Vol. 426–427, pp. 1–16.
 125. Sušnik, J., L.S. Vamvakeridou-Lyroudia, **D.A. Savić** and Z. Kapelan (2012) Integrated System Dynamics Modelling for water scarcity assessment: case study of the Kairouan region, *Science of the Total Environment*, Vol 440, pp 290-306.
 126. Marques, J., Cunha, M. C., Sousa, J. and **D.A. Savić** (2012). Robust optimization methodologies for water supply systems design. *Drinking Water Engineering and Science*, Vol. 5, No. 1, pp. 173-192.
 127. Ward, B. and **D.A. Savić** (2013) A multi-objective optimisation model for sewer rehabilitation considering critical risk of failure, *Water Science & Technology*, Vol 66, No 11, pp 2410–2417.
 128. Sušnik, J., J.-L. Molina, L.S. Vamvakeridou-Lyroudia, **D.A. Savić** and Z. Kapelan (2013) Comparative analysis of System Dynamics and Object-Oriented Bayesian Networks modelling for water systems management. *Water Resources Management*, Vol 27, No 3, pp. 819-841.
 129. Guidolin, M., Z. Kapelan and **D.A. Savić** (2013) Using high performance techniques to accelerate demand driven hydraulic solvers, *Journal of Hydroinformatics*, Vol 15, No 1, pp 38-54.

130. **Savić DA**, Bicik J, Morley MS, Duncan A, Kapelan Z, Djordjević S, Keedwell EC. (2013) Intelligent Urban Water Infrastructure Management, *Journal of The Indian Institute of Science*, Vol. 93, No. 2, pp. 319-336.
131. Romano, M., Z. Kapelan and **D.A. Savić** (2013) Geostatistical Techniques for Approximate Location of Pipe Burst Events in Water Distribution Systems, *Journal of Hydroinformatics*, Vol. 15, No. 3, pp. 634-651.
132. Sušnik, J., L.S. Vamvakeridou-Lyroudia, **D.A. Savić** and Z. Kapelan (2013) Integrated modelling of a coupled water-agricultural system using system dynamics, *Journal of Water and Climate Change*, Vol. 4, No. 3, pp. 209-231.
133. Ghimire B, Chen AS, Guidolin M, Keedwell EC, Djordjević S, **D.A. Savić** (2013) Formulation of a fast 2D urban pluvial flood model using a cellular automata approach, *Journal of Hydroinformatics*, Vol. 15, No. 3, pp. 676-686.
134. Wang Q, Liu S, Liu W, Kapelan Z, **D.A. Savić** (2013) Decision Support System for emergency scheduling of raw water supply systems with multiple sources, *Frontiers of Environmental Science and Engineering*, Vol. 7, No. 5, pp. 777-786.
135. McClymont, K., E. Keedwell, **D.A. Savić** and M. Randall-Smith (2013) A General Multi-objective Hyper-Heuristic for Water Distribution Network Design with Discolouration Risk, *Journal of Hydroinformatics*, Vol. 15, No. 3, pp. 700-716.
136. Hutton, C., Kapelan, Z., Vamvakeridou-Lyroudia, L., and **D.A. Savić** (2014). The Application of Formal and Informal Bayesian Methods for Water Distribution Hydraulic Model Calibration. *J. Water Resour. Plann. Manage.*, Vol. 140, No. 11, doi: 10.1061/(ASCE)WR.1943-5452.0000412.
137. Ferrari, G., **D.A. Savić** and Becciu, G. (2014) A Graph Theoretic Approach and Sound Engineering Principles for Design of District Metered Areas, *J. Water Resour. Plann. Manage.*, Vol. 140, No. 12, doi: 10.1061/(ASCE)WR.1943-5452.0000424.
138. Wang, Q., **D.A. Savić** and Kapelan, Z. (2014). Hybrid metaheuristics for multi-objective design of water distribution systems. *Journal of Hydroinformatics*, Vol. 16, No. 1, pp. 165-177.
139. Hutton, C., Z. Kapelan, L.S. Vamvakeridou-Lyroudia, **D.A. Savić** (2014) Dealing with Uncertainty in Water Distribution Systems' Models: a Framework for Real-Time Modelling and Data Assimilation, *Journal of Water Resources Planning and Management*, Vol. 140, No. 2, pp. 169–183.
140. Romano, M., Z. Kapelan and **D.A. Savić** (2014) Automated detection of pipe bursts and other events in water distribution systems, *Journal of Water Resources Planning and Management*, Vol. 140, No. 4, pp. 457–467.
141. Romano, M., Z. Kapelan and **D.A. Savić** (2014) Evolutionary algorithm and expectation maximisation strategies for improved detection of pipe bursts and other events in water distribution systems, *Journal of Water Resources Planning and Management*, Vol. 140, No. 5, pp. 572–584.
142. Johns, M.B., E. Keedwell and **D.A. Savić** (2014) Adaptive locally constrained genetic algorithm for least-cost water distribution network design, *Journal of Hydroinformatics*, Vol. 16, No. 2, pp. 288-301, doi:10.2166/hydro.2013.218.
143. McClymont, K., Keedwell EC, **D.A. Savić**, Randall-Smith M. (2014) Automated construction of evolutionary algorithm operators for the bi-objective water distribution network design problem using a genetic programming based hyper-heuristic approach, *Journal of Hydroinformatics*, Vol. 16, No. 2, pp. 302-318, DOI:10.2166/hydro.2013.226.
144. Liu, H., **D.A. Savić**, Kapelan, Z., Zhao, M., Yuan Y. and Zhao, H., (2014), A diameter-sensitive flow entropy method for reliability consideration in water distribution system design, *Water Resources Research*, Vol. 50, No. 7, pp. 5597–5610.
145. Ward, B., A. Selby, S. Gee, S. Rosser and **D.A. Savić** (2014) Assessing impacts of the private sewer transfer on UK utilities, *Infrastructure Asset Management*, Vol.1, No. 2, pp. 23 –33, doi: 10.1680/iasma.13.00003.
146. Vojinovic, Z., S. Sahlu, A. S. Torres, S. D. Seyoum, F. Anvarifar, H. Matungulu, W. Barreto, **D.A. Savić** and Z. Kapelan (2014) Multi-objective rehabilitation of urban drainage systems under uncertainties, *Journal of Hydroinformatics*, Vol. 16, No. 5, 1044-1061.

- doi:10.2166/hydro.2014.223.
147. Tricarico, C., Morley, M.S., Gargano, R., Kapelan, Z., de Marinis, G. and **D.A. Savić**, (2014), The influence of the existing network layout on water distribution system redesign analysis, *Journal of Hydroinformatics*, Vol. 16, No. 6, pp. 1375-1389, doi: 10.2166/hydro.2014.017.
 148. Sušnik, J., Vamvakeridou-Lyroudia, L.S., Gebert, N., Kloos, J., Renaud, F. La Jeunesse, I., Mabrouk, B., **D.A. Savić**, Kapelan, Z., Ludwig, R., Fischer, G., Roson, R., and Zografos, C., (2014), Interdisciplinary Assessment of Water-Related Climate Change Impacts on the Lower Nile River, Egypt, From Three Complementary Projects, *Science of the Total Environment*, Vol. 503, pp. 279-288, doi: 10.1016/j.scitotenv.2014.06.111.
 149. Austin, R.J., A.S. Chen, **D.A. Savić** and S. Djordjević (2014) Quick and accurate Cellular Automata sewer simulator, *Journal of Hydroinformatics*, Vol. 16, No. 6, 1359-1374., doi:10.2166/hydro.2014.070.
 150. Ward, B., M. Kawalec and **D.A. Savić** (2014) An optimised total expenditure approach to sewerage management, *Municipal Engineer (ICE)*, Vol. 167, No. 4, pp 191 –199, doi: 10.1680/muen.13.00006.
 151. Marques, J., Cunha, M., and **D.A. Savić** (2015), Using Real Options in the Optimal Design of Water Distribution Networks, *Journal of Water Resources Planning and Management* (ASCE), Vol. 141, No. 2, 04014052, doi: 10.1061/(ASCE)WR.1943-5452.0000448.
 152. Wang, Q., Guidolin, M., **D.A. Savić** and Kapelan, Z., (2015), Two-Objective Design of Benchmark Problems of Water Distribution System via MOEAs: Towards the Best-Known Approximation to the True Pareto Front, *Journal of Water Resources Planning and Management* (ASCE), Vol. 141, No. 3, 04014060., doi: 10.1061/(ASCE)WR.1943-5452.0000460.
 153. Marques, J., Cunha, M., and **D.A. Savić** (2015), Using real options for an eco-friendly design of water distribution systems, *Journal of Hydroinformatics*, Vol. 17, No. 1, pp. 20-35, doi:10.2166/hydro.2014.122.
 154. Wang, Q., Creaco, E., Franchini, M., **D.A. Savić** & Kapelan, Z. (2015). Comparing Low and High-Level Hybrid Algorithms on the Two-Objective Optimal Design of Water Distribution Systems. *Water Resources Management*, Vol. 29, No. 1, pp 1-16, doi: 10.1007/s11269-014-0823-8.
 155. Maier, H. R., Kapelan, Z., Kasprzyk, J., Kollat, J., Matott, L. S., Cunha, M. C., Dandy G.C., Gibbs M.S., Keedwell E., Marchi A., Ostfeld A., **D.A. Savić**, Solomatine D.P., Vrugt J.A., Zecchin A.C., Minsker B.S., Barbour E.J., Kuczera G.I., Pasha F., Castelletti A., Giuliani M., Reed P.M. (2014). Evolutionary algorithms and other metaheuristics in water resources: current status, research challenges and future directions. *Environmental Modelling & Software*, Vol. 62, pp. 271-299, doi: <http://dx.doi.org/10.1016/j.envsoft.2014.09.013>
 156. Marques, J., Cunha, M., & **D.A. Savić** (2015). Multi-objective optimization of water distribution systems based on a real options approach. *Environmental Modelling & Software*, Vol. 63, pp. 1-13. doi:10.1016/j.envsoft.2014.09.014
 157. Sušnik, J., Strehl, C., Postmes, L. A., Vamvakeridou-Lyroudia, L. S., Mälzer, H. J., **D.A. Savić** & Kapelan, Z. (2015). Assessing Financial Loss due to Pluvial Flooding and the Efficacy of Risk-Reduction Measures in the Residential Property Sector. *Water Resources Management*, Vol. 29, No. 1, pp. 161-179, doi: 10.1007/s11269-014-0833-6.
 158. Gibson, M., E. Keedwell and **D.A. Savić** (2015) An investigation of the efficient implementation of cellular automata on multi-core CPU and GPU hardware, *Journal of Parallel and Distributed Computing*, Vol. 77, pp. 11-25.
 159. Walker D., D. Jakovljević, **D.A. Savić** and M. Radovanović (2015) Multi-criterion Water Quality Analysis of the Danube River in Serbia: A Visualisation Approach, *Water Research*, Vol. 79, pp. 158-172, doi:10.1016/j.watres.2015.03.020.
 160. McClymont, K., Keedwell EC, **D.A. Savić** (2015) An analysis of the interface between evolutionary algorithm operators and problem features for water resources problems. A case study in water distribution network design, *Environmental Modelling & Software*, Vol. 69, pp 414-424. doi:10.1016/j.envsoft.2014.12.023.
 161. Creaco, E., Farmani, R., Kapelan, Z., Vamvakeridou-Lyroudia, L., & **D.A. Savić** (2015). Considering the mutual dependence of pulse duration and intensity in models for generating residential water demand. *Journal of Water Resources Planning and Management*, (in press) 141(11),

- 10.1061/(ASCE)WR.1943-5452.0000557.
162. Smith, K., S. Liu, Y. Liu, **D.A. Savić**, G. Olsson, T. Chang and X. Wu (2015) Energy use for urban water supply in China: A comparative study, *Mitigation and Adaptation Strategies for Global Change*, (in press), pp. 1-21. doi: 10.1007/s11027-015-9648-x.
 163. Mereu, S., J. Sušnik, A. Trabucco, A. Daccache, L. Vamvakeridou-Lyroudia, S. Renoldi, A. Virdis, **D.A. Savić**, and D. Assimacopoulos. (2016) Operational resilience of reservoirs to climate change, agricultural demand, and tourism: A case study from Sardinia. *Science of the Total Environment*, Vol. 543, pp. 1028-1038. doi:10.1016/j.scitotenv.2015.04.066
 164. Grayman, W. M., Murray, R., **D.A. Savić**, & Farmani, R. (2016). Redesign of Water Distribution Systems for Passive Containment of Contamination (In Press). *Journal-American Water Works Association*, Vol. 108, No. 7. doi:10.5942/jawwa.2016.108.0105.
 165. Creaco, E., Kossieris, P., Vamvakeridou-Lyroudia, L., Makropoulos, C., Kapelan, Z., & **D.A. Savić** (2016). Parameterizing residential water demand pulse models through smart meter readings. *Environmental Modelling & Software*, Vol. 80, 33-40.
 166. Creaco, E., Berardi, L., Sun, S., Giustolisi, O., & **D.A. Savić** (2016). Selection of relevant input variables in storm water quality modeling by multiobjective evolutionary polynomial regression paradigm. *Water Resources Research*. doi: 10.1002/2015WR017971.
 167. García, I. F., Creaco, E., Díaz, J. R., Montesinos, P., Poyato, E. C., & **D.A. Savić** (2016). Rehabilitating pressurized irrigation networks for an increased energy efficiency. *Agricultural Water Management*, 164, 212-222.
 168. Wa'el A, H., Memon, F. A., & **D.A. Savić** (2016). Assessing and Modelling the Influence of Household Characteristics on Per Capita Water Consumption. *Water Resources Management*, 30(9), 2931-2955.
 169. Sadr, S.M.K., Memon, F., Jain, A., Gulati, S., Duncan, A.P., Hussein, W., **D.A. Savić** and Butler, D. (2016). An analysis of domestic water consumption in Jaipur, India, *British Journal of Environment and Climate Change*, 6(2): 97-115.
 170. Laucelli, D., Romano, M., **D.A. Savić**, & Giustolisi, O. (2016). Detecting anomalies in water distribution networks using EPR modelling paradigm. *Journal of Hydroinformatics*, 18(3), 409-427.
 171. Creaco, E., Alvisi, S., Farmani, R., Vamvakeridou-Lyroudia, L., Franchini, M., Kapelan, Z., & **D.A. Savić** (2016). Methods for Preserving Duration–Intensity Correlation on Synthetically Generated Water-Demand Pulses. *Journal of Water Resources Planning and Management*, 142(2), doi: 10.1061/(ASCE)WR.1943-5452.0000613.
 172. Sanz, G., Pérez, R., Kapelan, Z., & **D.A. Savić** (2016). Leak Detection and Localization through Demand Components Calibration. *Journal of Water Resources Planning and Management*, 142(2), doi: 10.1061/(ASCE)WR.1943-5452.0000592.
 173. Giustolisi, O., Berardi, L., Laucelli, D., **D.A. Savić**, & Kapelan, Z. (2016). Operational and tactical management of water and energy resources in pressurized systems: Competition at WDSA 2014. *Journal of Water Resources Planning and Management*, 142(5), doi: 10.1061/(ASCE)WR.1943-5452.0000583.
 174. Galdiero, E., De Paola, F., Fontana, N., Giugni, M., & **D.A. Savić** (2016). Decision support system for the optimal design of district metered areas. *Journal of Hydroinformatics*, 18(1), 49-61.
 175. Kapelan, Z., **Savić, D.**, & Mahmoud, H. (2017). A Response Methodology for Reducing Impacts of Failure Events in Water Distribution Networks. *Procedia Engineering*, 186, 218-227.
 176. Marques, J., Cunha, M., & **Savić, D.** (2017). Ranking Alternatives for the Flexible Phased Design of Water Distribution Networks. *Procedia Engineering*, 186, 567-575.
 177. Sophocleous, S., **Savić, D.**, Kapelan, Z., & Giustolisi, O. (2017). A two-stage calibration for detection of leakage hotspots in a real water distribution network. *Procedia Engineering*, 186, 168-176.
 178. Morosini, A. F., Caruso, O., Costanzo, F., & **Savić, D.** (2017). Emergency Management of Water Distribution Systems: The Nodal Demand Control. *Procedia Engineering*, 186, 428-435.
 179. Morley, M. S., Khoury, M., & **Savić, D.** (2017). Serious Game Approach to Water Distribution System Design and Rehabilitation Problems. *Procedia Engineering*, 186, 76-83.

180. Wa'el A, H., Memon, F. A., & **Savić, D.** (2017). An integrated model to evaluate water-energy-food nexus at a household scale. *Environmental Modelling & Software*, 93, 366-380.
181. Mala-Jetmarova, H., Sultanova, N., & **Savić, D.** (2017). Lost in optimisation of water distribution systems? A literature review of system operation. *Environmental Modelling & Software*, 93, 209-254.
182. Mahmoud, H. A., **Savić, D.**, & Kapelan, Z. (2017). New Pressure-Driven Approach for Modeling Water Distribution Networks. *Journal of Water Resources Planning and Management*, 143(8), 04017031.
183. Ward, B., Smith, D., **Savić, D.**, Roebuck, J., & Collingbourne, J. (2017). Optimized Investment Planning for High-Volume Low-Value Buried Infrastructure Assets. *Journal of Pipeline Systems Engineering and Practice*, 8(3), 04017007.
184. Wang, Q., **Savić, D.**, & Kapelan, Z. (2017). GALAXY: A new hybrid MOEA for the optimal design of Water Distribution Systems. *Water Resources Research*, 53(3), 1997-2015.
185. Ward, B., Selby, A., Gee, S., & **Savić, D.** (2017). Deterioration modelling of small-diameter water pipes under limited data availability. *Urban Water Journal*, 14(7), 743-749.
186. Marques, J., Cunha, M., **Savić, D.**, & Giustolisi, O. (2017). Water Network Design Using a Multiobjective Real Options Framework. *Journal of Optimization*, <https://doi.org/10.1155/2017/4373952>.
187. Creaco, E., Pezzinga, G., & **Savić, D.** (2017). On the choice of the demand and hydraulic modeling approach to WDN real-time simulation. *Water Resources Research*, 53(7), 6159-6177.
188. Wa'el A, H., Memon, F. A., & **Savić, D.** (2018). A risk-based assessment of the household water-energy-food nexus under the impact of seasonal variability. *Journal of Cleaner Production*, 171, 1275-1289.
189. Laureano-Rosario, A.E., Duncan, A.P., Mendez-Lazaro, P.A., Garcia-Rejon, J.E., Gomez-Carro, S., Farfan-Ale, J., **Savić, D.** and Muller-Karger, F.E. (2018). Application of Artificial Neural Networks for Dengue Fever Outbreak Predictions in the Northwest Coast of Yucatan, Mexico and San Juan, Puerto Rico. *Tropical Medicine and Infectious Disease*, 3(1), 5.
190. Li, K., Chen, R., Savic, D. and Yao, X., 2018. Interactive Decomposition Multi-Objective Optimization via Progressively Learned Value Functions. *IEEE Transactions on Fuzzy Systems*, 27(5), pp.849-860.
191. Di Nardo, A., Di Natale, M., Giudicianni, C., Santonastaso, G. F. & **Savić, D.** (2017). Simplified Approach to Water Distribution System Management via Identification of a Primary Network. *Journal of Water Resources Planning and Management*, 144(2), 04017089.
192. Lu, Q., Chang, N. B., Joyce, J., Chen, A. S., **Savić, D.**, Djordjevic, S., & Fu, G. (2017). Exploring the potential climate change impact on urban growth in London by a cellular automata-based Markov chain model. *Computers, Environment and Urban Systems*, 68, pp.121-132.
193. Tricarico, C., Morley, M.S., Gargano, R., Kapelan, Z., **Savić, D.**, Santopietro, S., Granata, F. and de Marinis, G., 2018. Optimal energy recovery by means of pumps as turbines (PATs) for improved WDS management. *Water Science and Technology: Water Supply*, 18 (4), 1365-1374.
194. Webber, J.L., Gibson, M.J., Chen, A.S., **Savić, D.**, Fu, G. and Butler, D., 2018. Rapid assessment of surface-water flood-management options in urban catchments. *Urban Water Journal*, 15(3), pp.210-217.
195. Díaz, S., Mínguez, R., González, J. and **Savić, D.**, 2018. Explicit expressions for state estimation sensitivity analysis in water systems. *Journal of Water Resources Planning and Management*, 144(4), p.06018001.
196. Sušnik, J., Chew, C., Domingo, X., Mereu, S., Trabucco, A., Evans, B., Vamvakieridou-Lyroudia, L., **Savić, D.**, Lapidou, C. and Brouwer, F., 2018. Multi-stakeholder development of a serious game to explore the water-energy-food-land-climate nexus: The SIM4NEXUS approach. *Water*, 10(2), p.139.
197. León-Celi, C.F., Iglesias-Rey, P.L., Martínez-Solano, F.J. and **Savić, D.**, 2018. Operation of Multiple Pumped-Water Sources with No Storage. *Journal of Water Resources Planning and Management*, 144(9), p.04018050.
198. Mahmoud, H.A., Kapelan, Z. and **Savić, D.**, 2018. Real-time operational response methodology

- for reducing failure impacts in water distribution systems. *Journal of Water Resources Planning and Management*, 144(7), p.04018029.
199. Wang, Q., Zhou, Q., Lei, X. and **Savić, D.**, 2018. Comparison of Multiobjective Optimization Methods Applied to Urban Drainage Adaptation Problems. *Journal of Water Resources Planning and Management*, 144(11), p.04018070.
 200. Wang, Y., Chen, A.S., Fu, G., Djordjević, S., Zhang, C. and **Savić, D.**, 2018. An integrated framework for high-resolution urban flood modelling considering multiple information sources and urban features. *Environmental modelling & software*, 107, pp.85-95.
 201. Mala-Jetmarova, H., Sultanova, N. and **Savić, D.**, 2018. Lost in optimisation of water distribution systems? A literature review of system design. *Water*, 10(3), p.307.
 202. Stewart, R.A., Nguyen, K., Beal, C., Zhang, H., Sahin, O., Bertone, E., Vieira, A.S., Castelletti, A., Cominola, A., Giuliani, M. and Giurco, D., Blumensteing, M., Turner, A., Liu, A., Kenway, S., **Savić, D.**, Makropoulos, C. and Kossieris, P., 2018. Integrated intelligent water-energy metering systems and informatics: Visioning a digital multi-utility service provider. *Environmental Modelling & Software*, 105, pp.94-117.
 203. Laureano-Rosario, A.E., Duncan, A.P., Symonds, E.M., **Savić, D.** and Muller-Karger, F.E., 2018. Predicting culturable enterococci exceedances at escambron beach, San Juan, Puerto Rico using satellite remote sensing and artificial neural networks. *Journal of Water and Health*, 17 (1): 137-148.
 204. Saldarriaga, J., Bohorquez, J., Celeita, D., Vega, L., Paez, D., **Savić, D.**, Dandy, G., Filion, Y., Grayman, W. and Kapelan, Z., 2019. Battle of the water networks district metered areas. *Journal of Water Resources Planning and Management*, 145(4), p.04019002.
 205. Zheng, F., Tao, R., Maier, H.R., See, L., **Savić, D.**, Zhang, T., Chen, Q., Assumpção, T.H., Yang, P., Heidari, B. and Rieckermann, J., 2018. Crowdsourcing Methods for Data Collection in Geophysics: State of the Art, Issues, and Future Directions. *Reviews of Geophysics*, 56(4), pp.698-740.
 206. Khoury, M., Gibson, M.J., **Savić, D.**, Chen, A.S., Vamvakieridou-Lyroudia, L., Langford, H. and Wigley, S., 2018. A Serious Game Designed to Explore and Understand the Complexities of Flood Mitigation Options in Urban–Rural Catchments. *Water*, 10(12), p.1885.
 207. Marques, J., Cunha, M. and **Savić, D.**, 2018. Many-objective optimization model for the flexible design of water distribution networks. *Journal of environmental management*, 226, pp.308-319.
 208. Sophocleous, S., **Savić, D.** and Kapelan, Z., 2019. Leak Localization in a Real Water Distribution Network Based on Search-Space Reduction. *Journal of Water Resources Planning and Management*, 145(7), p.04019024.
 209. Cunha, M., Marques, J., Creaco, E. and **Savić, D.**, 2019. A Dynamic Adaptive Approach for Water Distribution Network Design. *Journal of Water Resources Planning and Management*, 145(7), p.04019026.
 210. Kossieris, P., Tsoukalas, I., Makropoulos, C. and **Savić, D.**, 2019. Simulating marginal and dependence behaviour of water demand processes at any fine time scale. *Water*, 11(5), p.885.
 211. Wang, Q., Wang, L., Huang, W., Wang, Z., Liu, S. and **Savić, D.**, 2019. Parameterization of NSGA-II for the Optimal Design of Water Distribution Systems. *Water*, 11(5), p.971.
 212. Sayers, W., **Savić, D.** and Kapelan, Z., 2019. Performance of LEMMO with artificial neural networks for water systems optimisation. *Urban Water Journal*, 16(1), pp.1-12.
 213. Makropoulos, C. and **Savić, D.**, 2019. Urban Hydroinformatics: Past, Present and Future. *Water*, 11(10), p.1959.
 214. Liu, H., Zhu, Y., Pei, S., **Savić, D.**, Fu, G., Zhang, C., Yuan, Y. and Zhang, J., 2019. Flow regime identification for air valves failure evaluation in water pipelines using pressure data. *Water research*, 165, p.115002.
 215. Zhang, Q., Zheng, F., Kapelan, Z., **Savić, D.**, He, G. and Ma, Y., 2020. Assessing the global resilience of water quality sensor placement strategies within water distribution systems. *Water Research*, 172, p.115527.
 216. Vamvakieridou-Lyroudia, L.S., Chen, A.S., Khoury, M., Gibson, M.J., Kostaridis, A., Stewart, D., Wood, M., Djordjevic, S. and **Savić, D.** 2020. Assessing and visualising hazard impacts to en-

- hance the resilience of Critical Infrastructures to urban flooding. *Science of The Total Environment*, 707, p.136078.
217. Gibson, M.J., Chen, A.S., Khoury, M., Vamvakieridou-Lyroudia, L.S., Stewart, D., Wood, M., **Savić, D.** and Djordjević, S., 2020. Case study of the cascading effects on critical infrastructure in Torbay coastal/pluvial flooding with climate change and 3D visualisation. *Journal of Hydroinformatics*, 22(1), pp.77-92.
 218. Visanji, Z., Sadr, S.M., Johns, M.B., **Savić, D.** and Memon, F.A., 2020. Optimising wastewater treatment solutions for the removal of contaminants of emerging concern (CECs): a case study for application in India. *Journal of Hydroinformatics*, 22(1), pp.93-110.
 219. Sitzenfrey, R., Wang, Q., Kapelan, Z. and **Savić, D.**, 2020. Using complex network analysis for optimization of water distribution networks. *Water Resources Research*, 56(8), p.e2020WR027929.
 220. Paez, D., Fillion, Y., Castro-Gama, M., Quintiliani, C., Santopietro, S., Sweetapple, C., Meng, F., Farmani, R., Fu, G., Butler, D., Zhang, Q., et al., 2020. Battle of Postdisaster Response and Restoration. *Journal of Water Resources Planning and Management*, 146(8), p.04020067.
 221. Beuken, R., Eijkman, J., **Savić, D.**, Hummelen, A. and Blokker, M., 2020. Twenty years of asset management research for Dutch drinking water utilities. *Water Supply*. <https://doi.org/10.2166/ws.2020.179>.
 222. Cunha, M., Marques, J. and **Savić, D.**, 2020. A Flexible Approach for the Reinforcement of Water Networks Using Multi-Criteria Decision Analysis. *Water Resources Management*, pp.1-22.
 223. Morley, M. and **Savić, D.**, 2020. Water Resource Systems Analysis for Water Scarcity Management: The Thames Water Case Study. *Water*, 12(6), p.1761.
 224. Elsayed, H., Djordjević, S., **Savić, D.**, Tsoukalas, I. and Makropoulos, C., 2020. The Nile Water-Food-Energy Nexus under Uncertainty: Impacts of the Grand Ethiopian Renaissance Dam. *Journal of Water Resources Planning and Management*, 146(11), p.04020085.
 225. Jia, Y., Zheng, F., Zhang, Q., Duan, H.F., **Savić, D.** and Kapelan, Z., 2021. Foul sewer model development using geotagged information and smart water meter data. *Water Research*, 204, p.117594.
 226. **Savić, D.**, 2021. Digital water developments and lessons learned from automation in the car and aircraft industries. *Engineering*, (in press).
 227. Jia, Y., Zheng, F., Maier, H.R., Ostfeld, A., Creaco, E., **Savić, D.**, Langeveld, J. and Kapelan, Z., 2021. Water quality modelling in sewer networks: review and future research directions. *Water research*, p.117419.
 228. Wagener, T., **Savić, D.**, Butler, D., Ahmadian, R., Arnot, T., Dawes, J., Djordjevic, S., Falconer, R., Farmani, R., Ford, D. and Hofman, J., 2021. Hydroinformatics education—the Water Informatics in Science and Engineering (WISE) Centre for Doctoral Training. *Hydrology and Earth System Sciences*, 25(5), pp.2721-2738.
 229. Wang, Q., Guan, M., Huang, W., Wang, L., Wang, Z., Liu, S. and **Savić, D.**, 2021. Visualisation of the combinatorial effects within evolutionary algorithms: the compass plot. *Journal of Hydroinformatics*, 23(3), pp.517-528.
 230. Delpasand, M., Fallah-Mehdipour, E., Azizpour, M., Jalali, M., Safavi, H.R., Saghafian, B., Loáiciga, H.A., Babel, M.S., **Savić, D.** and Bozorg-Haddad, O., 2021. Forensic engineering analysis applied to flood control. *Journal of Hydrology*, 594, p.125961.
 231. **Savić, D.**, 2021. Digital water developments and lessons learned from automation in the car and aircraft industries. *Engineering* (in press).
 232. Zhang, Q., Zheng, F., Jia, Y., **Savić, D.** and Kapelan, Z., 2021. Real-time foul sewer hydraulic modelling driven by water consumption data from water distribution systems. *Water Research*, 188, p.116544.
 233. Jia, Y., Zheng, F., Maier, H.R., Ostfeld, A., Creaco, E., **Savić, D.**, Langeveld, J. and Kapelan, Z., 2021. Water quality modeling in sewer networks: Review and future research directions. *Water research*, 202, p.117419.
 234. Jia, Y., Zheng, F., Zhang, Q., Duan, H.F., **Savić, D.** and Kapelan, Z., 2021. Foul sewer model development using geotagged information and smart water meter data. *Water Re-*

search, 204, p.117594.

235. Maroufpoor, S., Bozorg-Haddad, O., Maroufpoor, E., Gerbens-Leenes, P.W., Loáiciga, H.A., **Savić, D.** and Singh, V.P., 2021. Optimal virtual water flows for improved food security in water-scarce countries. *Nature Scientific Reports*, 11(1), pp.1-18.
236. Elsayed, H., Djordjevic, S., **Savić, D.**, Tsoukalas, I. and Makropoulos, C., 2022. Water-food-energy nexus for transboundary cooperation in Eastern Africa. *Water Supply* (in press).

PUBLICATIONS – Books and Chapters in Books

1. **Savić, D.A.** and G.A. Walters (eds.), (1999) *Water Industry Systems: modelling and optimization applications* (Vol. 1), Water Engineering Management Series, Research Studies Press, Baldock, Hertfordshire, England.
2. **Savić, D.A.** and G.A. Walters (eds.), (1999) *Water Industry Systems: modelling and optimization applications* (Vol. 2), Water Engineering Management Series, Research Studies Press, Baldock, Hertfordshire, England.
3. Walters, G.A. and **Savić, D.A.** (eds), (2000) *Water Network Modelling for Optimal Design and Management*, CWS 2000, Proceedings of the Symposium “Water Network Modelling for Optimal Design and Management, 11-12 September, Centre for Water Systems, Exeter, UK, p. 261.
4. Walski, T., D. Chase and **Savić, D.A.** (2001) *Water Distribution Modeling*, Haestad Methods Press, Waterbury, Connecticut, USA, p 441, ISBN 0-9657580-4-4.
5. Marsalek J., Q. Rochfort and **Savić, D.A.** (2001) Chapter 2: Urban Water as a Part of Integrated Catchment Management, in *Frontiers in Urban Water Management: Deadlock or Hope*, Maksimovic, C. and J.A. Tejada-Guilbert, IWA Publishing, London, UK, ISBN: 1900222760.
6. Skipworth, P., M. Engelhardt, A. Cashman, **Savić, D.A.**, A.J. Saul and G.A. Walters (2002) *Whole life costing for Water Distribution Network Management*, Thomas Telford Ltd, London, UK, p. 203 ISBN 0-7277-3166-1.
7. Snyder, J.K., A. Deb, F. Grablutz, S. McCammon, W. Grayman, H. K. Rosenthal, **Savić, D.A.** (2002) *Impacts of Fire-Flow on Distribution System Water Quality, Design, and Operations*, American Water Works Association, p. 175, ISBN: 1583212566.
8. Walski, T., D.V. Chase, **Savić, D.A.**, W.M. Grayman, S. Beckwith and E. Koelle (2003) *Advanced Water Distribution Modeling and Management*, Haestad Methods Press, Waterbury, Connecticut, USA, p. 751, ISBN: 0971414122.
9. Walters, G.A., **Savić, D.A.**, Khu, S.T. and R. King (eds.), (2004), *Decision Support in the Water Industry Under Conditions of Uncertainty*, Proceedings of the Research Network Seminar, 24-25 March, Centre for Water Systems, Exeter, UK, p. 164, ISBN 0-9539140-1-1.
10. **Savić, D.A.** and S.T. Khu (2005) *Encyclopedia of Hydrological Sciences*, Chapter on Evolutionary Computing in Hydrological Sciences, John Wiley and Sons, Vol. 1, Part 2, pp. 331-348, ISBN: 0-471-49103-9.
11. Vamvakeridou-Lyroudia, L.S. and **Savić, D.A.** (2006), Chapter on *Fuzzy Logic*, in *Hydroinformatics: Data Integrative Approaches in Computation, Analysis, and Modeling*, CRC Press, Taylor & Francis Group, Boca Raton, FL, p. 455-475.
12. **Savić, D.A.**, Bertoni, J.C., Mariño, M.A. and Savenije, H.H.G. (eds.), (2005), *Sustainable Water Management Solutions for Large Cities*, IAHS Publication 293, ISSN 0144-7815.
13. **Savić, D.A.**, Walters, G.A., King, R. and Khu, S.-T., eds. (2005), *Water Management for the 21st Century*, Proc. of the Eight Int. Conf. on Computing and Control for the Water Industry, CCWI2005, Exeter, UK. Vols 1&2, ISBN 0-9539140-2-X.
14. Joksimovic, D. and **Savić D.A.** (2007) Cost Management and Optimisation, Chapter 3 in *Water Reuse System Management Manual – AQUAREC*, Edited by D. Bixio and T. Wintgens, Office for Official Publications of the European Communities, Luxembourg.
15. di Pierro, F., Khu, S.T. and **Savić, D.A.** (2008): Many-Objective Evolutionary Optimisation, in Juan R. Rabuñal, Julián Dorado and Alejandro Pazos (eds), *Encyclopaedia of Artificial Intelligence*, Idea Group Publishing.
16. Schutze, M., Kapelan, Z., da Conceição Cunha, M., Bertelsen, D., **Savić, D.A.** and Nekrep, M. (2008), “Modelling and Decision Support”, Section 3.4 in book “Proactive Crisis Management of Urban Infrastructure” edited by J. Røstum, *COST Office*.
17. **Savić, D.A.** (2008) Global and Evolutionary Optimization for Water Management Problems, in Abrahart, R.J., See, L.M. and Solomatine, D.P. (eds) *Practical Hydroinformatics – Computa-*

PUBLICATIONS – Books and Chapters in Books

- tional Intelligence and Technological Developments and Water Applications, Springer Publishing, pp. 231-244.
18. Khu, S.T., **Savić, D.A.** and Kapelan, Z. (2008) Evolutionary-based Meta-modelling: The Relevance of Using Approximate Models in Hydroinformatics, in Abrahart, R.J., See, L.M. and Solomatine, D.P. (eds) Practical Hydroinformatics – Computational Intelligence and Technological Developments and Water Applications, Springer Publishing, pp. 275-290.
 19. Farmani, R., **Savić, D.A.**, Henriksen, H.J., Molina, J.L., Giordano, R. and Bromley, J. (2009) Evolutionary Bayesian belief networks for participatory water resources management under uncertainty, to appear in the Handbook of Research on Hydroinformatics: Technologies, Theories and applications, IGI Global Publishers, USA.
 20. Djordjević, S., Vojinović, Z., Dawson, R. and **Savić, D.A.** (2009) Chapter 10: Flood modelling in urban areas, to appear in: Applied Uncertainty Analysis for Flood Risk Management, Ed. by K. Beven and J. Hall, Imperial College Press and World Scientific, London.
 21. Hydroinformatics in hydrology, hydrogeology and water resources Cluckie, I., Chen, Y, Babovic, V., Konikow, L., Mynett, A., Demuth, S. and **Savić, D.A.** (2009), IAHS Publications, p. 528.
 22. Speight, V., N. Khanal, **Savić, D.A.**, Z. Kapelan, P. Jonkerouw and M. Agbodo (2009), Guidelines for Developing, Calibrating and Using Hydraulic Models, Water Research Foundation, Denver, CO, p. 163.
 23. **Savić, D.A.** and J. Banyard (Eds.) (2011) Water Distribution Systems, ICE Publications, London.
 24. **Savić, D.A.** and Z. Kapelan (2011) Chapter 9: Water Distribution Systems, to appear in: Urban Hydroinformatics, Price, R. and Z. Vojinovic, IWA Publishing.
 25. Beal, S, Grimshaw, D., Haywood Smith, B., Marshallsay, D., Pearson, D., **Savić, D.A.**, Tooms, S., Trow, S. (2016) Achieving Zero Leakage By 2050: Water Accounting And Quantification Methods, UK Water Industry Research Ltd., London, UK.

Over 300 conference publications and reports have also been co-authored by Prof. Savić. The list is available on request.

RESEARCH FUNDING (ACADEMIC)

Leadership and contributions to successful research projects demonstrate the capability to secure and effectively manage grant and contract funding. Recipient of over **£5M** in research funding over the last 5 years. Current research projects are funded by the European Commission, the Engineering and Physical Sciences Research Council (EPSRC), the Natural Environmental Research Council (NERC), the British Council, Royal Society and the Innovate UK (TSB). Industrial support for his research has also been high, with major research contracts from the water industry. The following are research grants secured since the appointment at Exeter (only Exeter's share of the funding is reported):

€10,000,000	European Research Council	Smart Water Futures: Designing the Next Generation of Urban Drinking Water Systems, Synergy Grant (<i>Principal Investigator</i>)
2021-2027		
€210,000	European Commission	Aqua3S, Enhancing Standardisation strategies to integrate innovative technologies for Safety and Security in existing water networks (<i>Principal Investigator</i>)
2019-2022		
€200,000	European Commission	Fiware4Water, FIWARE for the Next Generation Internet Services for the WATER sector (<i>Principal Investigator</i>)
2019-2022		
€390,000	European Commission	NEXTGEN, Towards a NEXT GENERATION of water systems and services for the Circular Economy (<i>Principal Investigator</i>)
2018-2022		
€440,000	European Commission	LOTUS, LOW-cost innovative Technology for water quality monitoring and water resources management for Urban and rural water Systems in India (<i>Principal Investigator</i>)
2018-2022		
£150,000	Innovate UK/ EPSRC/ Artesia Consulting	Development of a Tactical Leakage Control for the detection and repair of distribution and trunk mains leakage (<i>Principal Investigator</i>)
2018-2020		
€450,000	European Commission	RECONNECT, Regenerating ECOSystems with Nature-based solutions for hydro-meteorological risk rEDuCTION (<i>Co-Investigator at Exeter</i>)
2018-2023		
£70,000	Royal Academy of Engineering	Solving Urban Flood Challenges in China (<i>Co-Investigator at Exeter</i>)
2018-2020		
£110,000	British Council Newton Fund	Development of a Novel Standalone Solar-Driven Agriculture Greenhouse Desalination System That Grows its Energy and Irrigation Water (<i>Co-Investigator at Exeter</i>)
2018-2020		
£700,000	EPSRC	Human-Computer Optimisation for Water Systems Planning and Management (<i>Principal Investigator</i>)
2017-2020		
£60,000	NERC	Assessment of potential for large scale implementation of sustainable drainage systems in the South West – part of South West Partnership for Environment & Economic Prosperity (SWEEP) (<i>Co-Investigator at Exeter</i>)
2017-2020		

RESEARCH FUNDING (ACADEMIC)

£30,000	Royal Academy of Engineering 2017-2020	RAENG Visiting Professor Award – Ruth Allen (<i>Principal Investigator</i>)
€700,000	European Commission H2020 2016-2020	SIM4NEXUS, Sustainable Integrated Management FOR the NEXUS of water-land-food-energy-climate for a resource-efficient Europe (<i>Principal Investigator at Exeter</i>)
£165,000	NERC 2016-2019	Coupled Human And Natural Systems Environment (CHANSE) for water management under uncertainty in the Indo-Gangetic Plain (<i>Co-Investigator at Exeter</i>)
€525,000	European Commission H2020 2016-2020	RESCCUE, RESilience to cope with Climate Change in Urban arEas – a multisectorial approach focusing on water (<i>Co-Investigator at Exeter</i>)
£390,000	EPSRC 2016-2018	Modelling supply chain optimisation in the food and beverages industry: Helping SMEs in South West England work towards the circular economy (<i>Co-Investigator at Exeter</i>)
£100,000	NERC 2016-2019	TENDERLY: Towards END-to End flood forecasting and a tool for Real-time catchment susceptibility (<i>Co-Investigator at Exeter</i>)
€715,000	European Commission H2020 2015-2018	A panEuropean framework for strengthening Critical Infrastructure resilience to climate change EU-CIRCLE (<i>Principal Investigator at Exeter</i>)
£150,000	Global Innovation Initiative (British Council) 2015-2017	Flood impact assessment in mega cities under urban sprawl and climate change – collaboration with China and USA (<i>Principal Investigator</i>)
€170,000	European Commission H2020 2015-2017	Water Innovation through Dissemination Exploitation of Smart Technologies (WIDEST – CSA) (<i>Principal Investigator at Exeter</i>)
£50,000	Bristol Water 2015-2019	PhD project on optimised asset management in water distribution systems (<i>Principal Investigator</i>).
£50,000	RPS 2015-2019	PhD project on leakage management in water distribution systems (<i>Principal Investigator</i>).
£250,000	EPSRC 2015-2017	The Nexus Game – Serious Game for the Study of the Water-Food-Energy Nexus (<i>Principal Investigator</i>)
£140,000	TSB/EPSRC 2014-2017	KTP with ICS Consulting to develop a fast 2D flood modelling software (<i>Principal Investigator</i>)
£12,000	Royal Society; National Natural Sci-	Urban flood model development based on physical experimental simulations

RESEARCH FUNDING (ACADEMIC)

	ence Foundation of China 2015-2017	(Co-Investigator)
£12,000	Royal Society; Ministry of Science and Technology, Taiwan 2015-2017	Real time flash flood forecasts with nowcasting rainfall from radar observations (Co-Investigator)
£1,900,000	EPSRC 2014-2022	Centre for Doctoral Training in Water Informatics: Science and Engineering (WISE), £11.95M total funding (Centre Director and Principal Investigator)
£48,000	Seven Trent Water & WITConsult 2014-2019	EngD project on Next Generation Tools for Water Distribution System Modelling (Principal Investigator).
£12,000	Royal Society; Ministry of Science and Technology, Taiwan 2014-2016	Development of real-time flash flood mapping and early warning system (Co-Investigator)
£700,000	EPSRC 2014-2022	Centre for Doctoral Training in Engineering for the Water Sector (STREAM IDC), (Principal Investigator at Exeter)
£190,000	NERC 2013-2017	Susceptibility of catchments to INTense RAInfall and flooding (SINATRA), (Co-Investigator)
£36,000	Department of Business, Innovation and Skills 2013-2014	Sino-UK Higher Education Research Partnerships for PhD Studies – with Tsinghua University, (Principal Investigator).
€692,000	European Commission FP7 2012-2015	iWIDGET: Improved Water efficiency through ICT technologies for integrated supply-Demand side management, €3.5M total funding (Project Coordinator and Principal Investigator at Exeter)
£257,000	EPSRC 2012-2015	SEQuence-Analysis Based Hyperheuristics (SEQAH) for Real-World Optimisation Problems (Co-Investigator)
£1,126,600	EPSRC 2012-2015	Optimal Design of Very Large Tidal Stream Farms: for Shallow Estuarine Applications (Co-Investigator)
€250,000	European Commission FP7 2012-2016	WATER4INDIA: Smart, Cost-effective Solutions for Water Treatment and Monitoring in Small Communities in India (Co-Investigator)
€323,000	European Commission FP7 2012-2016	SARASWATI: Supporting consolidation, replication and up-scaling of sustainable wastewater treatment, reclamation and reuse technologies for India (Co-Investigator)
€20,000	European Commis-	@qua: Innovation Network for Water Efficiency (Princi-

RESEARCH FUNDING (ACADEMIC)

	sion FP7 2011-2013	<i>pal Investigator at Exeter)</i>
£216,000	TSB/EPSRC/ United Utilities plc, 2011-2014	KTP project: Burst detection in water distribution systems (<i>Co-Investigator</i>)
£60,000	Env. Agency and South West Water 2011-2014	Predicting Event Driven Bacterial Concentrations in Tidal Waters (<i>Principal Investigator</i>)
£48,000	AECOM UK 2011-2015	EngD project on Integrated urban water and wastewater asset management (<i>Principal Investigator</i>).
£131,000	TSB/EPSRC/Yorkshire Water 2011-2013	KTP project: Improved modelling for real-time failure management in YWS water distribution systems (<i>Principal Investigator</i>)
€500,000	European Commission FP7 2011-2014	TRUST: Transitions to the Urban Water Services of Tomorrow, ENV.2010.3.1.1-1 (<i>Co-Investigator</i>)
£60,000	Micro Drainage Ltd. 2010-2015	EngD project on Machine Intelligence Methods for Optimized Design of Urban Drainage Systems (<i>Principal Investigator</i>)
£163,000	TSB/EPSRC/Yorkshire Water 2010-2012	KTP project: Integrated decision support system for real-time failure management in all YWS water distribution systems (<i>Co-Investigator</i>).
£428,000	EPSRC 2010-2013	Simplified Dual-Drainage Modelling for Flood Risk Assessment in Urban Areas (<i>Principal Investigator</i>)
€672,000	European Commission FP7 2010-2014	PREPARED – “Enabling Change” Integrated Project, ENV.2009.3.1.1.1: Adaptation of water supply and sanitation systems to cope with climate change (<i>Principal Investigator at Exeter</i>)
€390,000	European Commission FP7 2010-2013	WASSERMED - FP7-ENV-2009-1, Climate Induced Changes on the Hydrology of Mediterranean Basins: Reducing Uncertainty and Quantifying Risk through an Integrated Monitoring and Modelling System (<i>Principal Investigator at Exeter</i>)
£40,000	HR Wallingford 2009-2014	EngD project on Artificial Intelligence Techniques for Flood Risk Management in Urban Areas (<i>Principal Investigator</i>).
£1,300,000	EPSRC 2009-2018	STREAM, Industrial Doctorate Centre for the Water Sector (<i>Principal Investigator at Exeter</i>)
£174,000	EPSRC 2008-2010	A Risk-Based Design of Water Distribution Systems under Uncertainty (<i>Co-investigator</i>)
£124,080	Technology Strategy Board	Knowledge Transfer Partnership with Harmonic Ltd (<i>Co-investigator</i>)

RESEARCH FUNDING (ACADEMIC)

£293,000	2008-2010 EPSRC	Flood Risk Management Consortium (FRMRC) Phase 2 (<i>Co-investigator</i>)
£76,000	2007-2011 British Council and DIFID	Capacity Building for Urban Water Demand Manage- ment (<i>Co-investigator</i>)
£645,650	2007-2010 EPSRC	Delivering Sustainable Water Systems by Optimising Existing Infrastructure via Improved Knowledge, Under- standing and Technology – Project Neptune EP/E003192/1 (<i>Principal investigator at Exeter</i>)
€312,000	2006-2009 European Commis- sion FP6	Programme “New and Emerging Science and Technolo- gy”: Integrative Systems and the Boundary Problem ISBP (<i>Co-investigator</i>)
£3,226	1/10-30/11/06 Royal Society	Shot Visit grant: Professor Suiqing Liu - Tongji University, China (<i>Principal Investigator</i>)
£19,389	2005-2006 EPSRC	Travel grant: UK-China visits (<i>Co-Investigator</i>)
£444,992	2005-2010 EPSRC	2 nd EPSRC Platform Grant for the Centre for Water Sys- tems GR/T26054 (<i>Principal Investigator</i>)
€207,200	2005-2009 European Commis- sion FP6	NeWater, New approaches to adaptive water manage- ment under uncertainty (<i>Principal Investigator at Exeter</i>)
€246,884	2005-2009 European Commis- sion FP6	AquaStress, Mitigation of water stress through new ap- proaches to integrated management, technical and insti- tutional instruments (<i>Principal Investigator at Exeter</i>)
£167,410	2005-2007 EPSRC	Flood Risk Management Research Consortium, FRMRC, subcontract to Sheffield University (<i>Principal Investigator at Exeter</i>)
£92,050	2005-2007 EPSRC	Pollutants in the Urban Environment (PUrE): Risk and Uncertainty Analysis for the PUrE Framework (<i>Principal Investigator at Exeter</i>)
£185,392	2004-2007 DTI/EPSRC and South-West Water	KTP with SWW: A methodology for overall performance assessment and stable serviceability profile at minimum cost (whole life cost) for small waste-water catchments (<i>Principal Investigator</i>)
£13,140	2003-2004 EPSRC	Adaptable Urban Drainage – Addressing Changes in In- tensity, Occurrence and Uncertainty of Stormwater (AUDACIOUS), subcontract to Imperial College (<i>Principal Investigator at Exeter</i>)
£280,802	2004-2007 EPSRC	Consortium for Decision Support (CoDES): Scoping Study and Plus Project with Water Consortium (<i>Principal Investigator at Exeter</i>)

RESEARCH FUNDING (ACADEMIC)

£108,131	EPSRC 2003-2005	Water Cycle Management for New Development WaND – Advanced Decision Support Toolbox (Principal Investigator at Exeter)
€154,886	European Commission FP5 2003-2006	Integrated Concepts for Reuse of Upgraded Wastewater, Aquarec (Principal Investigator at Exeter)
€154,681	European Commission FP5 2003-2006	Time-Geographical Approaches to Emergence and Sustainable Societies, TiGrESS (Principal Investigator at Exeter)
£47,457	EPSRC 2002-2003	RAIS: Development and Application of Inverse Transient Analysis Software (Principal Investigator)
£144,581	EPSRC 2003-2005	A Whole-Life Costing Approach to Sewerage (Principal Investigator)
£427,418	EPSRC 2001-2005	EPSRC Platform Grant for the Centre for Water Systems (Principal Investigator)
£61,533	EPSRC 2001-2004	EPSRC “Network for advanced computer technology for underground infrastructure”, ACTUI (Co-investigator)
£19,207	Leverhulme Trust 2001-2002	Inverse Transient Analysis in Pressurised Pipe Networks – Visiting Fellow Grant (Principal Investigator)
£254,994	EPSRC 2000-2005	EPSRC Advanced Research Fellowship "Evolutionary Methods for Risk Optimisation of Strategic Water Supply Investment Schemes" (Principal Investigator)
£143,551	EPSRC 1999-2002	Inverse Transient Analysis in Pipe Networks for Leakage Detection, Quantification and Roughness Calibration (Principal Investigator)
£29,000	Royal Mail 1999-2000	Data Mining Techniques for Risk Assessment – continuation (Principal Investigator)
£131,906	EPSRC 1999-2002	Whole-Life Costing Approach to Distribution Network Management (Principal Investigator)
£5,000	Optimal Solutions Ltd 1999	PhD studentship (industrial top up), Mr Werner de Schaetzen (Principal Investigator)
£4,500	Optimal Solutions Ltd 1999	Travel and Subsistence grant for a Honorary Research Assistant, Mr Zoran Kapelan (Principal Investigator)
£1,800	The British Council 1999-2002	Academic Link Interchange Scheme between the Faculty of Civil Engineering and Geodesy, University of Ljubljana, Slovenia and University of Exeter

RESEARCH FUNDING (ACADEMIC)

		<i>(Principal Investigator)</i>
£135,772	EPSRC 1998-2001	Development of Genetic Programming Techniques for Water Industry Applications <i>(Principal Investigator)</i>
£76,904	Teaching Company/DTI 1998-2000	Development of Software for Optimal Design and Management of Storm Sewer Systems (<i>Co-Investigator</i>)
£3,250	Optimal Solutions Ltd 1998-1999	PhD studentship (industrial top up), Mark Morley (<i>Principal Investigator</i>)
£32,500	Royal Mail 1998-1999	Data Mining Techniques for Risk Assessment (Principal Investigator)
£82,010	DTI/ Ewan Associates Ltd. 1997-1999	A Teaching Company Scheme project: Software Development for the Water Industry (<i>Co-Investigator</i>)
£27,998	Environment Agency 1997-1998	Development of Optimised Conjunctive Control Rules <i>(Principal Investigator)</i>
£140,000	Ewan Associates Ltd, 1997-2002	Software Development for Water Distribution Networks <i>(Co-investigator)</i>
£2,094	EPSRC 1996	Travel grant to Australia <i>(Principal Investigator)</i>
£500	The British Council 1996	Travel grant to visit the University of Adelaide and University of Central Queensland (Australia) <i>(Principal Investigator)</i>
£400	The British Council 1996	Travel grant to visit the University of British Columbia (Canada) <i>(Principal Investigator)</i>

EXTERNAL EXAMINING

Undergraduate Courses	<ul style="list-style-type: none"> ▪ Civil Engineering, University of Sheffield (2010-2013) ▪ Civil and Structural Engineering, University of Sheffield (2010-2013)
PhD. degree (by research)	<ul style="list-style-type: none"> ▪ Francois J-C. Bouchart (1996) The University of Central Queensland (Australia) ▪ Khalid Karim (1997), The University of Central Queensland (Australia) ▪ B. Berghout (1997) University of Newcastle (Australia) ▪ Laurence J. Murphy (1997) University of Adelaide (Australia) ▪ Mark Engelhardt (1999) University of Adelaide (Australia) ▪ Vinodkumar M. Rana (2001) Indian Inst. of Technology Bombay (India) ▪ Suharyanto (2001) Swinburne Univ. of Technology, Victoria (Australia) ▪ Nirmala Dinesh (2002) University of Adelaide (UK) ▪ James E. Huntingdon (2002) University of Sheffield (UK) ▪ Alan Weston (2002) Lancaster University (UK) ▪ Kok-Tsen Lau (2002) Imperial College, London (UK) ▪ Christos K. Makropoulos (2003) Imperial College, London (UK) ▪ Michael G. Murray (2003) University of Newcastle (UK) ▪ Paresh Chandra Deka (2003) Indian Inst. of Techn., Guwahati (India) ▪ Ian S.J. Packham (2004) University of Plymouth (UK) ▪ Andrew F. Colombo (2004) University of Toronto (Canada) ▪ Doan C. Dung (2004) National University of Singapore (Singapore) ▪ Tim Watson (2005) University of Auckland (New Zealand) ▪ Bong Seog Jung (2005) University of Toronto (Canada) ▪ Melanie Bauer (2006) University of Hanover (Germany) ▪ Jimin Yan (2006) Loughborough University (UK) ▪ Mohamed Hayuti (2007) University of Liverpool (UK) ▪ Tianjun Fang (2007) University of New South Wales (Australia) ▪ Ali Nazemi (2008) University of Birmingham (UK) ▪ Manuel López-Ibáñez (2009) Edinburgh Napier University (UK) ▪ Mirjam Blokker (2010) TU Delft (The Netherlands) ▪ Ben Farley (2011) University of Sheffield (UK) ▪ Jia Liu (2011) University of Bristol (UK) ▪ Rashid Rehan (2011) University of Waterloo (Canada) ▪ Ben Farley (2011) University of Sheffield (UK) ▪ Nemanja Trifunovic (2012) TU Delft/UNESCO-IHE (The Netherlands) ▪ Barreto Cordero (2012) TU Delft/UNESCO-IHE (The Netherlands) ▪ Ignaz Worm (2012) TU Delft (The Netherlands) ▪ Jotham Sempewo (2013) University of Birmingham (UK) ▪ Arlex Torres (2013) TU Delft/UNESCO-IHE (The Netherlands) ▪ Usha Manohar (2014) Indian Institute of Science, Bangalore (India) ▪ Morten Borup (2014) TU Denmark (Denmark) ▪ Christopher Sampson (2015) University of Bristol (UK) ▪ Godfrey Chagwiza (2015) National University of Sci. and Technology (Zimbabwe) ▪ Alvar Escrivá-Bou (2015) Technical University of Valencia (Spain) ▪ Amin Gondijoost (2016) University of Waterloo (Canada) ▪ Dagmara Starczewska (2017) University of Sheffield (UK) ▪ Vorawit Meesuk (2017) Delft University of Technology (The Netherlands) ▪ Nico-Ben de Villiers (2017) Stellenbosch University (South Africa)

POST-DOCTORAL RESEARCHERS

(*Bold: First or sole supervisor)

Michael Gibson	2D flood modelling tool	Research Fellow (2016-present)
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Matthew Barrie Johns	Human-Computer Optimisation for Water Systems Planning and Management (HOWS)	Research Fellow (2017- present)
Dr Lydia Vamvakieridou-Lyroudia	Water distribution system optimisation, system dynamics applications	Research Fellow (2004-present)
Dr Albert Chan	Dual drainage system modelling	Research Fellow (2006-2020)
Barry Evans	A panEuropean framework for strengthening Critical Infrastructure resilience to climate change EU-CIRCLE	Research Fellow (2016-present)
Dr David Walker	iWIDGET – Water distribution system DSS for smart metering applications	Research Fellow (2014-2018)
Dr Mehdy Khoury	Serious Game Development for Water Management	Research Fellow (2016-present)
Dr Mark Morley	TRUST - DSS development and applications; Serious Game development	Research Fellow (2005-2010; 2011-2016)
Dr Enrico Creaco	iWIDGET – Water distribution system demand modelling	Research Fellow (2014-2015)
Dr Andrew Duncan	DSS for water treatment technology selection in India	Research Fellow (2014-2016)
Dr Seyed Sadr	DSS for wastewater treatment technology selection in India	Research Fellow (2014-2017)
Dr Michele Guidolin	Water distribution system modelling, graphical processing unit computations	Research Fellow (2009-2015)
Dr Janez Sušnik	Impact of climate change on water resources security	Research Fellow (2010-2014)
Dr Adeel Hashmi	iWIDGET – Decision Support System development	Research Fellow (May – Sep 2014)
Dr Nemanja Branislavljevic	PREPARED – Data assimilation for real-time modelling of urban water systems	Research Fellow (2012-2013)
Dr Talib Butt	PREPARED – Risk assessment and attribution in urban areas	Research Fellow (2012-2013)
Dr Bidur Ghimire	Simplified dual-drainage modelling for urban flood analyses	Research Fellow (2010-2013)
Dr Chris Hutton	PREPARED - Real-time urban water system management	Research Fellow (2011-2014)

Dr Pavel Bu-rovskiy	NEPTUNE – Object-oriented water distribution system modelling	Research Fellow (2009-2011)
Dr Patrick Reed	Many-objective optimisation in water resources management	Visiting Scholar, Penn State University, USA (Jul – Nov 2009)
Dr Josef Bicik	Real-time decision support systems in water distribution management	KTP Associate (2011-2012)
Dr Kun Yang	Inverse analysis methods for water distribution systems	Visiting Research Fellow, Harbin Institute of Technology (Nov 2010 – Oct 2011)
Dr Inmaculada Pulido-Calvo	Heuristic Modelling of the Water Resources Management in the Guadalquivir River Basin, Southern Spain	Visiting Research Fellow, Huelva University, Spain (Mar – Jul 2009)
Dr Raziye Farmani	Multibojective Optimisation of Pipe Networks and Bayesian Belief Networks development	Research Fellow (2002-2009)
Dr Haytham Awad	NEPTUNE - Pressure management and rezoning of water distribution systems	Research Fellow (2007-2009)
Dr Francesco di Pierro	TiGrESS - Decision support system for water supply design	Research Fellow (2006-2009)
Dr Darko Joksimovic	AquaRec - Decision support system for wastewater reuse	Research Fellow (2007-2008)
Dr Javier Burgete	Computational hydraulics applications	Visiting Research Fellow, Estación Experimental de Aula Dei, CSIC, Zaragoza, Spain (Apr – Sep 2008)
Dr Gianluca Dorini	Decision Support for Sewer Network Rehabilitation Using Whole-life Costing	Research Fellow (2007-2008)
Dr Daniele Laucelli	Artificial Intelligence techniques for management of water resources systems	Visiting Researcher, University of Bari, Italy (2007-2010)
Dr Ralph Olson	Bayesian-based Optimisation of Water Distribution Systems	Research Fellow (2006-2008)
Dr Ricardo Abadía Sanchez	Optimal discharge groups in irrigation branched network operating on rotation delivery	Visiting Research Fellow, Miguel Hernandez University, Alicante, Spain (Jul/Aug 2007)
Dr Slobodan Djordjevic	Sewer Systems Modelling for Whole-life asset management	Research Fellow (2002-2005)
Dr Zoran Kapelan	Risk and Uncertainty Decision Making, Inverse Transient Analysis in Pipe Networks	Research Fellow (2002-2005)

POST-DOCTORAL RESEARCHERS

(*Bold: First or sole supervisor)

Dr Artem Babayan	Robust Optimisation of Pipe Networks	Research Fellow (2002-2006)
Dr Cristiana Bragalli	Many-objective optimisation of water distribution systems	Visiting Research Fellow, University of Bologna, Italy (Mar/Jun 2002)
Prof. Marko Ivetic	Inverse Transient Analysis in Pressurised Pipe Networks	Visiting Research Fellow, University of Belgrade, Serbia (2001-2002)
Dr Edward Keedwell	Data Mining for Risk Assessment	Research Fellow 1998-2006
Dr Jim Davidson	Development of Genetic Programming Techniques for Water Industry Applications	Research Fellow (1998-2001)
Dr Roger King	Water systems management and KTP project development	Visiting Professor / Business Fellow 2002-2005

(*Bold: First or sole supervisor)

RESEARCH STUDENTS/ASSISTANTS

Lydia Tsiami	Water-Futures: Staged development of water distribution systems under deep uncertainty	PhD student, NTUA, Greece (2021-present)
Damian Staszek	Water supply demand balance modelling and resilience considerations	PhD student (2015-present)
Korinus Waimbo	Human development index in the Water-food-energy nexus	PhD student (2015-present)
Mohammed Younis	Remote sensing for calibration of urban drainage models	PhD student (2015-2018)
Josephine Ashe	Real-time water quality measurement and modelling	PhD student (2014-present)
Kossieris Panagiotis	Real-time customer water demand modelling	PhD student, National Technical University of Athens, Greece (2014-2017)
Abdiel Laureano-Rosario	Modelling outbreaks of waterborne diseases using remotely sensed data	PhD student, University of South Florida, Tampa, USA (2014-2017)
Sophocles Sophocleous	New generation models for water distribution systems	EngD (2014-2018)
Gerard Sanz	Leakage detection and demand calibration in water distribution networks	Visiting Research Assistant / PhD, Universitat Politècnica de Catalunya, Spain (Jul-Sep 2014)
Enzo Galdiero	Graph-theoretic approach to segmentation of water distribution systems	Visiting Research Assistant / PhD, University of Napoli, Italy (Apr-Nov 2014)
Irene Fernández	Design and operational optimisation	Visiting Research Assistant / PhD,

(*Bold: First or sole supervisor)

RESEARCH STUDENTS/ASSISTANTS

García	of irrigation systems	University of Cordoba, Spain (May – Jul 2014)
Giuseppe Imburgia	Water and energy nexus in UK water industry	Visiting Research Assistant, University of Bologna, Italy (Mar-May 2014)
Euijeong Lim	Economic Level of Leakage for Korean water distribution systems	MPhil (2013-present)
Herman Mahmoud	Real-time management of water distribution systems	PhD (2014-2018)
Wa'El Abdul-Bari Hussien	Water-food-energy modelling for the UK	PhD (2013-2017)
Valeria Puleo	Real-time optimal control of water distribution system	Visiting Research Assistant / PhD, University of Palermo, Italy (Oct 2012- Mar 2013)
Francesco Costanzo	Model Calibration as a Tool for Leakage Identification in WDS	Visiting Research Assistant / PhD, University of Calabria, Italy (2012-2013)
João Marques	Staged development of water distribution systems considering future uncertainties (Real Options approach)	Visiting Research Assistant / PhD, University of Coimbra, Portugal (Mar-May 2012)
Ben Daniel Ward	Integrated Asset Management Systems for Water Infrastructure	EngD (2011-2016)
Giada Ferrari	Graph-theoretic approach and engineering judgment for segmentation of water distribution systems	Visiting Research Assistant / PhD, Politecnico di Milano, Italy (2011-2012)
Michael Gibson	Artificial Intelligence Techniques and General Purpose Graphics Processing Units for fast flood simulation	PhD (2010-2016)
Dr David Walker	Development of a revised Run-off model for Wastewater Networks – UKWIR	Research Assistant (2013-2014)
Haixing Liu	Diameter-sensitive entropy as a reliability surrogate for water distribution system design optimisation	Visiting Research Assistant / PhD, Harbin Institute of Technology, China (Jan 2012 – Apr 2013)
Matthew Barrie Johns	Incorporating expert knowledge into evolutionary algorithms	PhD (2010-2017)
Dongwon Li	Water distribution system operational optimisation	PhD (2010-2012)
Qi Wang	Hybrid Optimisation Algorithms for Two-Objective Design of Water Distribution Systems	PhD (2010-2014)

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RESEARCH STUDENTS/ASSISTANTS

Jo-Fai Chow	Machine Intelligence Method for Optimized Design of Urban Drainage Systems	EngD (2010-2015)
Rebecca Austin	Simplified Sewer Flow Modelling	PhD (2010-2014)
Andrew Duncan	Machine Learning Methods in Water Engineering	PhD (2010-2015)
Antonino Fortunato	Selection of rehabilitation alternatives for water distribution systems under scarce data availability	Visiting Research Assistant, University of Palermo, Italy (2010-2011)
William Keith Sayers	Artificial Intelligence Techniques for Flood Risk Management in Urban Environments	EngD (2009-2016)
Kent McClymont	Multi-objective Hyper-heuristics for water systems optimisation	PhD (2009-2012)
Kyle Thompson	PREPARED – Software development for real-time water system management	Research Assistant (2010-2013)
Brian Harrold	Yorkshire Water KTP – Water distribution model calibration	KTP Associate (2011-2012)
Andreas Geiger	Cellular Automata systems for modelling of urban flooding	Visiting Research Assistant, University of Stuttgart, Germany (2008-2009)
Martin Weickgenannt	Constraint optimization of sensor locations for contaminant detection in water distribution networks	Visiting Research Assistant, University of Stuttgart, Germany (2008)
Tonino Liserra	Management of water losses in urban water systems	Visiting Research Assistant / PhD, University of Bologna (Apr – Jul 2008)
Michele Romano	Near Real-Time Detection and Approximate Location of Pipe Bursts and Other Events in WDS	PhD (2008-2012)
Angela Marchi	Learning Evolutionary Multi-objective Optimization for Water Distribution Systems	Visiting Research Assistant, University of Bologna, Italy (2007-2008)
Kourosh Behzadian	Stochastic Sampling Design using Multiobjective Genetic Algorithm and Adaptive Neural Network	Visiting Research Assistant / PhD, Amirkabir University of Technology, Iran (Mar – Jun 2007)
Josef Bicik	A Real-Time Decision Support System for Failure Management in Water Distribution Networks	Research Assistant/Fellow PhD (2007-2010)

(*Bold: First or sole supervisor)

RESEARCH STUDENTS/ASSISTANTS

Francesca Primativo	Contaminant diffusion in water distribution systems	Visiting Research Assistant / PhD, Technical University of Bari (2007-2010)
Julian Thornton	Leakage management of water distribution systems	MPhil (2008-2010)
Barry Evans	A multilayered approach to two-dimensional urban flood modelling	PhD (2007-2010)
Fu Sun	Modelling of water supply systems in China	Visiting Research Assistant / PhD, Tsinghua University, China (Aug-Oct 2007)
Pasquale Cutore	Probabilistic prediction of urban water consumption using the SCEM-UA algorithm	Visiting Research Assistant, University of Catania, Italy (2006)
Raido Puust	Leakage management methodologies	Visiting Research Assistant / PhD, University of Talin, Estonia (Jan – Aug 2006)
Sally Walters	KTP Associate, SWW, Risk-based management of small wastewater catchments	KTP Associate / MPhil (2004-2006)
Darko Joksimovic	Decision support system for wastewater reuse	PhD (2003-2007)
Gianluca Dorini	Decision Support for Sewer Network Rehabilitation Using Whole-life Costing	PhD (2003-2007)
Philip Jonkergouw	Early Detection of Contamination in Water Distribution Systems	PhD (2003-2007)
Lisa Murray	Rainfall forecasting	PhD (2004-2010)
Jorge Leandro	Dual-drainage system modelling	PhD (2005-2009)
Luigi Berardi	Optimization of management problem for complex water systems	Visiting Research Assistant / PhD (2005-2006)
Daniel Kozelj	Calibration of water distribution system models	Visiting Research Assistant, University of Ljubljana, Slovenia (Oct 2003-Jan 2004)
Francesco Pierro	Many-Objective Evolutionary Algorithms and Applications to Water Resources Engineering	PhD (2003-2006)
James Fullerton	A Simplified Modelling Approach for Storm Water Flow Optimisation	PhD (2000-2004)

(*Bold: First or sole supervisor)

RESEARCH STUDENTS/ASSISTANTS

Yang Liu	Hydrologic Model Calibration using Fast Hybrid Optimization	PhD (2002-2006)
Hugo Bartolín Ayala	New Ideas for Calibration of Water Distribution Systems	Visiting Research Associate, Tech- nical University of Valencia, Spain (Jun – Aug 2002)
Martin Parker	Genetic Algorithm Development for Sewer Network Optimisation	Teaching Company Associate 1998 – 2002
Carla Tricarico	A Rehabilitation Model for Water Distribution Systems	Visiting Research Associate/ PhD, University of Cassino, Italy (2003- 2005)
Angelo Doglioni	A Novel Hybrid Evolutionary Tech- nique for Environmental Hydraulic Modelling	Visiting Research Associate/ PhD, University of Basilicata, Italy (2000-2004)
Ivaltemir Barros Carrijo	Extraction of optimal operation rules for a water distribution system	Visiting Research Assistant / PhD, University of Sao Paulo, Sao Car- los (2000-2001)
Primoz Banovec	Integration of water resources data with standard classification systems	Visiting Research Assistant /PhD, University of Ljubljana (2000- 2001)
Tobias Maschler	Simplification of Water Supply Network Models through Linearisation	Visiting Research Assistant / MEng (Eur), University of Stuttgart, Germany (Mar – Aug 1999)
Florian Bessler	Data Mining for the Water Industry	Research Assistant (1999-2003)
Zoran Kapelán	Inverse Transient Analysis in Pipe Networks	PhD (1999-2002)
Zohra Bakkoury	Feasibility Assessment and Optimal Scheduling of Water Supply Projects	PhD part-time (1996-2002)
Jakobus van Zyl	A Methodology for Improved Opera- tional Optimization of Water Distribu- tion Systems	PhD (1998-2001)
Jenny Thorne	Development of Optimised Conjunc- tive Control Rules	Research Associate (1997-1998)
Werner de Schaetzen	Optimal Calibration and Sampling Design for Hydraulic Network Models	PhD (1997-2000)
Ariel Katz	Improvement of Chemical Plant Per- formance Using Neural Networks and Genetic Programming	PhD (1996-1999)
Mark Morley	Genetic Algorithms and GIS in water distribution systems management	PhD (1996-1999)