

CURRICULUM VITAE BOYAN SAVOV

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1. Family name: Savov

First names: Boyan Veselinov
 Passport holder: Bulgarian

Residence: Bulgaria
 Education: Higher

| Institution (Date from - Date to) | Degree(s) or Diploma(s) obtained: |
|--|---|
| International Institute for Hydraulic, Infrastructural and Environmental Engineering (UNESCO-IHE), Delft, The Netherlands, 1993-1994 | Post-graduate diploma in Hydraulic/Coastal Engineering |
| University of Architecture, Civil Engineering and Geodesy, Sofia, Bulgaria, 1975-1980 | MSc in Hydraulic Engineering |
| Technical High School in Civil Engineering | Civil Engineering Technician |

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

| Language | Reading/ Listening | Speaking | Writing |
|-----------|-----------------------|----------|---------|
| Bulgarian | 1 | 1 | 1 |
| English | 1 | 1 | 1 |
| Russian | 1 | 1 | 1 |
| Romanian | 4 | - | - |
| Dutch | 5 | - | - |

Other skills: Computer skills: General: MS Office, MS Project, AutoCAD, CorelDraw; Photoshop. Structural: PILE, SPW, Hydrographic: HYPACK Max, SURFER, DrDEPTH; Coastal/Port: UNIBEST, BREAKWAT, CRESS; Environmental: EchoWatch, AquaPro, and more, Other skils: Skipper 40 GT; Experienced in providing Practical Training in Port and Coastal Engineering: Co-organizer of Field Work with TU Delft, mentor of trainees, Examiner on the M.Sc. Programme in Coastal Engineering at TU-Delft. Field measurements and Monitoring: Wave/current Measurements, Turbidity Monitoring

7. Professional experience

| From - to | Location | Company | Position | Description |
|------------------------|---------------------|--|---|---|
| 08/2019- Present | Varna, Bulgaria | B.V.S. Consult Ltd. | Contractor | Manufacturing and deployment of HERMES-AL1 Oceanographic station at the Adriatic Coast of Albania |
| 07/2019- Present | Varna, Bulgaria | B.V.S. Consult Ltd. | Contractor | Simulation of wave penetration in the St. Elias Marina, Varna, Bulgaria based on the use of HERMES BG-1 wave data |
| 03/2019- 06/2020 | Varna, Bulgaria | B.V.S. Consult Ltd. | Contractor | Manufacturing, deployment, and operation of HERMES-BG1 Oceanographic station |
| 08/2018- 12/2018 | Varna, Bulgaria | Association of Bulgarian Black Sea Communities (UBSLA) | Senior Consultant, HERMES Advisory Board Member | HERMES - A HarmonizEdfRamework to Mitigate coastal EroSion promoting ICZM protocol implementation (EU-funded project) Designing of an oceanographic station comprising real-time wave, current, tide, turbidity measurement, and time-laps visualising |
| 07/2018- present | White Lagoon | B.V.S. Consult Ltd. | Project Leader | Conceptual design of artificial reef, laguna beach, and marina by implementing innovative approach in waterfront development (in cooperation with TU-Delft) |
| 04/2018- .07/2018 | Albena, Bulgaria | B.V.S. Consult Ltd. | Project Leader | Designing a multifunctional pile structure- recreational jetty with sea water pool, café, and mooring facility. Innovative energy dissipation screen between the piles. |
| 10/01/2018 -ongoing | Varna, Bulgaria | B.V.S. Consult Ltd. | Project Leader | Design and construct of a submerged breakwater and artificial headlands at "The Bay". Proposed a New Approach to Climate Adaptation Planning of Waterfront Development |
| 01/08/2017 Present | Varna, Bulgaria | B.V.S. Consult Ltd. | Owner's Adviser | Providing expertise on rehabilitation of a marina, waterfront development, and beach expansion at Sts. Konstantin and Elena Resort near Varna |

| 01/01/2017 01/08/2017 | Burgas, Bulgaria | BMF-Port Burgas | Employer's Representative | Head of Project Implementation Unit (The Engineer). Overall Supervision (FIDIC) on a port expansion for specialised heavy cargo transhipment. Construction of caissons, dolphins, jetty, storage area for heavy cargo (2000 t/unit), dredging, and rock works. |
|-------------------------------|--------------------------|---|---|---|
| 20/07/2016 31/12/2016 | Varna, Bulgaria | B.V.S. Consult Ltd. | Leader of in-situ pre-and post- construction study | Verification of the Functional Efficiency of Submerged Breakwater by Field Measurements (<i>Presented at ICCE 2016 Antalia, December 19, 2016</i>). |
| 06/04/2016 - 20/07/2016 | Acajutla, El Salvador | Geotron Caribbean b.v. | Project Manager | Offshore investigation for a new LNG terminal at Acajutla, El Salvador. |
| 01/2016- 06/04/2016 | Varna, Bulgaria | B.V.S. Consult Ltd. | Freelance consultant | Working on reuse of concrete blocks from demolished buildings in rehabilitation of coastal structures. |
| 09/2014- 11/2015 | Constanta, Romania | Van Oord Dredging and Marine Contractors | Environmental Manager | Management of the Environmental Department at the Constanta Branch Office. Liaising with the Environmental Authority with respect to issuing all environmental permits for Beach rehabilitation Project (value 100 mill EUR). Setting-up environmental monitoring program, execution of the program (turbidity and current measurements, etc.). Supervising subcontracted parties. |
| 04/2013- 09/2014 | Constanta, Romania | Van Oord Dredging and Marine Contractors | Engineering Manager | Managing a team of engineers to assure the engineering support to the work departments for two projects "Constanta Port, Northern Breakwater Extension" (value 150 mill EUR) and "Rehabilitation of the southern part of the Romanian Black Sea coast" (4 lots Tomis North, Tomis Center, TomisSouth and Eforie North)- design documentation, payment statements, quality documents, claims, site investigation (onshore and offshore geotechnical, hydrodynamical). Setting-up activities with respect to investigations, design, and execution of the two projects. Preparation of method statements, QA procedures, work plans and schedules. Liaising with the Client and the Designer. Assessment of storm damage. |
| 07/2013- 11/2015 | Constanta, Romania | Van Oord Dredging and Marine Contractors | Mentor of interns and trainees | Guided and supervised 14 interns from Delft University of Technology and 2 trainees of Van Oord DMC for 3 months each. Large variety of issues and tasks were tackled, like: Wave measurements, forecasting and monitoring workability of marine equipment, organizing soil investigation, estimation of settlement of Northern |

| | | | | Breakwater, field investigation with respect of liquefaction potential, beach morphology versus borrow material properties, placement of concrete armour units-workability, fragmentation of rock from quarry to placement, environmental monitoring program and implementation, planning concrete works with respect to expected settlement, estimating and monitoring recovery of storm damage, and more. |
|---------------------|--------------------|--|---|---|
| 01/2010- 03/2013 | | B.V.S. Consult Ltd. | Free-lance consultant | Conceptual design of the expansion of the fishing port Tsarevo. Development of work method for waste water outfall at Sozopol. CREEFS – Research and Restoration of the Essential Filters of the Sea. Technical Supervisor. EU-funded project. Consultation on beach restoration project in Romania. Soundings, mapping and sediment volume calculations, Kamchiya River Dam. Completed December 2011; Expertise on the integrity of coastal protection at Evksinograd Palace (Governmental Residence), Varna, Bulgaria. Completed December 2011; Structural expertise on a segmented breakwater, Berdiansk Spit, Ukraine. Proposed an alternative solution. Completed July, 2011; Structural expertise of Sirius Beach coastal protection facilities. Completed June, 2011; Hydrographic Survey and Soil Investigation for dredging and positioning of a new floating dock at Odesos Ship Repair Yard, Varna, Bulgaria. Completed January 2010. |
| 08/2006- 01/2010 | Varna, Bulgaria | Bulgarian Shipping Company, | Head of the Marine Construction department | Responsible for overall planning, management, and coordination of all activities and projects of a group of companies. The duties include: Communication with the companies-members; Revising proposals and reports; Communication with international partners and contractors; Development of conceptual schemes of mooring structures and quay walls with preliminary cost estimate for the Lesport Terminal Expansion, 2006; Coordinator, Technical Scoping Study for the Expansion of Lesport' developed by Royal Haskoning; Team Leader, Master Plan for Port Expansion Project (EUR 70 mill), Lesport Terminal, 2008; Team Leader, EUR 1.2 mill winning proposal for designing of Lesport Terminal Expansion Project at Varna, 2008 (Supervisor, hydrographical survey and soil Investigation for the port expansion at Lesport Terminal, Varna, 2009. |
| 12/2003- 07/2006 | Varna, Bulgaria | BH Dredging/VO Country Representative | Coastal/Port Engineer | Participation in bid preparation and coordination of execution of dredging works for deepening the access channel at Port Burgas, 2006; Bid preparation for Deepening the access chanell to the Fishing Port, Bourgas, 2005; |

| 01/2002- 12/2003 | Hanover, Germany, Delft, the Netherland s | Black Sea Coastal Association Ballast-Ham Dredging | Free-lance consultant- Coastal, Port, and Dredging | Laboratory study on dredge-induced spreading of sediments. Project within the 5th Framework Programme of the EC, Delft Hydraulics, The Netherlands. Participated in the development of model set-up. Participated in laboratory tests; Hydraulic model tests of floating breakwater. Project within the 5th Framework Programme of EC: Jointly with Franzius Institute, Hanover, Germany. Developed model set-up schemes, designed the model sections and supervised the manufacturing; participated in the model set-up and model tests. Completed December 2002. |
|---------------------|---|--|---|---|
| 10/1994- 01/2002 | Varna, Bulgaria | SLINE Consultancy, Representative of Ballast Nedam Dredging (BND); | Free-lance consultant, Coastal, Port, and Dredging | Port expansion project at Bourgas (Black Sea, value \$160 mill: Site investigation, i.e. sampling and analysis of marine sediments; developed coastal changes monitoring program as part of the bid; Structural design of a quay wall at "St. Constantine and Helena" Marina, Varna, Bulgaria. Completed May, 2001; Wave Loads and Mooring Line Forces on a Floating Pool Structure at Sharm El Sheich, Sinai, the Red Sea. Part of pre-feasibility study: Developed conceptual scheme for pre-feasibility analysis of innovative facility with respect to very strict environmental constraints. Completed June 2001; ISO 14001-based Environmental Management System related to dredging works. With the support of USAID-EcoLinks Grant Program. Participated in development of project proposal. Developed environmental management strategy for dredging work with respect to ISO 14001. 1999-2000; Coastal changes monitoring program, Port Bourgas expansion project, part of the bid, October 2000. Marine sediments sampling for the Port Burgas expansion project. Organized the subwater works and coordinated data handling and analysis. September 2000; Investigation on subwater sand sources along the Bulgarian Balck Sea Coast, 1997; Dredged sediment management plan for the Varna Lake area, 1995; |
| 09/1993- 09/1994 | Delft, the Netherlands | UNESCO-IHE | Course Participant | Post-graduate studies in Hydraulic Engineering (Coastal/Port) |
| 04/1992- 09/1993 | Varna, Bulgaria | SLINE Consultancy | Consultant | Accessement of the damage of main breakwater, St. Konstantine Marina after severe storm in January 1993. Expertize on the structural integrity of the passenger terminal of port Varna after collision of a vessel, April 1993. Designing of the "St. Constantine and Helena" Marina. Structural design of the main breakwater, 1993. |
| 07/1991- 04/1992 | New York, USA | SLINE Consultancy | Consultant | Independent research on moderrn technologies and structures in Coastal and Port Engineering; "St. Constantine and Helena" Marina. Developed the general layout, studied wave climate, mathematical modelling of currents, sediment transport, water |

| | | | | circulation. 1991. |
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| 1980-1991 | Varna, Bulgaria | State Company GEOZASHTITA | Designer, Quality Control Engineer | Worked on various project for coastal protection and reinforcement of coastal landslides. |

8. Other relevant information (e.g., Selected Presentations and Publications)

- 1. B. Savov, Management Challenges Between Land and Water Nature, People, and Modern Engineering. BITS's 6th Annual World Congress of Ocean-2017, Shenzhen, China, November 3-5, 2017
- 2. B. Savov, New Approach to Climate Adaptation Planning of Waterfront Development. Arabian Coast 2016, Dubai, December 21-23 2016.
- 3. T. Marin, B. Savov, Verification of the Functional Efficiency of Submerged Breakwater by Field Measurements. ICCE 2016 Antalia, December 19, 2016
- 4. B. Savov, Expansion of the Northern Breakwater of Port Constanta and Beach rehabilitation project Constanta area Completion of the Works. Seminar at Varna Free University, October 2015
- 5. B. Savov, Expansion of the Northern Breakwater of Port Constanta and Beach rehabilitation project, Constanta area-one year later. Seminar at Varna Free University, October 2014.
- 6. B. Savov, Expansion of the Northern Breakwater of Port Constanta and Beach rehabilitation project, Constanta area. Seminar at Varna Free University, October 2013.
- 7. B. Savov, Studies Related to Port Expansion at Lesport, Port of Varna expansion project. TENT Pan European Program, Brussels, December, 2008.
- 8. B. Savov, Conveying Expertise in Coastal Engineering to Bulgaria, Water Education for a Changing World. On the occasion of the 50th Anniversary Celebrations of UNESCO-IHE. June 2007.
- 9. B. Savov, The Role of Dredging in Integrated Coastal Zone Management, Bulgarian-Dutch Seminar on Integrated Coastal Zone Management, Sunny Beach, April 2005.
- 10. V. Penchev, A. Karageorgis, B. Savov, Laboratory Study on Dredge-induced Spreading of Sediments. HYDRALAB II User Meeting, Budapest, May, 2003.
- 11. K. Daskalov, B. Savov, V. Penchev, Physical Model Study on an Unconventional Floating Caisson Breakwater. PDCE2003 Varna, Bulgaria, June 2003.
- 12. V. S. Penchev, B. Savov, K. Daskalov, Basic Results of Hydraulic Model Tests of Floating Breakwater Third User's Group Meeting. Franzius Institute, Hanover, 2002.
- 13. B. Savov, V. Penchev, M. Johnson, R. A. Woellner, Contribution to the Environmental Management Strategy of Dredging Works on the Bulgarian Black Sea Coast. Proceedings of 5th International Conference "Black Sea 2000", Varna, Bulgaria, November 2000.
- 14. Verhagen H. J., B. Savov, Sea Breeze Generated Waves on the Coast of Varna, PDCE2000, Varna, Bulgaria, June 2000.
- 15. B. Savov, V. Penchev, M. Johnson, Environmental Impact of Contaminated Sediments at Dredging Areas Along the Bulgarian Black Sea Coast, Proceedings of 2nd International Conference on Port Development and Coastal Environment, Varna, Bulgaria, June 2000.
- 16. Verhagen H. J., B. Savov, Sea Breeze Generated Waves and Coastal Morphology, MEDCOAST Conference on Wind and Wave Climate of the Mediterranean and Black Sea, Turkey, March 1999.