

Sanda-Carmen GEORGESCU

Full Professor, PhD Advisor

LIST OF PUBLICATIONS & PROJECTS

CONTENT:

- **Theses (PhD Thesis; Habilitation Thesis)**
- **Peer-reviewed Papers (indexed in international databases listed by CNATDCU; non-indexed)**
- **Patent application (indexed WOS-Derwent)**
- **Books & book contributions**
- **Contract-based Projects**
- **Scientific communications and lectures as keynote speaker / invited professor**

THESES

1. **Georgescu S.-C.**, *Evolution d'une bulle: Formation à partir d'un orifice et éclatement à la traversée d'une surface libre (Bubble evolution: Formation at a submerged orifice and bursting at a free liquid surface)*, **PhD Thesis**, Institut National Polytechnique de Grenoble, France, **1999**, <https://theses.fr/1999INPG0042>
2. **Georgescu S.-C.**, *Numerical modelling in Fluid Engineering* (in English), **Habilitation Thesis**, Doctoral School of Power Engineering, University "Politehnica" of Bucharest (actually POLITEHNICA Bucharest), **2016**, available on ResearchGate, doi: 10.13140/RG.2.2.21381.55524

PEER-REVIEWED PAPERS → **115 papers (1992-2024)**, divided as following:

52 papers in journals & conference proceedings, indexed in international databases listed by CNATDCU: WOS (Web of Science), Scopus, IEEE Xplore, Ulrichsweb, Index Copernicus (2002-2024)

1. **Georgescu S.-C.**, Achard J.-L., Canot É., *Jet drops ejection in bursting gas bubble processes*, European Journal of Mechanics, B/Fluids ([https://doi.org/10.1016/S0997-7546\(01\)01177-3](https://doi.org/10.1016/S0997-7546(01)01177-3), **WOS:000174832200009**, **IF = 2.5/2023, Q2**), **21(2)**, 265-280, **2002 (highly cited; > 50 citations)**
2. Găitănanu Ș.-D., Iancu I., **Georgescu S.-C.**, Georgescu A.-M., *Assessing the operation of a well field by coupling EPANET to the results of a hydrogeological study*, MDPI Engineering Proceedings (**Scopus**), Proceedings 3rd WDSA/CCWI Joint Conference, 1-4 July, Ferrara, Italy, **2024 (to appear)**
3. Shile F., Sadik M., **Georgescu S.-C.**, *A meshless approach for modeling water infiltration in heterogeneous soils*, 11th International Conference on Energy and Environment (CIEM), Bucharest, Romania, 26-27 October, pp. 1-5, Publisher: IEEE (doi: 10.1109/CIEM58573.2023.10349761, **IEEE Xplore**), **2023**
4. Georgescu A.-M., **Georgescu S.-C.**, *Preface of the Proceedings of 14th International Conference on Hydroinformatics - HIC 2022*, IOP Conference Series: Earth and Environmental Science (doi: 10.1088/1755-1315/1136/1/011001, **Scopus**), 1136, 011001 (5 pages), Jan. **2023**
5. Pîrăianu V.-F., Drăgoi C., Ciuc P.-O., Mădulărea R. A., Georgescu A.-M., **Georgescu S.-C.** (corresponding author), *Dry fountains of UPB: Operation modelling and power consumption assessment*, U.P.B. Scientific Bulletin, Series C (**WOS:000741473700029**, **IF = 0.2/2023, Q4**), 83(4), 363-378, **2021**
6. Safta C.-A., **Georgescu S.-C.**, Dumitrescu L., *New approach of pressure losses in hydraulic power systems*, 10th International Conference on Energy and Environment (CIEM), Bucharest, Romania, 14-15 October, pp. 1-5, Publisher: IEEE (doi: 10.1109/CIEM52821.2021.9614769, **IEEE Xplore**), **2021**
7. Săvulete A.C., Pîrăianu V.F., **Georgescu S.-C.** (corresponding author), Georgescu A.-M., *Modelling of a drip irrigation system operation for greenhouses rose cultivation using PDD in EPANET 2.2*, IOP Conf. Series: Earth and Environmental Science (doi:10.1088/1755-1315/664/1/012041, **Scopus**), 664, 012041, May **2021**
8. Primejdie L.G., Achim A.V., Bucur D.M., Dunca G., **Georgescu S.-C.**, *Rural water distribution system with groundwater supply and water tower: Numerical modelling in EPANET 2.2*, IOP Conference Series: Earth and Environmental Science (doi:10.1088/1755-1315/664/1/012040, **Scopus**), 664, 012040, May **2021**

9. Georgescu A.-M., **Georgescu S.-C.** (corresponding author), Dunca G., Bucur D.M., Aldea A., *Energy production assessment in a complex hydropower development*, Journal of Hydroinformatics (<https://doi.org/10.2166/hydro.2019.237>, WOS:000555429500006, IF = 2.2/2023; Q2), 22(4), 725-737, **2020**
10. Georgescu A.-M., **Georgescu S.-C.**, Berardi L., Laucelli D.B., Giustolisi O., *Modelling an urban groundwater well field with WDNNetXL/WDNetGIS*, 9th International Conference on Energy and Environment (CIEM), 17-18 Oct. 2019, Timisoara, Romania, IEEE Conference Publications (doi: 10.1109/CIEM46456.2019.8937595, WOS:000630902700054), Dec. **2019**
11. Ciuc P.-O., Mădulărea R.A., Georgescu A.-M., **Georgescu S.-C.**, Dunca G., Bucur D.M., *Cavitation influence on the operation of a pumping station rig with variable speed pumps*, 9th Int. Conf. Energy and Environment, 17-18 Oct. 2019, Timisoara, Romania, IEEE Conf. Publ. (doi: 10.1109/CIEM46456.2019.8937656, WOS:000630902700051), Dec. **2019**
12. Năstase S., Andrei C.-G., Tică E.I., **Georgescu S.-C.**, Neagoe A., Grecu I.S., *Hydropower optimization test-case solved with Nature-Inspired Algorithms*, 9th International Conference on Energy and Environment (CIEM), 17-18 Oct. 2019, Timisoara, IEEE Conf. Publ. (doi: 10.1109/CIEM46456.2019.8937643, WOS:000630902700052), Dec. **2019**
13. Ciuc P.-O., Mădulărea R.A., Georgescu A.-M., Diminescu M.A., **Georgescu S.-C.** (corresponding author), *Experimental test rig designed to analyse pumping station operation controlled by pressure at different key points*, E3S Web of Conferences, **85**, 06001 (<https://doi.org/10.1051/e3sconf/20198506001>, WOS:000468021200047), Feb. **2019**
14. Mădulărea R.A., Ciuc P.-O., Georgescu A.-M., **Georgescu S.-C.** (corresponding author), *Speed factors computed for pumping schedules in Water Distribution Networks: DDA versus PDA formulations*, E3S Web of Conferences, volume **85**, 06002 (<https://doi.org/10.1051/e3sconf/20198506002>, WOS:000468021200048), Feb. **2019**
15. Iancu I., Dimache A.-N., **Georgescu S.-C.**, Georgescu A.-M., *EPANET modeling of an urban groundwater field*, E3S Web of Conferences, vol. **85**, 06003 (<https://doi.org/10.1051/e3sconf/20198506003>, WOS:000468021200049), Feb. **2019**
16. **Georgescu S.-C.**, Georgescu A.-M., Mădulărea R. A., Bucur D.M., Dunca G., *Efficient chlorination schedule for a water distribution network with multiple pumping stations*, Environmental Engineering and Management Journal (doi: 10.30638/eemj.2017.110, WOS:000409069600006, IF = 1.334/2017, Q3), **16**(5), 1071-1079, May **2017**
17. **Georgescu S.-C.**, Bucur D.M., Dunca G., Georgescu A.-M., Nicolae A. A., Ciuc P.-O., *Hydraulic balancing of the cooling water system of a Pumped Storage Power Plant*, 8th International Conference on Energy and Environment (CIEM), IEEE Conf. Publications (doi: 10.1109/CIEM.2017.8120766, WOS:000427610300052), 19-20 Oct. Bucharest, 246-250, **2017**
18. Georgescu A.-M., Perju S., Madularea R.A., **Georgescu S.-C.**, *Energy consumption due to pipe background leakage in a district water distribution system in Bucharest*, 8th International Conference on Energy and Environment (CIEM), IEEE Conf. Publications (doi: 10.1109/CIEM.2017.8120785, WOS:000427610300053), 19-20 Oct. Bucharest, 251-254, **2017**
19. Tică E.I., Neagoe A., **Georgescu S.-C.**, Năstase S., *HBMOA computational efficiency assessed for a hydropower optimization problem*, 8th International Conference on Energy and Environment (CIEM), IEEE Conference Publications (doi: 10.1109/CIEM.2017.8120784, WOS:000427610300054), 19-20 Oct. Bucharest, 255-259, **2017**
20. Bucur D.M., Cosoiu C.I., Iovanel R., Nicolae A.A., **Georgescu S.-C.** (corresponding author), *Assessing the operation of the cooling water system of a Hydro-Power Plant using EPANET*, Energy Procedia (<https://doi.org/10.1016/j.egypro.2017.03.1058>), **112**, 51-57, March **2017**
21. Dunca G., Piraianu V.-F., Roman R., Ciuc P.-O., **Georgescu S.-C.** (corresponding author), *Experimental versus EPANET simulation of variable speed driven pumps operation*, Energy Procedia (<https://doi.org/10.1016/j.egypro.2017.03.1070>, WOS:000404848300013), **112**, 100-107, March **2017**
22. Bucur D.M., Dunca G., **Georgescu S.-C.**, Georgescu A.-M., *Water flow around a flapping foil: Preliminary study on the numerical sensitivity*, University "Politehnica" of Bucharest Scientific Bulletin, Series D: Mechanical Engineering (https://www.scientificbulletin.upb.ro/fullid6b_405436.pdf, Scopus), **78**(4), 175-182, **2016**
23. **Georgescu S.-C.**, Georgescu A.-M., Jumara A., Piraianu V.-F., Dunca G., *Numerical simulation of the cooling water system of a 115 MW Hydro-Power Plant*, Energy Procedia (doi: 10.1016/j.egypro.2015.12.230, WOS:000377911100029), **85**, 228-234, **2016**
24. **Georgescu S.-C.**, Georgescu A.-M., *Pumping station scheduling for water distribution networks in EPANET*, U.P.B. Sci. Bull., Series D (https://www.scientificbulletin.upb.ro/full162_198380.pdf, Scopus), **77**(2), 235-246, **2015**
25. **Georgescu S.-C.**, Georgescu A.-M., Madularea R. A., Piraianu V.-F., Anton A., Dunca G., *Numerical model of a medium-sized municipal water distribution system located in Romania*, Procedia Engineering (<https://doi.org/10.1016/j.proeng.2015.08.919>, WOS:000380489900074), **119**, 660-668, **2015**
26. Georgescu A.-M., **Georgescu S.-C.**, Cosoiu C.I., Hasegan L., Anton A., Bucur D.M., *EPANET simulation of control methods for centrifugal pumps operating under variable system demand*, Procedia Engineering (<https://doi.org/10.1016/j.proeng.2015.08.995>, WOS:000380489900113), **119**, 1012-1019, **2015**
27. Anton A., Georgescu A.-M., Perju S., **Georgescu S.-C.**, Cosoiu C.I., Hasegan L., *Simulation of the partial load operation of an urban groundwater well field*, Procedia Engineering (<https://doi.org/10.1016/j.proeng.2015.08.962>, WOS:000380489900127), **119**, 1147-1152, **2015**

28. **Georgescu S.-C.**, Achard J.-L., *Multiple equilibrium states during the quasi-steady formation of bubbles and drops at a circular orifice*, University "Politehnica" of Bucharest Scientific Bulletin, Series A: Applied Mathematics and Physics (<https://www.scientificbulletin.upb.ro/553128.pdf>, WOS:000340335100001, IF = 0.7/2023, Q3), **76**(3), 3-18, **2014**
29. Georgescu A.-M., Cosoiu C.-I., Perju S., **Georgescu S.-C.**, Hasegan L., Anton A., *Estimation of the efficiency for variable speed pumps in EPANET compared with experimental data*, Procedia Engineering (<https://doi.org/10.1016/j.proeng.2014.11.466>, WOS:000369528900183), **89**, 1404-1411, **2014**
30. Georgescu A.-M., Perju S., **Georgescu S.-C.**, Anton A., *Numerical model of a district water distribution system in Bucharest*, Procedia Engineering (<https://doi.org/10.1016/j.proeng.2014.02.077>, WOS:000341500600077), **70**, 707-714, **2014**
31. **Georgescu S.-C.**, Georgescu A.-M., *Application of HBMOA to pumping stations scheduling for a water distribution network with multiple tanks*, Procedia Engineering (<https://doi.org/10.1016/j.proeng.2014.02.078>, WOS:000341500600078), **70**, 715-723, **2014**
32. Costinas S., **Georgescu S.-C.**, Opris I., *Smart solutions for the auxiliary power supplies schemes in hydropower plants*, University "Politehnica" of Bucharest Scientific Bulletin, Series C (https://www.scientificbulletin.upb.ro/full8b6_314350.pdf, WOS:000421763000022), **76**(3), 245-253, **2014**
33. Georgescu A.-M., **Georgescu S.-C.**, Stroia L., *Heron's fountain demonstrator*, Romanian Journal for Civil Engineering (*Index Copernicus*), **5**(2), 87-94, **2014**
34. Georgescu A.-M., **Georgescu S.-C.** (corresponding author), *Numerical modelling of chlorine distribution in an urban water supply system*, Environmental Engineering and Management Journal (<http://www.eemj.icpm.tuiasi.ro/vol12no4.htm>, WOS:000323411700007, IF = 0.9/2023, Q4), **12**(4), 657-664, **2013**
35. **Georgescu S.-C.**, Georgescu A.-M., Cosoiu C.I., Costinas S., *Influence of duct geometry on Achard turbine efficiency*, 8th International Symposium on Advanced Topics in Electrical Engineering – ATEE (IEEE Conference Publications; <https://ieeexplore.ieee.org/document/6563475/>, WOS:000332928500129), 1-6, **2013**
36. Georgescu A.-M., **Georgescu S.-C.**, Petre A.-M., Badea I., *Time efficient computing of the power coefficient for a ducted Achard turbine*, U.P.B. Sci. Bull., Series D (https://www.scientificbulletin.upb.ro/rev_docs_arhiva/full931_930769.pdf, Scopus), **74**(4), 189-200, **2012**
37. **Georgescu S.-C.**, *HBMOA applied to design a water distribution network for a town of 50000 inhabitants*, U.P.B. Sci. Bull., Series D (https://www.scientificbulletin.upb.ro/fulldbc_493828.pdf, Scopus), **74**(1), 91-102, **2012**
38. Georgescu A.-M., **Georgescu S.-C.**, *Chlorine concentration decay in the water distribution system of a town with 50000 inhabitants*, U.P.B. Sci. Bull., Series D (https://www.scientificbulletin.upb.ro/full453_153714.pdf, Scopus), **74**(1), 103-114, **2012**
39. Georgescu A.-M., **Georgescu S. C.**, Cosoiu C.I., Alboiu N., *Efficiency of marine hydropower farms consisting of multiple vertical axis cross-flow turbines*, International Journal of Fluid Machinery and Systems (https://www.jstage.jst.go.jp/article/ijfms/4/1/4_1_150/_article, Scopus), **4**(1), 150-160, **2011**
40. Stroia L., **Georgescu S.C.**, Georgescu A.M., *Antiquity versus modern times in Hydraulics – A case study*, IOP Conf. Series: Earth and Environmental Science (doi: 10.1088/1755-1315/12/1/012097, WOS:000325657000097), **12**, 012097, **2010**
41. Georgescu A.-M., **Georgescu S.C.**, Cosoiu C.I., Alboiu N., Hamzu Al., *Velocity field in the wake of a hydropower farm equipped with Achard turbines*, IOP Conference Series: Earth and Environmental Science (doi: 10.1088/1755-1315/12/1/012108, WOS:000325657000108), **12**, 012108, **2010**
42. **Georgescu S.-C.**, Popa R., Georgescu A.-M., *Pumping stations scheduling for a water supply system with multiple tanks*, U.P.B. Sci. Bull., Series D (https://www.scientificbulletin.upb.ro/rev_docs_arhiva/full_1142.pdf, Scopus), **72**(3), 129-140, **2010**
43. **Georgescu S.-C.**, Popa R., *Application of Honey Bees Mating Optimization Algorithm to pumping station scheduling for water supply*, U.P.B. Sci. Bull., Series D (<https://www.scientificbulletin.upb.ro/full1774.pdf>, Scopus), **72**(1), 77-84, **2010**
44. Georgescu A.-M., **Georgescu S.-C.**, Cosoiu C.I., Alboiu N., Petre A.-M., *Experimental versus numerical results on the velocity field in the wake of a hydropower farm equipped with three Achard turbines*, U.P.B. Sci. Bull., Series D (<https://www.scientificbulletin.upb.ro/full3170.pdf>, Scopus), **72**(1), 133-140, **2010**
45. **Georgescu S.-C.**, Georgescu A.-M., Bernad S. I., *Numerical computation of the efficiency of a hydropower farm model, equipped with Achard turbines, tested in water channel*, Acta Technica Napocensis of the Technical University of Cluj-Napoca, Applied Mathematics and Mechanics (*Index Copernicus*), **52**(II), 295-300, **2009**
46. Bernad S., Georgescu A., **Georgescu S.-C.**, Susan-Resiga R., Anton I., *Flow investigations in Achard turbine*, Proceedings of the Romanian Academy, Series A: Mathematics, Physics, Technical Sciences, Information Sci. (<http://www.acad.ro/08-Bernad.pdf>, WOS:000259537100008, IF = 0.7/2023, Q3), **9**(2), 129-140, **2008**
47. Bernad S., Georgescu A., **Georgescu S.**, Resiga R., *Numerical investigation of the unsteady flow in the Achard Turbine*, FMA'08: Proc. 6th IASME/WSEAS International Conference on Fluid Mechanics and Aerodynamics: New Aspects of Fluid Mechanics and Aerodynamics (WOS:000260495700005), Rhodes, Greece, August 20-22, 59-65, **2008**

48. Georgescu A.-M., **Georgescu S.-C.**, Degeratu M., *Experimental setup designed for testing a cross-flow water turbine in a wind tunnel*, U.P.B. Sci. Bull., Series D (<https://www.scientificbulletin.upb.ro/full81303.pdf>, [Scopus](#)), **70**(4), 191-200, **2008**
49. **Georgescu S.-C.**, Georgescu A.-M., Bernad S.I., *Two-dimensional simulation of the unsteady flow through the Achard turbine: COMSOL Multiphysics versus Fluent results*, U.P.B. Sci. Bull., Series C (<https://www.scientificbulletin.upb.ro/full99587.pdf>, [Ulrichsweb](#)), **69**(4), 635-642, **2007**
50. Georgescu A.-M., **Georgescu S.-C.**, Petrovici T., Culcea M., *Pumping stations operating parameters upon a variable demand, determined numerically for the water distribution network of Oradea*, U.P.B. Sci. Bull., Series C (<https://www.scientificbulletin.upb.ro/full99587.pdf>, [Ulrichsweb](#)), **69**(4), 643-650, **2007**
51. Achard J.-L., **Georgescu S.-C.**, *Quasi-steady formation of bubbles and drops viewed as processes that break bifurcation*, Journal of Engineering Mathematics (doi: 10.1007/s10665-004-3065-6, [WOS:000228810700003](#), [IF = 0.885/2005](#), [Q1](#)), **51**(2), 147-164, **2005**
52. Canot É., **Georgescu S.-C.**, Vincent S., *Test-case No 21: Gas bubble bursting at a free surface, with jet formation (PN-PE)*, Multiphase Science and Technology (doi: 10.1615/MultScienTechn.v16.i1-3.200, [Scopus](#)), **16**(1-3), 121-127, **2004**

45 papers in [journals & international conferences proc., non-indexed in databases listed by CNATDCU \(1996-2023\)](#):

1. Gourbesville P., Freni G., Demir I., García Navarro P., Lin G.-F., Boxall J., Brentan B.M., Nguyen V.T.-V., Tassi P., Hinkelman R., Di Cristo C., Laucelli D., Berardi L., Menapace A., Meniconi S., Nohara D., Rokstad M., Gilewski P., **Georgescu S.-C.**, Makropoulos C., Delestre O., Kuo H., Abily M., Van Zyl J., Popescu I., Qiang M., Nguyen V.T., Liu D., Jang D., Shrestha S., Duong V.N., *Why digital water – knowledge application and hydroinformatics?*, Digital Water (ISSN: 2837-5807; doi: 10.1080/28375807.2024.2321312, [Taylor & Francis online](#)), Publisher: Taylor & Francis, vol. 1, issue 1, article 2321312, **2023**, published online: 13 March 2024
2. Ciuc P.-O., Mădulărea R. A., Pîrăianu V.-F., Georgescu A.-M., **Georgescu S.-C.** (corresponding author), *Duty points dropdown due to cavitation in variable speed driven pumps operating in parallel*, Book of Abstracts, 14th International Conference on Hydroinformatics – HIC 2022, 4-8 July, Bucharest, **2022**
3. Ciuc P.-O., Mădulărea R. A., Georgescu A.-M., **Georgescu S.-C.** (corresponding author), *Experimental investigations on classical versus remote control of variable speed driven pumps operating in parallel*, Book of Abstracts, 14th International Conference on Hydroinformatics – HIC 2022, 4-8 July, Bucharest, **2022**
4. Pîrăianu V.-F., Tănase N. O., Diminescu M.A., **Georgescu S.-C.** (corresponding author), *UPB's Dry Fountains: Hydraulic analysis in EPANET*, Book of Abstracts, 14th International Conference on Hydroinformatics – HIC 2022, 4-8 July, Bucharest, **2022**
5. Berardi L., Laucelli D.B., **Georgescu S.-C.**, Georgescu A.-M., Simone A., Ciliberti F.G., Giustolisi O., *Modellazione del pompaggio da pozzi mediante il sistema WDNEXL/WDNetGIS (Using WDNEXL/WDNetGIS system to model pumping from well field)*, L'Acqua (ISSN 1125-1255; <https://www.idrotecnicaitaliana.it/rivista-l-acqua/>; VIII Seminario Tecnologie e Strumenti Innovativi per le Infrastrutture Idrauliche "TeSI" Napoli, 8-9 Luglio 2019), **5**, 51-53, Settembre Ottobre **2019**
6. Georgescu A.-M., Mădulărea R.A., Ciuc P.-O., **Georgescu S.-C.**, *Decision support for a centre pivot irrigation system based on numerical modelling*, Proc. HIC 2018. 13th International Conference on Hydroinformatics, EPiC Series in Engineering (<https://doi.org/10.29007/frqh>), vol. 3, 764-771, **2018**
7. Dunca G., Bucur D.M., Aldea A., Georgescu A.-M., **Georgescu S.-C.**, *EPANET modelling of a high head pumped-storage hydropower facility*, Proc. 3rd EWaS International Conference on "Insights on the Water-Energy-Food Nexus", Lefkada Island, Greece, 27-30 June 2018, MDPI Proceedings (<https://doi.org/10.3390/proceedings2110608>), **2**(11), 608, **2018**
8. Pîrăianu V.-F., **Georgescu S.-C.**, Drăgoi C., *Low head hydropower: Challenges for the environmental friendly solutions of small Hydroelectric Power Plants development*, XIV World Renewable Energy Congress WREC 2015, 8-12 June, Bucharest, Section S5: Water & Hydropower, Paper S5_08, **2015**
9. Georgescu A.-M., **Georgescu S.-C.**, *Simplified numerical model of an axial impeller*, Proc. COMSOL Conference 2012 (<https://www.comsol.com/paper/13323>), Oct. 10-12, Milan, Italy, **2012**
10. Georgescu A.-M., **Georgescu S.-C.**, Stroia L., *Heron's Fountain refurbishment*, Proc. 6th National Conference of Romanian Hydropower Engineers, Editura Politehnica Press (ISSN 2068-276X), 27-28 May, Bucharest, pp 13-22, **2010**
11. **Georgescu S.-C.**, Georgescu A.-M., Bernad S.I., Susan-Resiga R., *Overall efficiency of hydropower farms consisting of multiple vertical axis, cross-flow, marine current turbine modules*, Proc. International Conf. on Modelling Fluid Flow CMFF'09, Sept. 9-12, Budapest, Hungary, editor J. Vad, vol. II (<https://www.researchgate.net/publication/235995074>), 752-759, **2009**
12. Popa R., **Georgescu S.-C.**, *Water distribution networks optimal design using the Honey Bees Mating Optimization Algorithm*, Proc. 4th International Conference on Energy and Environment – CIEM, Nov. 12-14, Bucharest, Politehnica Press (<https://www.researchgate.net/publication/269839317>), **2009**
13. Bernad S.I., Georgescu A.-M., **Georgescu S.-C.**, Bărbat T., Susan-Resiga R., *Numerical simulation of 2D unsteady flow around a blade of Achard turbine*, Proceedings of the 24th IAHR Symposium on Hydraulic Machinery and Systems, Foz do Iguassu, Brazil, Oct. 27-31, paper IAHR-100, **2008**

14. Georgescu A.-M., **Georgescu S.-C.**, Bernad S.I., *A method to assess the inter-influence between vertical axis, cross-flow turbines in a free stream – 2D numerical modelling*, Proc. COMSOL Conference 2008, Nov. 24, Budapest, Hungary, CD-ROM, 45-51, **2008**
15. Georgescu A.-M., **Georgescu S.-C.**, Bernad S.I., Coşoiu C.I., *Some Aspects on the horizontal arrangement of vertical axes, cross-flow, marine current turbines in farms*, Proc. 2nd International Conference on Ocean Energy ICOE 2008, Oct. 15-17, Brest, France (<https://www.researchgate.net/publication/235733407>), **2008**
16. **Georgescu S.-C.**, Georgescu A.-M., Bernad S.I., *Innovative simplified 2D numerical modelling of the inter-influence of vertical axis cross-flow turbines mounted in hydropower farms*, Scientific Bulletin "Politehnica" University of Timișoara, Transactions on Mechanics (<https://www.researchgate.net/publication/236173342>), **53**(67), Fascicola 3, 57-62, **2008**
17. Georgescu A.-M., **Georgescu S.-C.**, Bernad S.I., Hașegan L.V., *Staggered arrangement of three bladed, vertical axis, cross-flow turbine towers in farms*, Sci. Bull. "Politehnica" Univ. Timișoara, Trans. Mech. (<https://www.researchgate.net/publication/236173415>), **53**(67), Fascicola 3, 63-68, **2008**
18. Bernad S.I., Bărbat T., Georgescu A.-M., **Georgescu S.-C.**, Susan-Resiga R., *Unsteady Flow Simulation in the Achard Turbines Mounted in Hydropower Farms*, Sci. Bull. "Politehnica" Univ. Timișoara, Trans. Mech. (<https://www.researchgate.net/publication/236173468>), **53**(67), Fascicola 3, 69-74, **2008**
19. **Georgescu S.-C.**, Georgescu A.-M., Bernad S.I., Susan-Resiga R., *2D numerical modelling of the unsteady flow in the Achard turbines mounted in hydropower farms*, "Calitatea – Acces la succes" Review (<https://www.researchgate.net/publication/240586469>), Special Issue Proc. Int. Conf. Integrated Water Management, Sept. 24, Bucharest, 55-66, **2008**
20. Georgescu A.-M., **Georgescu S.-C.**, Bernad S.I., *Inter-influence of the vertical axis, cross-flow, marine current turbines mounted in farms*, Proc. Conference Excellence Research – A Way to Innovation CEEX2008, (<https://www.researchgate.net/publication/236325822>), July 27-29, Brasov, Romania, **2**, 192/1-6, **2008**
21. Bernad S.I., Georgescu A.-M., **Georgescu C.**, Bărbat T., *Marine turbine development. Fluent numerical investigations*, Proc. Conference "Progress in Simulation of Equipments and Industrial Processes. Efficient solutions with ANSYS & FLUENT" (<http://mh.mec.upt.ro/>), 29-30 May, Sinaia, Romania, CD-ROM, **2008**
22. **Georgescu S.-C.**, Georgescu A.-M., Damian R.M., Achard J.-L., *Past and future of water turbines in Romania*, Proc. 5th Int. Water History Association Conference on Pasts and Futures of Water – IWHA 2007, June 13-17, Tampere, Finland (<https://www.researchgate.net/publication/235921846>), **2007**
23. Georgescu A.-M., **Georgescu S.-C.**, Degeratu M., Bernad S., Coşoiu C.I., *Numerical modelling comparison between airflow and water flow within the Achard-type turbine*, Sci. Bull. "Politehnica" Univ. Timișoara, Trans. Mech. (<https://www.researchgate.net/publication/235995058>), **52**(66), Fascicola 6, Special Issue Proc. 2nd IAHR International Meeting of the Workgroup on Cavitation and Dynamic Problems in Hydraulic Machinery and Systems, Oct. 24-26, Timișoara, Romania, 289-298, **2007**
24. Georgescu A.-M., **Georgescu S.-C.**, Bernad S., Coşoiu C.I., *COMSOL Multiphysics versus Fluent: 2D numerical simulation of the stationary flow around a blade of the Achard turbine*, Sci. Bull. "Politehnica" Univ. Timișoara, Trans. Mech. (<https://www.researchgate.net/publication/236173533>), **52**(66), Fascicola 3, 13-22, **2007**
25. Bernad S., Georgescu A.-M., **Georgescu S.-C.**, Balint D., Susan-Resiga R., *2D unsteady flow simulation in the Achard turbine*, Sci. Bull. "Politehnica" Univ. Timișoara, Trans. Mech. (<https://www.researchgate.net/publication/236020340>), **52**(66), Fascicola 3, 23-28, **2007**
26. Georgescu A.-M., **Georgescu S.-C.**, Bernad S., Safta C.A., *COMSOL Multiphysics 2D flow simulation in the Achard turbine*, Proc. Conference Excellence Research – A way to E.R.A. CEEX2007 (<https://www.researchgate.net/publication/240613028>), Oct. 24-26, Brasov, Romania, 192/1-6, **2007**
27. **Georgescu S.-C.**, Canot É., Achard J.-L., Soucemarianadin A., *Drops ejection from a capillary nozzle by Drop-On-Demand technology*, Proc. International Conference on Modelling Fluid Flow CMFF'06, September 6-9, Budapest, Hungary, eds T. Lajos & J. Vad, vol. II (<https://www.researchgate.net/publication/240612608>), 684-691, **2006**
28. **Georgescu S.-C.**, Canot É., Achard J.-L., *Oil in water injection from a submerged nozzle*, Sci. Bull. "Politehnica" Univ. Timișoara, Trans. Mech. (<https://www.researchgate.net/publication/240591739>), **51**(65), Fascicola 3, 67-74, **2006**
29. **Georgescu S.-C.**, Canot É., Broboană D., Soucemarianadin A., *Numerical simulation of Drop-On-Demand jetting applications in microfluidics*, Book of Abstracts, EUROMECH Colloquium 472 "Microfluidics and Transfer", Session 7 "Isothermal two-phase flows. Interface phenomena" (<https://www.researchgate.net/publication/240612635>), 6-8 Sept., Grenoble, France, **2005**
30. Georgescu A.-M., **Georgescu S.-C.**, *Energy consumption quantification for a pumping or booster station using EPANET*, Proc. 2nd International Conference on Energy and Environment – CIEM, Editura Universul Energiei, Oct. 20-21, Bucharest, CD-ROM, S3_L18, **2005**
31. **Georgescu S.-C.**, Georgescu A.-M., Broboană D., *Experimental investigations for bubbler systems*, Proc. 2nd International Conf. on Energy and Environment – CIEM, Editura Universul Energiei, Oct. 20-21, Bucharest, CD-ROM, S8_L6, **2005**

32. Broboană D., **Georgescu S.-C.**, Marica C., Andrei A., *Modeling the bifurcating flow in a human lung airway using Fluent code*, Proc. 2nd International Conference on Energy and Environment – CIEM, Editura Universul Energiei, Oct. 20-21, Bucharest, CD-ROM, S8_L35, **2005**
33. **Georgescu S.-C.**, Canot É., Achard J.-L., *Local vortex formation in bursting air bubble collapsing process*, Sci. Bull. "Politehnica" Univ. Timișoara, Trans. Mech. (<https://www.researchgate.net/publication/240594911>), **50**(64), 177-184, **2005**
34. **Georgescu S.-C.**, Achard J.-L., *Comments on Eötvös Number versus Bond Number* (<https://www.researchgate.net/publication/240310477>), 26 April **2004**
35. Georgescu A.-M., Perju S., **Georgescu S.-C.**, Alboiu N., *Energy savings quantification for the refurbishment of a pumping station*, Sci. Bull. "Politehnica" Univ. Timișoara, Trans. Mech. (<https://www.researchgate.net/publication/236173605>), **49**(63), Special Issue Proc. 6th International Conference on Hydraulic Machinery and Hydrodynamics, Oct. 21-22, Timișoara, Romania, 195-200, **2004**
36. **Georgescu S.-C.**, Achard J.-L., *Profile singularities appearing during the quasi-steady formation of bubbles and drops at constant pressure*, in: *Numerical Methods in Fluid Mechanics and Fluent Applications*, eds I. Anton et al., Editura Orizonturi Universitare (<https://www.researchgate.net/publication/240612902>), Timișoara, Romania, 113-120, **2003**
37. Broboană D., **Georgescu S.-C.**, Bălan C., Petrovici T., *Flow of viscous fluids in bifurcated pipes: Part II – Numerical simulations*, Proc. International Conference on Energy and Environment – CIEM, Romanian Academy Press, Oct. 22-25, Bucharest, vol. I, 3/215-220, **2003**
38. **Georgescu S.-C.**, Bălan C., Broboană D., Nistoran D., *Dynamic bubbling regime visualisations for bubbler systems used to reduce the risk of ice jam formation*, Proc. International Conference on Energy and Environment – CIEM, Romanian Academy Press, Oct. 22-25, Bucharest, vol. I, 3/227-232, **2003**
39. **Georgescu S.-C.**, Achard J.-L., *Loi de Tate: Analyse critique et restrictions*, Actes du 15^{ème} Congrès Français de Mécanique, Septembre 3-7, Nancy, France (<https://www.researchgate.net/publication/240612663>), no. 113, 1-6, **2001**
40. Canot É., **Georgescu S.-C.**, Achard J.-L., *Bursting air bubble at a free surface: Regridding influences on the interface evolution*, in: *Numerical Simulation for Fluid Mechanics and Magnetic Liquids*, eds I. Anton, V. Ancușa, R. Resiga, Editura Orizonturi Universitare (<https://www.researchgate.net/publication/240612918>), Timișoara, Romania, 123-132, **2001**
41. Bălan C., **Georgescu S.-C.**, Safta C.A., *Instabilities in viscous flows*, Bulletin of the Polytechnic Institute of Iasi, Section I, Mathematics. Theoretical Mechanics. Physics, Fluid Mechanics Supplement (ISSN 0304-5188), vol. **XLVI**(L), 47-52, **2000**
42. **Georgescu S.-C.**, Achard J.-L., Canot É., *Bubble cavity collapse and liquid jet formation simulation in bursting gas bubble process*, Book of Abstracts, EUROMECH Colloquium 376 "Waves in Two-Phase Flows", 27-30 April, Istanbul, Türkiye, pp. 27-30, **1998**
43. Canot É., **Georgescu S.-C.**, *Bilan d'énergie mécanique pour le suivi d'interface: Modèle potentiel avec prise en compte des contraintes visqueuses normales*. Actes du 13^{ème} Congrès Français de Mécanique, Sept. 1-5, Poitiers-Futuroscope, France (<https://www.researchgate.net/publication/240612716>), **3**, 23-26, **1997**
44. **Georgescu S.-C.**, Achard J.-L., Canot É., *Large bubble entrapped beneath a free liquid surface*, Proc. 6th Symposium on Technologies, Installations and Equipments for Environmental Quality Improvement, Nov. 11-14, University "Politehnica" of Bucharest, **1**, 268-275, **1997**
45. **Georgescu S.-C.**, Achard J.-L., Canot É., *Ejection de gouttes dues à l'éclatement d'une bulle à une interface gaz-liquide*, Proc. 5th Symposium on Technologies, Installations and Equipments for Environmental Quality Improvement, Nov. 13-15, University "Politehnica" of Bucharest, **1**, 152-159, **1996**

18 papers in Romanian, in national journals & conferences proceedings, non-indexed in databases listed by CNATDCU (1992-2018):

1. Tică E.I., Neagoe A., Năstase S., Popa R., **Georgescu S.-C.**, *Optimizarea exploatării amenajărilor hidroenergetice: Actualitate și perspective*, Hidrotehnica (ISSN 0439-0962), vol. 63, nr. 1-3, 14-21, **2018**
2. Isbășoiu E.C., **Georgescu S.-C.**, *80 de ani de la planul lui Dorin Pavel de dezvoltare a Hidroenergeticii în România*, Hidrotehnica, vol. 59, no. 3, pp 59-64, **2014**. Articol republicat în *Lucrările celei de-a 8-a Conferințe a Hidroenergeticienilor din România "Dorin Pavel"*, 22-23 Mai, București, CD-ROM (ISSN 2068-2778), S8_2, pp 1-9, **2014**
3. **Georgescu S.-C.**, Georgescu A.-M., Anton A., Susan-Resiga R., *Cooperare în Educație: Platforma Informatică pentru Ingineria Fluidelor – PIIF*, Hidrotehnica, vol. 58, no. 3, 52-56, **2013**
4. **Georgescu S.-C.**, Georgescu A.-M., Popa R., *Dimensionarea optimă a rețelei de alimentare cu apă a unei localități cu 50.000 de locuitori, folosind "algoritmul albinelor"*, Hidrotehnica, vol. 56, no. 3, 7-20, **2011**
5. Georgescu A.-M., **Georgescu S.-C.**, Ciulacu C., Moiceanu A., *Modelarea numerică a transportului de clorină prin rețeaua de alimentare cu apă a unei localități cu circa 10000 de locuitori*, *Lucrările celei de-a 4-a Conferințe a Hidroenergeticienilor din România "Dorin Pavel"*, Editura Printech (ISBN 978-973-718-486-3), 26-27 Mai, București, vol. I, 141-152, **2006**
6. Nistoran D.E., **Georgescu S.-C.**, *Calibrarea unui canal Venturi pentru măsurarea debitelor foarte mici. Modelarea curgerii în diferențe finite*, *Lucrările celei de-a 4-a Conferințe a Hidroenergeticienilor din România "Dorin Pavel"*, Editura Printech (ISBN 978-973-718-486-3), 26-27 Mai, București, vol. I, 173-184, **2006**

7. Broboană D., Bălan C., **Georgescu S.-C.**, *Modelări experimentale și numerice ale curgerii fluidelor vâscoase newtoniene și newtoniene în geometrii cilindric capilare*, Lucrările celei de-a 4-a Conferințe a Hidroenergeticienilor din România "Dorin Pavel", Editura Printech (ISBN 978-973-718-486-3), 26-27 Mai, București, vol. I, 195-204, **2006**
8. **Georgescu S.-C.**, Georgescu A.-M., Broboană D., *Regimul dinamic de formare a bulelor în sistemele de aerare*, Hidrotehnica, vol. 50, no. 1, 3-12, **2005**
9. **Georgescu S.-C.**, Muntean T., Bălan C., Ioana F.I., Deaconu I., *Vizualizarea experimentală a formării lente a bulelor în lichide foarte vâscoase*, Lucrările celei de-a 3-a Conferințe a Hidroenergeticienilor din România "Dorin Pavel" (ISBN 973-718-010-0), 28-29 Mai, București, vol.1, 93-100, **2004**
10. **Georgescu S.-C.**, Georgescu A.-M., *Regimul lent de formare a bulelor la nivelul unui orificiu imersat*, Hidrotehnica, vol. 49, no. 11-12, 3-12, **2004**
11. Georgescu A.-M., **Georgescu S.-C.**, *Pagina web interactivă pentru rezolvarea problemelor simple de mașini hidraulice*, Hidrotehnica, vol. 49, no. 1, 3-9, **2004**
12. **Georgescu S.-C.**, Georgescu A.-M., *Instalație pentru studiul experimental al instabilității formării lente a bulelor de aer la nivelul unui orificiu imersat*, Lucrările celei de-a 2-a Conferințe a Hidroenergeticienilor din România "Dorin Pavel" (ISBN 973-652-578-3), 24-25 Mai, București, vol.1, 47-54, **2002**
13. **Georgescu S.-C.**, *Aplicarea Metodei Integrale la Frontiere în studiul fenomenului de focalizare a unei unde de presiune axial-simetrice*, Lucrările Primei Conferințe a Hidroenergeticienilor din România "Dorin Pavel" (ISBN 973-652-142-7), 26-27 Mai, București, vol.1, 113-124, **2000**
14. **Georgescu S.-C.**, *Aplicarea Metodei Integrale la Frontiere în studiul evoluției interfețelor gaz-lichid (Boundary Element Method applied to study the gas-liquid interfaces evolution)*, Colocviul de Mecanica Fluidelor și Aplicațiile ei Tehnice (Colloquium on Fluid Mechanics and its Technical Applications), 13-14 Oct., Bucharest, **1997**
15. Isbășoiu E.C., **Georgescu S.-C.**, *Contribuții la îmbunătățirea sistemului de răcire a hidrogeneratoarelor*, Energetica (ISSN 1220-5133), vol. 41, no. 5A, 212-213, **1993**
16. **Georgescu S.-C.**, *Proiectarea palelor rotoarelor turbomașinilor axiale prin metoda Wu (Axial turbomachinery runner blade design using the Wu method)*, Colocviul de Mecanica Fluidelor și Aplicațiile ei Tehnice (Colloquium on Fluid Mechanics and its Technical Applications), 15-16 Oct., Ploiești, Romania, **1993**
17. Isbășoiu E.C., **Georgescu S.-C.**, *Contribuții la proiectarea paletajelor turbomașinilor axiale (Contributions to the desing of axial turbomachinery blades)*, Colocviul de Mecanica Fluidelor și Aplicațiile ei Tehnice (Colloquium on Fluid Mechanics and its Technical Applications), 16-17 Oct., Ploiești, Romania, **1992**
18. Isbășoiu E.C., **Georgescu S.-C.**, *Contribuții la determinarea parametrilor de funcționare ai stațiilor de pompare*, Hidrotehnica (ISSN 0439-0962), vol. 37, no. 10, 25-30, **1992**

INTERNATIONAL PATENT APPLICATION indexed WOS-Derwent (2015)

1. Stroia A.L., Alboiu N.I., Coșoiu C.I., Georgescu A.-M., **Georgescu S.-C.**, Popescu O.C., Tătăroiu R., *System for monitoring, detection and localization of breaks in hydraulically-long pipes*, Patent number: RO130005-A2 (Application Number: RO130005-A2 RO000384, 22 May 2013), Patent Assignee Name and Code: SANGARI ENG SERVICES ROMANIA SRL (SANG-Non-standard), [Derwent Primary Accession Number: 2015-20320W](#). International Patent Classification: F17D-005/02. Link Espacenet Patent Search: <https://worldwide.espacenet.com/publicationDetails/>; Publication date: 30 Jan **2015**

BOOKS & BOOK CONTRIBUTIONS (1993-2024)

15 books published in Romanian:

1. Neagoe A., Tică E.I., **Georgescu S.-C.**, Petrovici T., *Informatică aplicată: Manual de GNU Octave (Applied Informatics: GNU Octave manual)*, Politehnica Press (ISBN print 978-606-515-855-9; ISBN CD 978-606-515-856-6; <https://www.researchgate.net/publication/337103038>), Bucharest, **2019**
2. **Georgescu S.-C.**, Georgescu A.-M., *Calculul Rețelor hidraulice cu GNU Octave, (Hydraulic networks analysis using GNU Octave)*, Editura Printech (ISBN 978-606-23-0318-1; <https://www.researchgate.net/publication/303805379>), Bucharest, 266 pages, **2014**
3. **Georgescu S.-C.**, Georgescu A.-M., *Manual de EPANET (EPANET manual)*, Editura Printech (ISBN 978-606-23-0319-8; <https://www.researchgate.net/publication/283268321>), Bucharest, 232 pages, **2014**
4. Georgescu A.-M., **Georgescu S.-C.**, Coșoiu C.I., Alboiu N.I., Hlevca D., *Probleme de Mașini hidraulice, (Solved problems in hydraulic machinery)*, Editura Printech (ISBN 978-606-23-0148-4; <https://www.researchgate.net/publication/311922008>), Bucharest, 179 pages, **2014**

5. Georgescu A.-M., **Georgescu S.-C.**, *Hidraulica rețelelor de conducte cu EPANET*, (Hydraulics of piping networks with EPANET), Editura Printech (ISBN 978-973-23-0147-7), Bucharest, 196 pages, **2013**
6. Georgescu A.-M., **Georgescu S.-C.**, Hașegan L.V., Coșoiu C.I., Degeratu M., Stroia L., *Standuri experimentale pentru Hidraulica instalațiilor* (Experimental test rigs for Hydraulics), Editura Orizonturi Universitare (ISBN 978-973-638-545-2), Technical Sciences Collection ST 255, Timisoara, Romania, 94 pages, **2013**
7. Isbășoiu E.C., Mucichescu C., Nisteanu V., Popa R., Vasiliu N., Guzun B., Vasiliu D., **Georgescu C.-S.** (Hydro mechanical equipment domain Coordinator; 570 words), Popa B., Safta C.A., Gogoșe D.E., *DEX-ȘT. Hidroenergetică: Dicționar Explicativ pentru Știință și Tehnologie, Română/ Englez/ Francez* (Scientific Dictionary Hydro-Power Engineering: Dictionary for Science and Technology, Romanian/ English/ French), ed. G. Drăgan, Romanian Academy Press (ISBN 978-973-27-1953-4) and Editura AGIR (ISBN 978-973-720-326-7), Bucharest, 427 pages, **2010**
8. Georgescu A.-M., **Georgescu S.-C.**, *Hidraulica rețelelor de conducte și mașini hidraulice* (Hydraulics of piping networks and hydraulic machinery), Editura Printech (ISBN 978-973-718-623-2; <https://www.researchgate.net/publication/312056601>), Bucharest, 294 p., **2007**
9. **Georgescu S.-C.**, Georgescu A.-M., Dunca G., *Stații de pompare. Încadrarea turbopompelor în sisteme hidraulice* (Pumping stations. Impeller pumps operation in hydraulic systems), Editura Printech (ISBN 978-973-718-623-2), Bucharest, 160 pages, **2005**
10. **Georgescu S.-C.**, Popa R., Petrovici T., *Metode numerice în Energetică – Îndrumar de laborator* (Numerical methods in Power engineering – Applications), Part 1, Editura Printech (ISBN 978-973-718-623-2), Bucharest, 104 pages, **2005**
11. Isbășoiu E.C., **Georgescu S.-C.**, *Mecanica fluidelor* (Fluid Mechanics), Editura Tehnică (ISBN 973-31-0841-3), Bucharest, 408 pages, **1995**
12. Isbășoiu E.C., **Georgescu S.-C.**, *Mecanica fluidelor* (Fluid Mechanics), Part 1, University "Politehnica" of Bucharest Press, 346 pages, **1994**
13. Isbășoiu E.C., **Georgescu S.-C.**, *Bazele hidraulicii* (Basic Hydraulics), vol. 3, UPB Press, 179 pages, **1994**
14. Isbășoiu E.C., **Georgescu S.-C.**, *Bazele hidraulicii* (Basic Hydraulics), vol. 2, UPB Press, 251 pages, **1993**
15. Isbășoiu E.C., **Georgescu S.-C.**, *Bazele hidraulicii* (Basic Hydraulics), vol. 1, UPB Press, 122 pages, **1993**

3 chapters in books:

1. Canot É., **Georgescu S.-C.**, Vincent S., *Test-case No 21: Gas bubble bursting at a free surface, with jet formation (PN-PE)*, Chapter 19, pp 135-142, in: *Validation of Advanced Computational Methods for Multiphase Flows*, eds. H. Lemonnier, D. Jamet and O. Lebaigue, Begell House Inc. (ISBN 1-56700-218-8, <http://dl.begellhouse.com/ebooks/709c03c830e1b733.html>), **New York**, USA, 260 pages, **2005**
2. **Georgescu S.-C.**, *Direct Boundary Element Method formulation for axisymmetric configurations*, Chapter 4.1, pp. 164-175, in: *Vortex Flows and Applications*, eds. R. Susan-Resiga, S. Bernad and S. Muntean, Eurostampa Publishing House (ISBN 978-973-687-659-2; <https://www.researchgate.net/publication/240567228>), Timisoara, Romania, 492 pages, **2007**
3. **Georgescu S.-C.**, *Dynamics of highly distorted bubbles and drops modeled with BEM*, Chapter 4.2, pp. 175-194, in: *Vortex Flows and Applications*, eds. R. Susan-Resiga et al., Eurostampa Publishing House (ISBN 978-973-687-659-2; <https://www.researchgate.net/publication/240567228>), Timisoara, Romania, 492 p., **2007**

5 special issues in journals as Editor or Guest Editor:

1. *Proceedings of 14th International Conference on Hydroinformatics - HIC 2022*, 04/07/2022 - 08/07/2022 Bucharest, Romania, in: **IOP Conference Series, Earth and Environmental Sciences** (**Scopus indexed**; ISSN: 1755-1315, <https://iopscience.iop.org/issue/1755-1315/1136/1>), A.-M. Georgescu and **S.-C. Georgescu** (Editors), **vol. 1136**, 62 papers (no. 012001-012062), 560 pages, 187 authors, published: 20 Jan. **2023**
2. *EENVIRO 2018 – Sustainable Solutions for Energy and Environment* (Cluj Napoca, Romania, October 9-13, 2018); Book Series: **E3S Web of Conferences** (**WOS indexed**; eISSN: 2267-1242, <https://www.e3s-conferences.org/articles/e3sconf/abs/2019/11/contents/contents.html>), M.C. Bălan, F. Bode, C. Croitoru, A. Dogeanu, A. Georgescu, **C. Georgescu**, I. Năstase and M. Sandu (Editors), publisher: EDP Sciences, France, **vol. 85**, 89 papers (no. 01001-08010), 623 pages, 231 authors, published online: 22 Febr. **2019**
3. *University "Politehnica" of Bucharest Scientific Bulletin, Series D: Mechanical Engineering* (**Scopus indexed**; ISSN 1454-2358), **S.-C. Georgescu** (Guest Editor), **vol. 74**(1), 70 authors, 236 pages, **2012**
4. *University "Politehnica" of Bucharest Scientific Bulletin, Series D: Mechanical Engineering* (**Scopus indexed**; ISSN 1454-2358), **S.-C. Georgescu** (Guest Editor), **vol. 72**(1), 63 authors, 175 pages, **2010**
5. *Scientific Bulletin "Politehnica" University of Timișoara, Transactions on Mechanics* (non-indexed, ISSN 1224-6077), A.-M. Georgescu, **S.-C. Georgescu**, S. I. Bernad (Editors), **vol. 53**(67), Fasc. 3, 43 authors, 147 pages, **2008**

GRANTS / RESEARCH-DEVELOPMENT-INNOVATION PROJECTS WON THROUGH COMPETITION (1996-2017)**International grant won through competition as Project Manager in University "Politehnica" of Bucharest – UPB (actually POLITEHNICA Bucharest) → see Projects in Brainmap: <https://www.brainmap.ro/sanda-carmen-georgescu>**

1. Soucemarianadin A. (directeur du projet; Université Joseph Fourier, Grenoble, France), Achard J.-L. (responsable équipe; LEGI Grenoble), Canot É. (responsable équipe; IRISA, Rennes), **Georgescu S.-C. (responsable équipe; Université "Politehnica" de Bucarest)**, Broboană D. (UPB), Kowalewski T. (responsable équipe; IPPT PAN, Varsovie), *Stimulation et formation de goutte à la demande: étude expérimentale et numérique des effets non-linéaires (Drop-on-Demand stimulation and formation: experimental and numerical study of the nonlinear effects)*, ÉGIDE (Centre française pour l'accueil et les échanges internationaux) – Programme **ECO-NET**, Financement français: Ministère des Affaires étrangères (Direction de la coopération scientifique, universitaire et de recherche), Ministère de la Jeunesse, de l'Éducation nationale et de la Recherche (Direction des relations internationales et de la coopération), Égide (Service Recherche et Entreprises), Perioada de derulare: **2004-2005**

National grants won through competition as Project Director / Project Manager in UPB

2. Georgescu A.-M. (coordonator proiect, Universitatea Tehnică de Construcții București), **Georgescu S.-C. (responsabil proiect Partener P1, Universitatea Politehnica București)** – Centrul de Cercetări Energetice și de Protecția Mediului), Bernad S.I. (responsabil proiect Partener P2, Academia Română – Filiala Timișoara), Membri echipa UPB: Broboană D., Bucur D.M., Dunca G., Neagoe A., Nistoran Gogoșe D.E., Petrovici T., Safta C.A., *Interinfluența turbinelor hidraulice stabilizate, cu ax de rotație vertical, de tip Achard (Inter-influence of the vertical axis, stabilised, Achard type hydraulic turbines)*, acronim: **THARVEST**, Programul **CEEX**, contract nr. 192/20.07.2006, autoritatea contractantă: A.M.C.S.I.T. Politehnica, beneficiar: Ministerul Educației, Cercetării și Tineretului, **Buget pentru UPB: 300.000 lei (≈ 85.516 €)**, curs valutar 2006), Perioada de derulare: **2006-2008**. Link CNCISIS lista granturi 2006: http://www.mct-excelenta.ro/fileadmin/mct/Rezultate/modulul_1/ianuarie_2006/lista_finantate_M1.htm (vezi poziția 91)
3. **Georgescu S.-C. (director de proiect)**, Bucur D.M., Dunca G., Nistoran-Gogoșe D.E., Petrovici T., *Simularea numerică a formării micropicăturilor, aplicată în microfluidică (Microdrop on demand numerical simulation, applied in Microfluidics)*, **Grant A**, cod **CNCISIS** 1405, Faza I (contract 33380/29.06.2004, nr. temă 32, EN 06-04-06), Faza a II-a (contract 34694/24.06.2005, nr. temă 49, EN 06-05-08), Faza a III-a (contract GR 139/02.06.2006, nr. temă 40, EN 06-06-08), Universitatea Politehnica București, beneficiar: Ministerul Educației și Cercetării, **Buget total: 73.000 lei (≈ 19.028 €)**, curs valutar 2004), Perioada de derulare: **2004-2006**. Link la CNCISIS, la listele cu granturi aprobate în 2004, respectiv granturi în continuare 2005 și 2006, Comisia 2A (vezi codul 1405): http://cncsis.gov.ro/UserFiles/File/granturi/2004/A_NOI_FINANTATE.htm
http://cncsis.gov.ro/UserFiles/File/Competitii%20derulate/REZULTATE_A_2005_CONTINUARI.pdf
http://cncsis.gov.ro/UserFiles/File/Competitii%20derulate/REZULTATE_A_2006_CONTINUARE.pdf
4. **Georgescu S.-C. (director de proiect)**, Sandu M., *Instabilități statice în mișcări bifazice gaz-lichid (Static instabilities in gas-liquid two-phase flows)*, **Grant T** (Banca Mondială 70%, Guvernul României 30%), cod **CNCISIS** 110, Universitatea Politehnica București, beneficiar: Ministerul Educației Naționale, București, **Buget total: 20.000 USD**, Perioada de derulare: **2001-2002**

Grants / projects won through competition as a Team Member

1. Bunea F. (director proiect, coordonator ICPE-CA), Bucur D.M. (Responsabil partener P1-UPB), Codescu S. (P2-Tehnoinstrument Impex srl), Membri P1-UPB: **Georgescu S.-C. (persoană cheie)**, Călinoiu C. (persoană cheie), Dunca G. (cercetător senior) et al.; *Innovative aeration system of the water used by hydraulic turbines, for preservation of the aquatic life (Sistem inovativ de aerare a apei turbinate în vederea menținerii condițiilor necesare vieții acvatice)* – **ECOTURB**, **PN-II-PT-PCCA-2013-4-0814**, Contract: 88/29.11.2013, Link pagini web: <https://www.icpe-ca.ro/sistem-inovativ-de-aerare-a-apei-turbinate-in-vederea-mentinerii-conditiilor-necesare-vietii-acvatice/>; <https://www.icpe-ca.ro/icpe-ca/proiecte/proiecte-nationale/pn-2014/ecoturb.pdf>, Perioada de derulare: **2014-2017**
2. Pora C.D. (director proiect, SANGARI Engineering Services Romania), Stroia L.A., **Georgescu S.-C. (expert pe termen lung)** ș.a., *Realizarea de standuri și machete experimentale destinate zonei didactice sau de cercetare, customizabile în funcție de cerințele beneficiarului și folosind rezultate ale cercetării românești - RoAdapttech*, autoritatea contractantă: Autoritatea Națională pentru Cercetare Științifică, Programul Operațional Creșterea Competitivității Economice (**POS CCE**), program cofinanțat din Fondul European de Dezvoltare Regională, Axa prioritară 2, Domeniul major de intervenție 2.3, Operațiunea 2.3.3, beneficiar: S.C. SANGARI Engineering Services Romania S.R.L., ID/cod SMIS CNSR: 330/5755, contract 105/25.02.2010, Perioada de derulare: **2010-2013**
3. Armaș I. (coordonator proiect, Universitatea București), Gogoșe Nistoran E.D. (responsabil proiect Partener UPB), Popa R., Ionescu C., Popa B., **Georgescu S.-C. (membru echipă UPB)** ș.a., *Impactul variabilității climatice și al intervențiilor antropice asupra regimului hidrologic al Dunării și al dinamicii sedimentare costiere (Climatic variability and anthropic*

- interventions impact on Danube hydrological regime and on costal sediments dynamics*), acronim: DANUBERES, Programul **CEEX**, contract nr. X2C20, înregistrat cu nr. 606/17.07.2006, autoritatea contractantă: AMTRANS, beneficiar: Ministerul Educației, Cercetării și Tineretului, Perioada de derulare: **2006-2008**
4. Băran Gh. (coordonator proiect, INC DIE ICPE-CA București), Pincovschi I. (responsabil proiect Partener UPB), Oprina G., Bunea F., **Georgescu S.-C. (membru echipă UPB)** ș.a., *Hidrogazodinamica și transferul de masă la coloane de bule fine cu aplicare în tehnologii avansate de mediu (Dynamics and mass transfer in columns of tiny bubbles, applied in advanced environmental technologies)*, acronim: **TEHNOMED**, Programul **CEEX**, contract nr. X2C05, înregistrat cu nr. 334/18.07.2006, autoritatea contractantă: AMTRANS, beneficiar: Ministerul Educației, Cercetării și Tineretului, Perioada de derulare: **2006-2008**
 5. Susan-Resiga R. (coordonator proiect, Universitatea Politehnica Timișoara), Isbășoiu E.C. (responsabil proiect, UPB), Bălan C., Broboană D., Saffa C.A., **Georgescu S.-C. (membru echipă UPB)** ș.a., *Hidrodinamica vârtejurilor și Aplicații, Grant A Consorțiu*, cod **CNCSIS 33**, beneficiar: Ministerul Educației, Cercetării și Tineretului, Perioada de derulare: **2005-2007**
 6. Gogoșe D.E. (director proiect), **Georgescu S.-C. (membru echipă)**, ș.a., *Studiul hidraulic și reologic al poluării cu lichide petroliere a curgerilor cu suprafață liberă (Hydraulic and Rheological study of free surface flows pollution with Petroleum liquids)*, **Grant A, Faza I** (contract nr. 33784/23.07.2002, cod CNCSIS 398), *Faza a II-a* (contract nr. 33552/01.07.2003, cod CNCSIS 479); *Faza a III-a* (contract 33380/29.06.2004, cod CNCSIS 479), Universitatea Politehnica București, beneficiar Ministerul Educației și Cercetării, Perioada de derulare: **2002-2004**
 7. Isbășoiu E.C. (director proiect), **Georgescu S.-C. (coordonator parte științifică – subiect legat de teza de doctorat)**, Nistoran D., *Focalizarea undelor de presiune axial-simetrice: ruperea unei interfețe gaz-lichid simulată cu Metoda Integrală la Frontiere (Axisymmetric surface waves focalisation: gas-liquid interface break-up modelled through Boundary Element Method)*, Grant nr. 5001/B11, **CNCSU** Cod 924, Universitatea Politehnica București, beneficiar Ministerul Educației Naționale, București, Buget total: 5.000.000 lei (≈ 1667 USD, curs valutar 1996), Perioada de derulare: **1996**. Link la CNCSIS, la lista cu granturi aprobate în 1996: http://cncsis.gov.ro/UserFiles/File/Competitii%20derulate/Rez_1996.pdf (vezi codul 924)

EDUCATIONAL DEVELOPMENT PROJECTS (2010-2023)

Coordination of educational development project as Project Manager in UPB

1. Anton A. (manager proiect, Universitatea Tehnică de Construcții București - UTCB), **Georgescu A.-M. (manager adjunct proiect, UTCB)**, **Georgescu S.-C. (responsabil proiect Partener P1, Universitatea Politehnica din București - UPB)**, Baya A. (responsabil proiect Partener P2, Universitatea Politehnica din Timișoara - UPT), Susan-Resiga R. (coordonator activități principale proiect, UPT), Obreja D. (responsabil proiect Partener P3, Universitatea Dunărea de Jos din Galați - UDJG), Lungu A. (coordonator activități principale proiect, UDJG), Opruța D. (responsabil proiect Partener P4, Universitatea Tehnică din Cluj-Napoca), Bartha I. (responsabil proiect Partener P5, Universitatea Tehnică Gh. Asachi din Iași), Membri echipa UPB: Badea A.A., Dănăilă S. (coordonator activități principale proiect, UPB), Pârvu P., Bucur D.M., Dunca G., Bălan C., Vasiliu D., Stoia-Djeska M., Bontoș M.D., Broboană D., Gogoșe D.E., Bogoi A., Tănase N.O., *Creșterea calității învățământului superior de inginerie - Platforma Informatică pentru Ingineria Fluidelor (Quality Improvement of Higher Education in Engineering - Fluid Engineering Informatics Platform)*, acronim: **PiiF**, cod contract: POSDRU/86/1.2/S/61830, autoritatea contractantă: AMPOSDRU, Programul Operațional Sectorial pentru Dezvoltarea Resurselor Umane 2007-2013 (**POS DRU**), program cofinanțat din Fondul Social European, Axa prioritară 1, Domeniul major de intervenție 1.2, Beneficiar: U.T.C.B., **Buget pentru UPB: 1.800.009 lei (≈ 420.092 €, curs valutar 2010)**, Perioada de derulare: **2010-2013**

Educational development projects as a Team Member

2. Iovu H. (manager proiect); **Georgescu S.-C. (expert național - mentor cercetare avansată)**, **POCU**, Axa prioritară 6 - Educație și competențe, Proiect: *OPTIMizarea rezultatelor cercetării aplicative a doctoranzilor și cercetătorilor postdoctorat – OPTIM Research*, Cod MySMIS: 153735 (din 08.06.2022), Beneficiar: Universitatea Politehnica din București, Perioada de derulare: **2022-2023**
3. Robescu L.D. (director proiect), **Georgescu S.-C. (expert național - tutore programe remediale)**, *Proiectul privind Învățământul Secundar (ROSE)*, *Schema de Granturi pentru Universități*, Beneficiar: Universitatea Politehnica din București - Facultatea de Energetică, Titlul subproiectului: *Asigurarea acCESului la învățământ de calitate în domeniul ingineriei ENERGetice*, acronim: **ACE-ENERGY**, Acord de grant nr. 366/SGU/SS/III/10.09.2020, Perioada de derulare: **2020-2022**
4. Darie G. (manager proiect, Universitatea Politehnica din București - UPB), încă 6 universități partenere; Membri echipa UPB: Necula H., **Georgescu S.-C. (expert pe termen lung)**, Minciuc E., Dumbravă V. ș.a., *Student azi! Profesionist maine! – Îmbunătățirea procesului de inserție pe piața muncii a studenților din domeniile tehnic/economic/medical*

veterinar, acronim: *IMPULS*, cod contract: POSDRU/160/2.1./S/139928, autoritatea contractantă: OIPOSDRU, Programul Operațional Sectorial pentru Dezvoltarea Resurselor Umane 2007-2013 (**POS DRU**), program cofinanțat din Fondul Social European, Axa prioritară 2, Domeniul major de intervenție 2.1, Beneficiar: UPB, Perioada de derulare: **2014-2015**

5. Darie G. (manager proiect, Universitatea Politehnică din București - UPB), Partener 1: Asociația Studenților din Universitatea Politehnică București – A.S. Poli, Partener 2: Asociația Patronală ENERGIA-APEN; Membri echipa UPB: Necula H., Minciuc E., Ionescu C., Bulac C., Triștiu I., **Georgescu S.-C. (expert pe termen scurt)** ș.a., *Practica de azi – o șansă în plus pentru angajarea de mâine*, acronim: *PROSPER*, cod contract: POSDRU/109/2.1/G/81597, autoritatea contractantă: OIPOSDRU, Programul Operațional Sectorial pentru Dezvoltarea Resurselor Umane 2007-2013 (**POS DRU**), program cofinanțat din Fondul Social European, Axa prioritară 2, Domeniul major de intervenție 2.1, Beneficiar: UPB, Perioada de derulare: **2012-2013**

OTHER RESEARCH-DEVELOPMENT PROJECTS – CONTRACTS WITH THIRD PARTIES (1990-2008)

1. **Georgescu S.-C. (responsabil contract)**, *Dicționar explicativ în domeniul Hidroenergetic*, subdomeniul *Echipamente hidromecanice* (570 termeni de specialitate), contract nr. 1053/20.09.2007, beneficiar Institutul de Mecanica Solidelor, București, **2007-2008**
2. Isbășoiu E.C. (director contract), Poroschianu D., **Georgescu S.-C.**, Dunca G., Neagoie C., *Turbine hidraulice, pompe pentru acumulare și turbine-pompe - Încercări de garanție pe model, Standard Internațional CEI 60193* - ediția a 2-a 1999-11, Traducere în limba română, beneficiar ASRO București, **2003**
3. Isbășoiu E.C. (director contract), Vasiliu N., **Georgescu S.-C.**, ș.a., *Modelarea matematică, generarea automată a geometriei și proiectarea asistată de calculator a rotoarelor turbomasinilor. Faza a II^a: Algoritmi pentru generarea automată a geometriei rotoarelor turbomasinilor axiale. Faza a III^a: Algoritmi pentru realizarea grafică a rotoarelor turbomasinilor axiale în AUTOCAD*, contract nr. 8-92-17 Universitatea Politehnică București; beneficiar: Ministerul Învățământului și Științei, București, **1992-1994**
4. Isbășoiu E.C. (director contract), **Georgescu S.-C.**, *Masurări de rugozitate pe canalul I CHE Vânători*, contract nr. 8-93-14 UPB; beneficiar: Întreprinderea Electrocentrale Bistrita - Piatra Neamt, **1993**
5. Isbășoiu E.C. (director contract), Hlevca B., **Georgescu S.-C.**, *Intocmirea unor regulamente de exploatare pentru centralele hidroelectrice de pe Bistrita-Siret*, contract nr. 8-93-15 UPB; beneficiar: Întreprinderea Electrocentrale Bistrita Piatra Neamt, **1993**
6. Isbășoiu E.C. (director contract), **Georgescu S.-C.**, *Analiza circuitului de apă de răcire a hidroagregatelor de la CHE Turnu de pe râul Olt*, contract nr. 8-93-16 UPB; beneficiar: ISPH, București, **1993**
7. Isbășoiu E.C. (director contract), Tolea M., Hlevca B., **Georgescu S.-C.**, *Cercetări teoretice și experimentale privind influența curgerii în regim nepermanent asupra optimizării funcționării echipamentelor hidromecanice*, contract nr. 8-93-31 UPB; beneficiar: Ministerul Învățământului și Științei, București, **1993**
8. Isbășoiu E.C. (director contract), **Georgescu S.-C.**, Tolea M., *Comportarea în exploatare a turbinelor Francis de peste 20 MW, producție U.C.M. Reșița*, contract nr. 8-93-36 UPB; beneficiar: ISPH, București, **1993**
9. Isbășoiu E.C. (director contract), **Georgescu S.-C.**, *Îmbunătățirea sistemelor de ventilație a hidrogeneratoarelor de pe raul Olt*, contract nr. 8-92-4 UPB; beneficiar: Filiala RENEL – Vâlcea, **1992**
10. Isbășoiu E.C. (director contract), **Georgescu S.-C.**, *Asimilarea unor noi scheme aerodinamice cu ventilatoare cu pale profilate (rotor și aparat director, rotor și contrarotor) cu funcționare reversibilă*, contract nr. 8-91-6 UPB; beneficiar: Ventilatorul S.A., București, **1991-1992**
11. Isbășoiu E.C. (director contract), Diacon Al., Nisteanu V., **Georgescu S.-C.**, *Masurări pentru determinarea rugozității canalului de aducțiune al CHE Vânători și canalului de fuga al CHE Buhusi*, contract nr. 8-91-14 UPB; beneficiar: Întreprinderea Electrocentrale Bistrita - Piatra Neamt, **1991**
12. Isbășoiu E.C. (director contract), **Georgescu S.-C.**, ș.a., *Studiu privind utilizarea apelor evacuate din iazurile de decantare în vederea producerii de energie electrică - tipizare turbine/ Realizarea părții grafice*, contract nr. 201/1990; beneficiar: KASTA-ENT International, București, **1990**
13. **Georgescu S.-C. (responsabil proiect)**, angajat IMH), Teguiani C., *Studiu hidrologic necesar lucrării Determinarea lucrărilor de investiții în vederea valorificării în continuare a potențialului hidroenergetic în țară - bazinul Cerna (Mureș)*, contract nr. 277/1990 Institutul de Meteorologie și Hidrologie din București (IMH), beneficiar I.R.E. Deva, **1990**
14. Stanciu P. (responsabil proiect), Nedelcu D., **Georgescu S.-C.** (angajat IMH), ș.a., *Studiu hidrologic necesar lucrării Determinarea lucrărilor de investiții în vederea valorificării în continuare a potențialului hidroenergetic în țară - bazinul Someș*, contract nr. 131/1990 Institutul de Meteorologie și Hidrologie București (IMH); beneficiar: I.R.E. Cluj-Napoca, **1990**
15. Roșca D. (responsabil proiect), **Georgescu S.-C.** (angajat IMH), ș.a., *Impactul lacurilor de acumulare asupra mediului înconjurător - etapa I*, contract nr. 312/1990 Institutul de Meteorologie și Hidrologie București (IMH); beneficiar: Ministerul Apelor, **1990**

SCIENTIFIC COMMUNICATIONS AND LECTURES AS KEYNOTE SPEAKER OR INVITED PROFESSOR (1997-2022)

1. **Georgescu S.-C.**, *Water loss management* Course; 95 pages, course code UPB013, ATHENS Network Week, University "Politehnica" of Bucharest (UPB), 14-18 March, **2022**
2. **Georgescu S.-C.**, *Hydropower (3)*; Lecture in *Regenerative Energy Systems* Course, ATHENS Network Week, UPB, 21 Nov., **2019**
3. **Georgescu S.-C.**, *Water Supply Networks*; Enjeux et défis pour le développement durable #ÉcoleEXPLORE, UPB, 16 April, **2019**
4. **Georgescu S.-C.**, *Hydropower (2)*; Lecture in *Regenerative Energy Systems* Course, ATHENS Network Week, UPB, 20 March, **2019**
5. **Georgescu S.-C.**, *Hydropower (1)*; Lecture in *Regenerative Energy Systems* Course, ATHENS Network Week, UPB, 22 Nov., **2018**
6. **Georgescu S.-C.**, *Energie din natură – șurubul lui Arhimede în regim de turbinare (Energy from nature – Archimedes screw operating as turbine)*; Ziaua Apei 2018 (World Water Day 2018), UPB, 22 March, **2018**
7. **Georgescu S.-C.**, *Drinking Water Distribution Network modelling – Romanian study cases*; EnvYJobs Live Labs, Bucharest, 11 December, **2017**
8. **Georgescu S.-C.**, *Renewable Energy – Hydropower Engineering*; Energy, Always a Challenge 5 – EESTEC LC Bucharest, UPB, 17 April, **2015**
9. Canot E., **Georgescu S.-C.**, *Dynamics of fluid interfaces: Why the small scale point of view is important? From a mathematical description to physics applications*; 30 pages, Academia Nacional de Ciencias de Buenos Aires, 18 Nov., Buenos Aires, Argentina, **2013**
10. **Georgescu S.-C.**, *Turbine Pelton*; Séminaire de formation – N. Schlumberger, 15 Septembre, Guebwiller, France, **2009**
11. **Georgescu S.-C.**, *Vis d'Archimède utilisée comme turbine*; Séminaire de formation – N. Schlumberger, 16 Septembre, Guebwiller, France, **2009**
12. **Georgescu S.-C.**, *Turbine Bánki*; Séminaire de formation – N. Schlumberger, 16 Septembre, Guebwiller, France, **2009**
13. **Georgescu S.-C.**, *La vie d'une bulle*, "Journée des thésards" du Laboratoire des Ecoulements Géophysiques et Industriels, 16 Janvier '97, Référence: *A Contre Courant* (revue), no. 17, ENSHMG, Grenoble, France, **1997**