

CURRICULUM VITAE: ANDREA SULIS

A. PERSONAL HISTORY

Date and Place of Birth: May 4, 1976, Sorgono (NU), Italy
 Business Address: Center of Environmental Sciences (CINSA)
 University of Cagliari
 Via San Giorgio 12, 09124 Cagliari (CA), Italy
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B. EDUCATION

Master Degree, Hydraulic Engineering, University of Cagliari (Laurea Magna cum Laude – 110/100 e Lode),
 Thesis: *A water quality optimization modelling for complex water systems*, November 2002.

Ph.D., Water Resource Systems Analysis, University of Cagliari, Thesis: *A mixed optimization - simulation approach for complex water resource systems analysis*, February 2006.

C. PROFESSIONAL EXPERIENCE

SARAS S.p.A.

Senior Maritime Engineer, Consultancy, February 2019 – present.

University of Cagliari (Department of Land Engineering / Department of Civil and Environmental Engineering / Center of Environmental Sciences):

Research Associate, Water quality optimization in complex water systems, Prof. G.M. Sechi, February – August 2006.

Research Fellow, Grid computing approach for complex water system analysis, Prof. G.M. Sechi, August 2006 – February 2008.

Research Fellow, Water Resources System Planning, Prof. G.M. Sechi, March 2006 – February 2010.

Adjunct Professor in Coastal Dynamic and Protection, March 2010 – October 2012.

Assistant Professor in Coastal Dynamic and Protection and Maritime Engineering, November 2012 – November 2015.

University of Sassari (Department of Architecture, Design and Urban planning - DADU):

Adjunct Professor in Hydrogeology and Risk Management, October 2020 – present.

Cornell University (School of Civil and Environmental Engineering):

Visiting Scientist, Host Professor: D.P. Loucks, February – August 2007.

Danish Hydraulic Institute (Coastal Engineering Department):

Visiting, Dr. N. Dronen and R. Deigaard, November 2011.

D. MAIN TEACHING EXPERIENCE

Course of *Optimization and simulation techniques in water systems*, Graduate Program of Hydraulic Engineering (2006, 2008 Spring semesters, 20 hours), University of Cagliari (Teaching Assistant).

Course of *Simple Mathematical Approach to Manage Eutrophication Problem in Water Systems*, 6th Hydroaid Training Programme 2007 on Governance of Water Systems and Services (12 hours), Turin, Italy, 2007.

Course of *Maritime Engineering (Basic Principles of)*, Undergraduate Program of Civil Engineering (2009 Fall semester, 50 hours), University of Cagliari (Teaching Assistant).

Course of *Litoral Dynamic and Coastal Protection*, Graduate Program of Hydraulic Engineering and Environmental Engineering (2010 and 2011 Fall semesters, 60 hours), University of Cagliari.

Course of *Litoral Dynamic and Coastal Protection*, Graduate Program of Hydraulic Engineering (2012, 2013, 2014, 2015 Spring semesters, 60 hours), University of Cagliari.

Course of *Numerical Simulation in Maritime Engineering*, Graduate Program of Hydraulic Engineering (2014, 2015 Fall semesters, 30 hours), University of Cagliari.

Supervisor or co-supervisor of more than 40 Master Thesis at the University of Cagliari and University of Sassari in Coastal Engineering.

Course of *Hydrogeology and Risk Management*, Undergraduate Program of Urbanism (2020 and 2021 Fall semesters, 72 hours), University of Sassari.

Course of *Coastal Landscape Evolution (Project of Environment&Territory)*, Graduate Program (2021 Fall semesters, 33 hours), University of Sassari.

Course of *Introduction to Wave Energy Converters*, Undergraduate and Graduate Program of Urbanism (2022 Spring semester, 24 hours, free credits), University of Sassari.

Invited talk on *Performance Criteria of Generic Simulation Models in Complex Water Systems* (2 hours) at International Master Degree on Water management and governance, Mediterranean Agronomic Institute of Zaragoza (IAMZ), 2021.

E. GRANTS

Grant funded by the Sardinian Regional Government for the research project on *Development of a combined optimization-simulation approach for complex water system under drought conditions*. 2007.

Grant for appointment as Adjunct Assistant Professor funded by the Sardinian Regional Government under the Operative Programme of the European Social Fund (POR FSE Sardegna 2007-2013). 2010– 2012.

Who's Who in the World 2011 – 2012.

Grants funded by the University of Cagliari based on teaching and research quality indicators. 2012 – 2015.

F. SERVICE ACTIVITIES

I. Member of the IAHR Committee on Coastal and Maritime Hydraulics. 2020 – present.

Member of the Board of Directors of the International Modelling & Software Society. 2016 – 2018.

II. Member of Organizing Committee at the International Congress on Environmental Modelling and Software 2010: Modelling for Environment's Sake. July 5 - 8 2010, Ottawa, Ontario, Canada iEMSs 2010 (Ottawa, Canada).

Session Organizer at *S18 Environmental Impacts of Natural Offshore Obstacles*. International Congress on Environmental Modelling and Software 2010. July 5 - 8 2010, Ottawa, Ontario, Canada.

Invited Session Chair at *3I Session Engineering – Industrial*. 36th IAHR World Congress. 28 June – 3 July, 2015, The Hague, the Netherlands.

Technical reviewer of the 37th IAHR World Congress. Theme: Hydroinformatics / Computational Methods and Experimental Methods.

Session Organizer at *L12 Shared vision modeling for actual decisions in water resources management*. 21st International Congress on Modelling and Simulation (MODSIM2015). 29 November – 4 December, 2015, Broadbeach, Queensland, Australia.

Session Organizer and Chair at *Integrated Methods and Tool for Flood Risk and Water Supply Management*. Stream C: Integrated Social, Economic, Ecological, and Infrastructural Modeling. 9th International Congress on Environmental Modelling and Software. June 24 – 28, 2018, Fort Collins, Colorado, USA.

Session Organizer at *Integrated methods and tools for coastal and fluvial flood risk management*. Stream F: Environmental Impact of Climate Change, Environmental Pollution and other Anthropogenic Effects. 10th International Congress on Environmental Modelling and Software. July 6 – 10, 2020, Brussels, Belgium.

Invited Session Chair at *P4 Estuary and coastal environment and eco-hydraulics*. Coastlab2020. December 9-12, 2020, Zhoushan, China.

Session Organizer and Chair at *Understanding Hydroclimatological Extremes*. 24th International Congress on Modelling and Simulation (MODSIM2021). 28 November – 2 December 2021, Sydney, Australia.

Member of the Scientific Committee of the 4th International Workshop on Risk Design and Planning (CARE2022). June 8 – 11, 2022, Orosei, Italy.

Session Leader Organizer at *Planning for climate change in fragile coastal ecosystems*. Stream E: Solutions and application for environmental problems. iEMSs 2022. July 3 – 8, 2022, Brussels, Belgium.

Member of International Program Committee at Artificial Intelligence & Advanced Networking (AIAN22). 28 – 29 July 2022, Oxford, UK.

Member of the Scientific Committee of the 14th International Conference on Coasts, Ports and Marine Structures (ICOPMAS 2022). 31 October – 02 November 2022, Teheran, Iran.

- III.** Editorial Board Member of Journal of Water Resources and Ocean Science
 Editorial Board Member (Topical Advisory Panel) of Water
 Editorial Board Member of Journal of Modern Civil Engineering
 Editorial Board Member of Global Journal of Ecology
 Reviewer Board Member of Microorganisms
 Rosalind Member of London Journals Press

Article reviewer for the journals: Environmental Modelling & Software, Journal of Coastal Research, Geomorphology, Journal of Hydrology, Ocean Engineering, Water Resources Management, Water, Advances in Industrial Engineering and Management, Advances in Civil Engineering (editor), *Metodi del Territorio* (FrancoAngeli), International Journal of Disaster Risk Reduction.

G. SPONSORED RESEARCH PROJECTS

European Commission, SEDEMED (Drought and desertification in Mediterranean basins), INTERREG IIIB MEDOCC, Asse 4 - Ref. 2003-03-4.4-I-010), Role: Co-I. PI: Giovanni M. Sechi. 2004 – 2006.

Italian Minister of Research and University, PON-Cybersar (National Operation Programme Scientific Research, Technological Development, Higher Training) – Activity 11.2: High Performance in Data Process and Simulation, Role: Co-I. PI: Giovanni M. Sechi. 2007 – 2008.

Cagliari Harbour Authority, Measurement and analysis of ship generated waves in the commercial harbour of Cagliari, Role: Co-I. PI: Andrea Atzeni. 2009 – 2010.

Sardinian Regional Government, Hydrodynamic and geomorphology of Sardinian coasts, Regional Law 7/2007, Role: Co-I. PI: Andrea Atzeni. 2010 – 2012.

Sardinian Regional Government, Maritime Strategic Project 2007-2013 RES-MAR (Network for the Environment in the Maritime Space) – Action A “Coastal Erosion Monitoring”, Role: Member of the Scientific Committee. 2012-2013.

SARAS/SARLUX. Extreme Wave Analysis for Jetty Repair and Maintenance at SARAS Oil Refinery, Role: PI. 2014.

School of Civil and Environmental Engineering (CEE) Cornell University (NY). Scientific Agreement Department of Civil and Environmental Engineering (DICAAR) at University of Cagliari and CEE, prot. DICAAR n. 6240, Role: PI. From 2012.

Sardinian Hydrographic Basin Agency, Flood Risk Management Plan in Sardinia – Comparison between 1D and 2D models, Role: Co-I. PI: Giovanni M. Sechi. 2016 – 2017.

H. CONSULTING ASSIGNMENTS

Senior Engineer at the Center of Environmental Sciences (CINSA) for the “Design for Coastal Protection near the Esculapio Temple in Nora”. Client: Commission for the Architectural and Landscape Heritage for the Provinces of Cagliari and Oristano. December 2011 – September 2012.

Senior Consultant at the Sardinian Regional Government; Responsible for meteomarine study and project selection in the Sardinian Coastal Erosion Risk Plan (PO Fesr 2007-2013, OO 4.1.1) (1st classified in the candidate selection process for Senior Hydraulic Consultant; prot. n.22561 /rep. n.919; 05/10/2011), September 2012 – August 2013.

Senior Consultant at IDROTECH srl; Responsible for meteomarine and hydrodynamic study for “Marine and Coastal Engineering Works at Private Beach Villas Project Saadiyat Island- Abu Dhabi”. Client: Refik El – Khoury & Partners, November – December 2015.

Senior Maritime Engineer at Sering International LLC for Project Management and Design Review of Al Khaburah, Lima, Mirbat and Duqm Ports (Sultanate of Oman). Clients: Ministry of Agriculture and Fisheries & Special Economic Zone Authority at Duqm. December 2016 – February 2017.

Senior Consultant at the Department of Geology, University of Cagliari; Responsible for meteomarine study and development of wave-cliff interaction model. Consultancy under MAREGOT Project (2014 – 2010 Maritime INTERREG V-A Italy – France). September 2017 – April 2018.

Senior Consultant at the Department of Geology, University of Cagliari; Responsible for model development on *Posidonia oceanica* – wave motion in shallow waters. Consultancy under GIREPAM Project (2014 – 2010 Maritime INTERREG V-A Italy – France). July 2018 – January 2019.

Senior Consultant at the Center of Environmental Sciences (CINSA), University of Cagliari; Responsible for Generic Simulation Model Development and Application. Consultancy under the Sardinian Hydrographic Basin Agency – DICAAR Contract. March 2017 – present.

Senior Maritime Engineer at SARAS/SARTEC; Responsible for numerical simulations of harbour wave agitation using BW models. SARTEC contract. January – July 2018.

Senior Maritime Engineer at SARAS/SARTEC; Responsible for numerical simulations of wave and current in SARLUX harbour. SARTEC contract. January 2019 – December 2019.

I. PUBLICATIONS

Articles in Referred Journals

1. Sechi, G.M. and Sulis, A. (2007), Multi-reservoir system optimization using chlorophyll-a trophic indexes, *Water Resources Management*, 21(5), 849-860, ISSN 0920-4741.
2. Sechi, G.M. and Sulis, A. (2009), Dynamic attribution of water quality indexes in a multi-reservoir optimization model, *Desalination*, 237(1), ISSN 0011-9164.
3. Sulis, A. (2009), GRID computing approach for multireservoir operating rules with uncertainty, *Environmental Modelling & Software*, 24(7), 859-864, ISSN 1364-8152.
4. Sechi, G.M. and Sulis, A. (2009), Water system management through a mixed optimization-simulation approach, *Journal of Water Resources Planning and Management*, 135(3), 160-170, ISSN 0733-9496.
5. Atzeni, A., Pedone, C. and Sulis, A. (2009), Morfologia del Saliente di Is Morus – Pula (CA) e idrodinamica attorno allo scoglio antistante, *Studi Costieri*, 16, 73-88, ISSN 1129-8588 (In Italian).
6. Sechi, G.M. and Sulis, A. (2010), Drought mitigation using operative indicators in complex water systems, *Physics and Chemistry of the Earth*, 35(3-5), 195-203, ISSN 1474-7065.
7. Sulis, A., Buscarinu, P. and Sechi, G.M. (2011), Using reservoir trophic-state indexes in optimization modeling of water-resource systems, *Environmental Modelling & Software*, 26(6), 731-738, ISSN 1364-8152.
8. McIntosh, B.S., Ascough, J.C., Twery, M., Chew, J., Elmahdi, A., Haase, D., Harou, J.J., Hepting, D., Cuddy, S., Jakeman, A.J., Chen, S., Kassahun, A. S., Matthews, K., Merritt, W., Quinn, N.W.T., Rodriguez-Roda, I., Sieber, S., Stavenga, M., Sulis, A., Ticehurst, J., Volk, M., Wrobel, M., van Delden, H., El-Sawah, S., Rizzoli, A. and A. Voinov, (2011), Environmental decision support systems (EDSS) development – Challenges and best practices. *Environmental Modelling & Software*, 26 (12), 1389-1402, ISSN 1364-8152.

9. Atzeni, A. and Sulis, A. (2012), Field measurements of tug waves in the Cagliari Harbor, Italy, *Journal of Waterway, Port, Coastal, and Ocean Engineering*, 138(1), 72-76, ISSN 0733-950X.
10. Sulis, A. and Sechi, G.M. (2013), Comparison of generic simulation models for water resource systems. *Environmental Modelling & Software*, 40, 214-225, ISSN 1364-8152.
11. Sulis, A., Buscarinu, P., Soru, O. and Sechi, G.M. (2013), Trophic state and toxic cyanobacteria density in optimization modeling of multi-reservoir water resource systems. *Toxins*, 6(4), 1366-1384, ISSN 2072-6651.
12. Sulis, A. and Annis, A. (2014). Morphological response of a sandy shoreline to a natural obstacle at Sa Mesa Longa beach, Italy. *Coastal Engineering*, 84, 10-22, ISSN 0378-3839.
13. Sulis, A., (2016). An optimisation model for reservoir operation. *Water Management*. DOI: 10.1680/jwama.15.00048, ISSN 1741-7589.
14. Sulis, A., Balzano, A., Cabras, C., and Atzeni, A. (2017). On the applicability of empirical formulas for natural salients to Sardinia (Italy) beaches. *Geomorphology*, 286, 1-13, ISSN 0169-555X.
15. Sulis, A., Cozza, R., and Annis, A. (2017). Extreme wave analysis methods in the Gulf of Cagliari (South Sardinia, Italy). *Ocean & Coastal Management*, 140, 79-87, ISSN 0964-5691.
16. Sulis, A., (2017). Improved Implicit Stochastic Optimization technique systems under drought conditions: the case study of Agri-Sinni water system. *International Journal of River Basin Management*. DOI: 10.1080/15715124.2017.1378225, ISSN: 1571-5124.
17. Sulis, A., Frongia, S., Liberatore, S., Zucca, R. and Sechi, G.M. (2018). Combining water supply and flood control purposes in the Coghinas Basin (Sardinia, Italy). *International Journal of River Basin Management*. DOI: 10.1080/15715124.2018.1476366, ISSN: 1571-5124.
18. Sulis, A., (2018). Minor structures for the improvement of wave disturbance in a small harbor. *ACE – 9249407. Advances in Civil Engineering*. ISSN: 1687-8094.

Book Chapters

1. Begliutti, B., Buscarinu, P., Marras, G., Sechi, G.M. and Sulis, A. (2007), Reservoirs water-quality characterization for optimization modelling under drought conditions: Part I - Reservoirs trophic state characterization, Chapter 12, In: *Methods and Tools for Drought Analysis and Management*, Rossi, Vega and Bonaccorso (eds.), Springer, pp. 239-261, ISBN 978-1-4020-5923-0.
2. Sechi, G.M. and Sulis, A. (2007), Reservoirs water-quality characterization for optimization modelling under drought conditions: PART II - Water-quality optimization modelling, Chapter 13, In: *Methods and Tools for Drought Analysis and Management*, Rossi, Vega and Bonaccorso (eds.), Springer, pp. 263-273, ISBN 978-1-4020-5923-0.
3. Sechi, G.M. and Sulis, A. (2007), Mixed simulation-optimization technique for complex water resources systems analysis under drought conditions, Chapter 11, In *Methods and Tools for Drought Analysis and Management*, Rossi, Vega and Bonaccorso (eds.), Springer, pp. 217-237, ISBN 978-1-4020-5923-0.
4. Botti, P., Manca, A., Sechi, G.M., Sulis, A. and Zuddas, P. (2008), Pianificazione e gestione dei sistemi di risorse idriche: il caso del Flumendosa-Capidano, In: *Scienza delle decisioni in Italia: applicazioni della ricerca operativa a problemi aziendali*, Felici and Sciomachen (eds.), EGIC Genova, pp.63-74, ISBN 978-88-7544-150-0.
5. McIntosh, B.S., Giupponi, C., Voinov, A., Smith, C., Matthews, K.B., Monticino, M., Kolkman, M.J., Crossman, N., van Ittersum, M., Haase, D., Haase, A., Mysiak, J., Groot, J.C.J., Sieber, S., Verweij, P., Quinn, N., Waeger, P., Gaber, N., Hepting, D., Scholten, H., Sulis, A., van Delden, H., Gaddis, E. and Assaf, H. (2009), Bridging the gaps between design and use: developing tools to support environmental management and policy, In: *Environmental Modelling, Software and Decision Support (3): The State of the Art and New Perspective*, Jakeman, Voinov, Rizzoli and Chen (eds.), IDEA Book Series, Elsevier, pp. 33-48, ISBN-13 978-0-08-056886-7.
6. Assaf, H., van Beek, E., Borden, C., Gijssbers, P., Jolma, A., Kaden, S., Kaltofen, M., Labadie, J.W., Loucks, D.P., Quinn, N.W., Sieber, J., Sulis, A., Werick, W.J. and Wood, D.M. (2009), Generic Simulation Models for Facilitating Stakeholder Involvement in Water Resources Planning and Management: A Comparison, Evaluation, and Identification of Future Needs, In: *Environmental Modelling, Software and Decision Support (3): The State of the Art and New Perspective*, Jakeman, Voinov, Rizzoli and Chen (eds.), IDEA Book Series, Elsevier, pp. 229-246, ISBN-13 978-0-08-056886-7.

7. Sulis, A., Ardizzone, V., Giorgio, E. and Sechi, G.M. (2011), The porting of WARGI-DSS to Grid Computing Environment for Drought Plans in Complex Water Systems, In: *Advances in Grid Computing*, Constantinescu (ed.), INTECH, pp. 253-272, ISBN 978-953-307-301-9.
8. Deiana G., Melis M. T., Funedda A., Da Pelo S., Meloni M., Naitza L., Orrù P., Salvini R., Sulis A. (2019): Integrating remote sensing data for the assessments of coastal cliffs hazard: MAREGOT Project. AIT Series "Trends in earth observation - Earth observation advancements in a changing world". Chirici G. and Gianinetto M. (eds.), vol. 1, pp. 176-180, ISSN 2612-7148. ISBN 978-88-944687-1-7. DOI: 10.978.88944687/17.

Referred International Conference Proceedings

1. Manca, A., Sechi, G.M., Sulis, A. and Zuddas, P. (2004), Complex Water Resources System Optimization Tool Aided by Graphical Interface, *Proceedings of 6th International Conference on Hydroinformatics*, LLiong, Phoon and Babovic (eds.), World Scientific Publishing Company, pp. 1059-1066, ISBN 978-981-238-787-5.
2. Angioni, S., Sulis, A. and Triverio, A. (2004), An application tool for water resources management in a Sardinian basin, *Proceedings of IFAC Workshop on Modelling and Control for Participatory Planning and Managing Water Systems*, Venezia, Italy.
3. Sechi, G.M. and Sulis, A. (2005), A mixed optimization-simulation technique for complex water resource systems analysis, *Proceeding of Eighth Conference on CCWI*, Exeter, UK, ISBN 0-9539140-3-8.
4. Manca, A., Sechi, G.M., Sulis, A. and Zuddas, P. (2006), Scenario analysis in water resources management under data uncertainty, *Proceedings of the iEMSs Third Biennial Meeting: "Summit on Environmental Modelling and Software"*, Voinov, Jakeman and Rizzoli (eds.), International Environmental Modelling and Software Society, Burlington, Vermont, USA, ISBN 978-1-4243-0852-1.
5. Sechi, G.M. and Sulis, A. (2008), Operative indicators for drought mitigation tools in multireservoir systems, *Drought management: Scientific and technological innovations, Options Méditerranéennes, Serie A (80)*, Zaragoza, Spain, ISSN 1016-121-X ISBN 2-85352-390-X.
6. Sechi, G.M. and Sulis, A. (2008), Drought mitigation using operative indicators in complex water systems, *Proceedings of the iEMSs Fourth Biennial Meeting: "Summit on Environmental Modelling and Software"*, Sánchez-Marrè, Béjar, Comas, Rizzoli and Guariso (eds.), International Environmental Modelling and Software Society, Barcelona, Spain, ISBN 978-84-7653-074-0.
7. Atzeni, A. and Sulis, A. (2009), Morphology of the salient of Su Giudeu beach (Sardinia, Italy) and hydrodynamic along the shoreline, *Proceedings of 4th SCACR International Conference on Applied Coastal Research, IAHR Congress Proceedings*, Arcilla and Tomasicchio (eds.), Nuova BIOS, Barcelona, Spain, ISBN 978-88-6093-069-9.
8. Sulis, A., Ardizzone, V., Giorgio, E. and Sechi, G.M. (2009), The Porting of WARGI-DSS to GRID Environment for Planning and Management in Complex Water Systems, *Proceedings of the 33rd IAHR Congress: Water Engineering for a Sustainable Environment*, Vancouver, Canada, ISBN 978-90-78046-08-0.
9. Atzeni, A. and Sulis, A. (2009), Morphology of the salient of Su Tuerredda beach (Sardinia, Italy) and hydrodynamic along the shoreline, *Proceedings of 8th International Conference on the Mediterranean Coastal Environment - MEDCOAST 2009*, Sochi, Russia, ISBN 978-605-88990-2-5.
10. Sechi, G.M. and Sulis, A. (2010), PON CyberSar Project results on drought mitigation in complex water systems, *Proceedings of the Final Workshop of Grid Projects Funded by PON Ricerca 2000-2006 Avviso 1575*, Barbera, Iacono Manno and Fargetta (eds.), Consorzio COMETA, ISBN 978-88-95892-00-3.
11. Sechi, G.M. and Sulis, A. (2010), Intercomparison of Generic Simulation Models for Water Resource Systems, *Proceedings of the iEMSs Fifth Biennial Meeting: "Modelling for Environment's Sake"*, Swayne, Yang, Voinov, Rizzoli and Filatova (eds.), International Environmental Modelling and Software Society, Ottawa, Canada, ISBN 978-88-9035-741-1.
12. Sechi, G.M. and Sulis, A. (2011), Intercomparison of Generic Simulation Models for Multi-reservoir Water Resource Systems, *Proceedings of VI EWRA International Symposium: "Water Engineering and Management in a Changing Environment"*, Cancelliere and Rossi (eds.), European Water Resources Association, Catania, Italy, ISSN 2038-5854.
13. Sulis, A. (2014). Improved Implicit Stochastic Optimization technique for multireservoir water systems under drought conditions. *Proceedings - 7th International Congress on Environmental Modelling and Software, Bold Visions for Environmental Modelling, iEMSs 2014*, 3, 1551-1558, June 15 – 19, 2014, San Diego, California, USA, ISBN 978-88-9035-744-2.

14. Sulis, A., Annis, A. and Cozza, R. (2015). Comparison of extreme wave analysis methods for jetty design and maintenance. E-Proceedings of the 36th IAHR World Congress. 28 June – 3 July, 2015, The Hague, the Netherlands.
15. Sulis, A. and Asproni, S. (2015). Modelling storm-induced beach evolution at La Playa beach, Sardinia, IT. Proceedings of SCACR2015 – International Short Course/Conference on Applied Coastal Research. 28 September – 1 October, 2015, Florence, Italy.
16. Sechi, G.M., Liberatore, S., Sulis, A. and Zucca, R. (2015). Combining water supply and flood mitigation requirements in multipurpose-reservoir optimization. Proceedings of the 21st International Congress on Modelling and Simulation (MODSIM2015). 29 November – 4 December, 2015, Broadbeach, Queensland, Australia.
17. Sulis, A., Cuccaro, M. and Cuffaro M. (2017). A preventive intervention strategy for coastal erosion at Al Khaburah (Oman). Proceedings of the Thirteenth MEDCOAST Congress on Coastal and Marine Sciences, Engineering, Management & Conservation (MEDCOAST17). 31 October – 04 November, 2017, Mellieha, Malta. **EXT abs???**

18. IAHR2022

Referred Italian Conference Proceedings

1. Sechi, G.M., Sulis, A. and Zuddas, P. (2004), Una tecnica mista di ottimizzazione-simulazione per l'analisi di sistemi idrici complessi, Atti del XXIX Convegno di Idraulica e Costruzioni Idrauliche, Vol.3, Trento, Italy, ISBN 88-7740-382-9.
2. Sechi, G.M. and Sulis, A. (2005), Un modello di ottimizzazione quali-quantitativa della gestione di sistemi idrici complessi, Atti del I Convegno Nazionale di Idraulica Urbana, Sorrento, Italy, ISBN 88-900282-4-6.
3. Sechi, G.M. and Sulis, A. (2006), Analisi dei sistemi idrici complessi in condizioni di scarsità di risorsa, Atti del XXX Convegno di Idraulica e Costruzioni Idrauliche, Roma, Italy, ISBN 978-88-87242-81-2.
4. Sechi, G.M. and Sulis, A. (2007), Reservoir stored water characterization for optimization modelling of complex water resources systems, In: Approvvigionamento e distribuzione idrica: esperienze, ricerca ed innovazione. Memorie del Convegno di Ferrara, Franchini and Bertola (eds.), Morlacchi Editore, pp. 91-102, ISBN 978-88-6074-147-9.
5. Sechi, G.M. and Sulis, A. (2008), Una tecnica mista di ottimizzazione e simulazione per la pianificazione delle azioni di mitigazione della siccità: applicazione al sistema Agri-Sinni, Atti del XXXI Convegno di Idraulica e Costruzioni Idrauliche, Perugia, Italy, ISBN 978-88-6074-220-9.
6. Sechi, G.M. and Sulis, A. (2008), Un approccio GRID per la mitigazione della siccità in sistema idrici complessi. Proceedings of the Italian E-Science 2008, Napoli, Italy.
7. Sechi, G.M. and Sulis, A. (2010), Analisi di sistemi idrici elementari con modelli di simulazione, Atti del XXXII Convegno di Idraulica e Costruzioni Idrauliche, Palermo, Italy, ISBN 978-88-9038-952-8.
8. Sulis, A., Piroddi, V. and Balzano, A. (2012), Analisi morfodinamica di una spiaggia con fondo ad erodibilità eterogenea, XXXIII Convegno di Idraulica e Costruzioni Idrauliche, Brescia, Italy, Settembre 2012, ISBN: 978-88-97181-18-7.

Abstract and Extended Abstract in International and Italian Conferences

1. Sulis, A. (2004), Il DSS WARGI nella pianificazione e gestione dei sistemi idrici complessi, Atti del XXIX Convegno di Idraulica e Costruzioni Idrauliche, Vol.4, Trento, Italy, ISBN 88-7740-382-9.
2. Sechi, G.M. and Sulis, A. (2008), Some Thoughts on Success in Applying Models to Water Resource Systems, Proceedings of the iEMSs Fourth Biennial Meeting: "Summit on Environmental Modelling and Software", Sánchez-Marrè, Béjar, Comas, Rizzoli and Guariso (eds.), International Environmental Modelling and Software Society, Barcelona, Spain, ISBN 978-84-7653-074-0.
3. Sechi, G.M. and Sulis, A. (2008), WARGI: a Tool for Water System Drought Mitigation within EU and National Projects, Proceedings of the iEMSs Fourth Biennial Meeting: "Summit on Environmental Modelling and Software", Sánchez-Marrè, Béjar, Comas, Rizzoli and Guariso (eds.), International Environmental Modelling and Software Society, Barcelona, Spain, ISBN 978-84-7653-074-0.

4. Atzeni, A. and Sulis, A. (2008), Morphological impact of submerged natural reef along Is Morus, Sardinia: insight and preliminary results, Proceedings of 9th International Conference LITTORAL 2008: “A Changing Coast: Challenge for the Environmental Policies”, Venice, Italy, ISBN 88-89405-04-X.
5. Orrù, P., Atzeni, A., Puliga, G. and Sulis, A. (2009), Vulnerability and holocene evolution of the Cagliari coastal plain, geomorphological processes connected to extreme meteorological events. Abstract. II Workshop VECTOR. Rome, Italy.
6. Sulis, A. (2012), On the applicability of empirical formulae for salients to South Sardinia (Italy) beaches, Abstracts. International Conference Littoral 2012: Coasts of Tomorrow. Belpaeme, McMeel, Vanagt and Mees (eds.), VLIZ Special Publication (61), 210 pp., Oostende, Belgium, ISSN 1377-0950.
7. Balzano, A., Sulis, A., Pedone, C. and Ventroni, M. (2013). Mappatura della pericolosità da inondazione costiera nella Regione Sardegna. Proceedings of Italian DHI Conference 2013, 09 – 10 October, 2013. Turin, Italy.
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9. Sulis, A. (2016). Resilience of Punta s’Aliga Barrier Beach to Storm Impacts. Proceedings of the 8th International Congress on Environmental Modelling and Software, Sauvage, S., Sánchez-Pérez, J.M., Rizzoli, A.E. (eds.), July 10-14, Toulouse, France. ISBN978-88-9035-745-9.
10. Funedda, A., Deiana, G., Da Pelo, S., Ghiglieri, G., Melis, M.T., Meloni, M.A., Orrù, P. and Sulis, A., (2018). L’evoluzione delle coste alte. Atti dell’Evento Regionale Gestione e Tutela delle Coste – Progetto MAREGOT. May 17, 2018. Cagliari, Italy.
11. Sulis, A., Liberatore, S. and Sechi, G.M. (2018). Uncertainty in mapping flood hazard in Coghinas basin. Proceedings - 9th International Congress on Environmental Modelling and Software, Modelling for sustainable food-energy-water systems, iEMSs 2018, June 24 – 28, 2018, Fort Collins, Colorado, USA.
12. Da Pelo, S., Funedda, A., Melis, M.T., Orrù, P.E., Deiana, G., Meloni, M.A., Naitza, L. and Sulis, A. (2019). Integrated geological approach to assess rocky coasts prone to landslide. Geophysical Research Abstract, Vol.21, EGU2019-18094, April 07 – 12 May, 2019. Wien, Austria.
13. Sulis, A., Ruiu, A., Zucca, R. and Sechi, G.M. (2019). Sustainability index assessment in the Flumendosa-Campidano water system management (Sardinia, Italy). Proceedings of the 11th World Congress on Water Resources and Environment (EWRA 2019), Managing water resources for a sustainable future, June 25 – 29, Madrid, Spain.
14. Sulis, A., Ruiu, A., and Sechi, G.M. (2020). Probabilistic approach for drought mitigation measures in the Sardinian water systems. Proceedings - 10th International Congress on Environmental Modelling and Software, Modelling for environmental sustainability, iEMSs 2020, September 14 – 18, 2020, Brussel, Belgium.
15. Sulis, A., Deiana, G., Meloni, M., Melis, M.T., Da Pelo, S., Orrù, P., and Funedda, A., (2020). Defining wave action influence on hard rocky cliff stability. Proceedings - 10th International Congress on Environmental Modelling and Software, Modelling for environmental sustainability, iEMSs 2020, September 14 – 18, 2020, Brussel, Belgium.
16. Cozza, R., Spano, U., and Sulis, A., (2020). Wave monitoring and extreme analysis for sustainable planning and design at Sarlux Port. Proceedings - 10th International Congress on Environmental Modelling and Software, Modelling for environmental sustainability, iEMSs 2020, September 14 – 18, 2020, Brussel, Belgium.
17. Sulis, A., Serreli, S., and Biddau, G.M., (2021). Wave height trend and implications for South Sardinia coastal planning. Climate Exp0 “A fusion of Science and Policy”, Adaptation and Resilience stream, May 17 – 21, 2021, Virtual Conference.

18. SIU 2022

Scientific Reports and Communications

1. Sulis, A. and Loucks, D.P. (2007), SWQ Model: Documentation and User’s Manual, pp. 41, Cornell University, Ithaca, NY-USA.
2. Sulis, A. (2019). Project Spotlight: Evaluation of resilience of Punta S’Aliga barrier beach (Sardinia, Italy). March Bulletin of U.S. Coastal Research Program.

J. COMPUTER KNOWLEDGE

Operating System: Linux (Ubuntu, Suse), Microsoft Windows

Programming Language: C++ (e.g.: the simulation model and the mixed optimization-simulation approach for complex water system developed in the Ph.D. Course are written in C++), Visual Basic

Specialized Software: Coastal Engineering: MIKE 21 Suite, XBeach, Delft3D suite; Water System Analysis: MIKE BASIN, WEAP, RIBASIM, MODSIM, AQUATOOL; Others: CAD, ArcGIS, Matlab

K. LANGUAGE SPOKEN

Italian (native speaker), English (fluent), French (scholastic)

L. PROFESSIONAL MEMBERSHIPS

Member of the International Environmental Modelling & Software Society (iEMSS).

Member of the International Association for Hydro-Environment Engineering and Research (IAHR).

Member of the Professional Engineer Association in Cagliari.

M. INTERESTS AND ACHIEVEMENTS

Advanced Open Water Diver, PADI. From 2016.

Driving Licence, Category B. From 1994.

First Certified Level Sommelier, Italian Association Sommelier. From 2014.

N. REFERENCES

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Cagliari, 14 March 2022