

## PROF. ING. VALENTINA SALOMONI, PHD

PUBBLICAZIONI  
ORDINATE PER  
TIPOLOGIA

### PUBBLICAZIONI SU RIVISTA INTERNAZIONALE

1. C.E. Majorana, V. Salomoni, S. Secchi, "Effects of mass growing on mechanical and hygrothermic response of three-dimensional bodies", **Journal of Materials Processing Technology**, PRO064/1-3, 277-286, 1997 (ISSN: 0924-0136, ISI: A1997WU63600031).
2. C.E. Majorana, V. Salomoni, B.A. Schrefler, "Some observations about strain localisation and shear band formation in concrete samples", **Journal of Materials Processing Technology**, 78, 128-137, 1998 (ISSN: 0924-0136, ISI: 000074643900021).
3. C.E. Majorana, V. Salomoni, B.A. Schrefler, "Hygrothermal and mechanical model of concrete at high temperature", **Materials and Structures**, 31, 378-386, 1998 (ISSN: 1359-5997, ISI: 000074788300006).
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5. B.A. Schrefler, X. Wang, V. Salomoni, G. Zuccolo, "An efficient parallel algorithm for three-dimensional analysis of subsidence above gas reservoirs", **International Journal for Numerical Methods in Fluids**, 31(1), 247-60, 1999 (ISSN: 0271-2091, ISI: 000082946500016).
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37. G. Mazzucco, V.A. Salomoni, C.E. Majorana, C. Pellegrino, C. Ceccato, "Numerical investigation of concrete columns with external FRP jackets subjected to axial loads", **Construction and Building Materials**, 111, 590-599, 2016 (DOI: 10.1016/j.conbuildmat.2016.02.050).
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1. B.A. Schrefler, G. Bolzon, V. Salomoni, L. Simoni, "On compaction in gas reservoirs", **Atti dell'Accademia Nazionale dei Lincei, Rendiconti Lincei – Scienze Fisiche e Naturali**, serie IX, VIII, fasc. IV, 235-248, 1997 (ISSN: 0392-7881).

### **LIBRI (EDITORE)**

1. C. Majorana, V. Salomoni, T. S. Lok (Eds.), "Proceedings of the 3<sup>^</sup> Int. Conf. on Protection of Structures Against Hazards", Sept. 28-29, Venice, Italy; CI-Premier Pte Ltd Pub., Singapore, 2006 (ISBN: 981-05-5561-X).
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### **CAPITOLI DI LIBRO**

1. C.E. Majorana, V.A. Salomoni, "Modelli avanzati di comportamento dei solidi biologici", In: F. Montevercchi (Ed.), "Meccanica nei tessuti biologici", Patron, Bologna, 131-142, 1997 (**didattico**).
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3. V.A. Salomoni, C.E. Majorana, G.M. Giannuzzi, A. Miliozzi, D. Nicolini, "New trends in designing parabolic trough solar concentrators and heat storage concrete systems in solar power plants", in: Radu D. Rugescu (Ed.), "Solar Energy", IN-TECH Pub., 267-292, 2010 (ISBN: 978-953-307-052-0).
4. B. Pomaro, C.E. Majorana, V.A. Salomoni, F. Gramegna, G. Prete, "A numerical approach for radiation assessment on concrete subject to a cyclic irradiation profile, combining Finite Elements and the Monte Carlo technique", In: G. Zavarise, D. Boso (Eds.), "Bytes and Science", International Centre for Numerical Methods in Engineering (CIMNE), Barcelona, Spain, 85-98, 2012 (ISBN: 978-84-940243-2-0).
5. V.A. Salomoni, C.E. Majorana, G.M. Giannuzzi, R. Di Maggio, F. Girardi, D. Mele, M. Lucentini, "Conceptual Study of a Thermal Storage Module for Solar Power Plants with Parabolic Trough Concentrators", in: R. Rugescu (Ed.), "The Applications of Solar Energy", In-Tech Publications, 151-181, 2013 (ISBN: 978-953-51-0969-3) (DOI: 10.5772/54060).

### **KEYNOTE LECTURES/INVITED PAPERS**

1. C.E. Majorana, V. Salomoni, "Strain localization in concrete using damage mechanics", Proc. 5th Int. Conf. on Computational Plasticity/COMPLAS V, March 17-20, Barcelona, Spain, 728-734, 1997 (ISBN: 84-87867-71-5) (**invited paper**).
2. V. A. Salomoni, "Predicted Responses of Structures Subjected to Blast and Blast-Induced Phenomena", 2<sup>^</sup> Int. Conf. on Protection of Structures Against Hazards, Dec. 01-03, Singapore, 2004 (ISBN: 981-05-0613-9) (**keynote lecture**).
3. V. A. Salomoni, G. M. Giannuzzi, C. E. Majorana, A. Miliozzi, D. Nicolini, "Structural design of parabolic-trough solar concentrators' steel components against wind and natural

hazards”, In: Majorana, Salomoni, Lok (Eds.), 3<sup>rd</sup> Int. Conf. on Protection of Structures Against Hazards, 73-80, 2006 (ISBN: 981-05-5561-X) (**keynote lecture**).

4. V.A. Salomoni, C.E. Majorana, A. Miliozzi, “Thermal-fluid flow within innovative heat storage concrete systems for solar power plants”, 14th International Conference on Finite Elements in Flow Problems, March 26–28, Santa Fe, New Mexico, USA, 2007 (**invited paper**).
5. C.E. Majorana, V.A. Salomoni, “FEM implementation of multiplicative plasticity in finite strains by means of the “dissipation theory””, PLASTICITY 2007 - 13th Int. Symposium on Plasticity and its Current Applications, June 2-6, Girwood, Alaska, 2007 (**invited paper**).
6. C.E. Majorana, V.A. Salomoni, “Elastoplastic damaged behaviour of thin shells in finite displacements and rotations”, PLASTICITY 2007 - 13th Int. Symposium on Plasticity and its Current Applications, June 2-6, Girwood, Alaska, 2007 (**invited paper**).
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9. C.E. Majorana, V.A. Salomoni, “Finite strain modelling of concrete at high temperatures”, In: “European Seminar on Coupled Problems”, Institute of Thermomechanics of the Academy of Science of Czech Republic, June 8-13, Prague, Czech Republic, 2008 (**keynote lecture**).
10. V.A. Salomoni, C.E. Majorana, G. Mazzucco, G. Xotta, “Heat and fluid flow in concrete as a composite material”, WCCM8 - 8th World Congress on Computational Mechanics, June 30–July 4, Venice Island, Italy, 2008 (**invited paper**).
11. G.M. Giannuzzi, V.A. Salomoni, A. Miliozzi, C.E. Majorana, “Innovative heat storage concrete systems for solar power plants”, WCCM8 - 8th World Congress on Computational Mechanics, June 30–July 4, Venice Island, Italy, 2008 (**invited paper**).
12. V.A. Salomoni, G.M. Giannuzzi, C.E. Majorana, A. Miliozzi, “Structural steel components optimization of parabolic-trough solar concentrators”, WCCM8 - 8th World Congress on Computational Mechanics, June 30 – July 4, Venice Island, Italy, 2008 (**invited paper**).
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14. G.A. Khoury, C.E. Majorana, V.A. Salomoni, “Polypropylene fibres and explosive spalling in Tunnel constructions”, WCCM8 - 8th World Congress on Computational Mechanics, June 30–July 4, Venice Island, Italy, 2008 (**invited paper**).

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16. C.E. Majorana, V.A. Salomoni, G. Mazzucco, G. Xotta, "Nonlinear analysis of concrete as an heterogeneous material", 15th International Symposium, Plasticity 2009, Jan. 3-8, St. Thomas, US Virgin Islands, USA, 2009 (**invited paper**).
17. C.E. Majorana, V.A. Salomoni, G. Mazzucco, G. Zavarise, "Contact analysis of elastoplastic-damaged thin shells subject to finite displacements and rotations", 15th International Symposium, Plasticity 2009, Jan. 3-8, St. Thomas, US Virgin Islands, USA, 2009 (**invited paper**).
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19. V.A. Salomoni, "Ground subsidence risk scenarios in Italy", 4<sup>th</sup> Int. Conf. on Protection of Structures Against Hazards, October 24-25, Beijing, China, 2009 (**keynote lecture**).
20. C. Majorana, V. Salomoni, G. Khouri, "Computational and Experimental Analysis of Spalling Process in Heated Concrete", International Symposium on Plasticity 2010, Jan. 3-8, St. Kitts, USA, 2010 (**invited paper**)
21. C. Majorana, G. Mazzucco, C. Pellegrino, V. Salomoni, "Numerical and Experimental Analyses of Welding Processes with Engineering Applications", International Symposium on Plasticity 2010, Jan. 3-8, St. Kitts, USA, 2010 (**keynote lecture**)
22. V. Salomoni, C. Majorana, G. Mazzucco, G. Zavarise, "Dynamic Thermo-Electro-Mechanical Nonlinear Behaviour of Shell-to-Shell in Contact", International Symposium on Plasticity 2010, Jan. 3-8, St. Kitts, USA, 2010 (**invited paper**).
23. B. Pomaro, V.A. Salomoni, F. Gramegna, G. Prete, C.E. Majorana, "Radiation damage in the target area shielding of a facility for Selective Production of Exotic Species (SPES Project): application with the neutron spectrum delivered by n-TOF on concrete", Symposium n. 147, IV European Conf. on Comp. Mech. Solids, Structures and Coupled Problems in Engrg., ECCM10, May 16-21, Paris, France, 2010 (**invited paper**).
24. V.A. Salomoni, R. Fincato, "The subloading surface plasticity model for modelling subsidence at regional scale", Coupled Problems 2011, IV International Conference on Computational Methods for Coupled Problems in Science and Engineering, June 20-22, Kos Island, Greece, 2011 (**invited paper**).
25. G. Xotta, V.A. Salomoni, C.E. Majorana, "Effect of aggregates and ITZ on visco-damaged response of concrete at the meso scale level", Coupled Problems 2011, IV International Conference on Computational Methods for Coupled Problems in Science and Engineering, June 20-22, Kos Island, Greece, 2011 (**invited paper**).

26. G. Mazzucco, V.A. Salomoni, C.E. Majorana, "Contact-damage modelling of FRP reinforcements under variable loading times", Coupled Problems 2011, IV International Conference on Computational Methods for Coupled Problems in Science and Engineering, June 20-22, Kos Island, Greece 2011 (**invited paper**).
27. V.A. Salomoni, G. Mazzucco, G. Xotta, R.L. Fincato, M. Schiavon, C.E. Majorana, "Non-linear modelling, design and production of steel blast-resistant doors and windows", Coupled Problems 2011, IV International Conference on Computational Methods for Coupled Problems in Science and Engineering, June 20-22, Kos Island, Greece, 2011 (**invited paper**).
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30. C.E. Majorana, B. Pomaro, V.A. Salomoni, F. Gramegna, G. Prete, "Concrete as a multiphase material in biological shields against nuclear radiation", In: B.H.V. Topping and Y. Tsompanakis (Eds.), Civil and Structural Engineering, Computational Technology, Ch. 2, 35-64, Saxe-Coburg Publications, 2011 (ISBN: 978-1-874672-55-5) (**Special Invited Lecture**).
31. V.A. Salomoni, K. Hashiguchi, R. Fincato, G. Xotta, "An unconventional plasticity approach for 3D modelling of geomaterials", Plasticity 2012, 18th International Symposium on Plasticity and its Current Applications, January 3-8, San Juan, PR, USA, 2012 (**invited paper**).
32. C.E. Majorana, G. Mazzucco, V.A. Salomoni, "Plasticity functions for thermomechanical analysis of steel welding processes", Plasticity 2012, 18th International Symposium on Plasticity and its Current Applications, January 3-8, San Juan, PR, USA, 2012 (**invited paper**).
33. V.A. Salomoni, K. Hashiguchi, R. Fincato, "Extended subloading surface in a coupled hydro-(thermo-)mechanical formulation for geomaterials", Coupled Problems 2013, V International Conference on Computational Methods for Coupled Problems in Science and Engineering, June 17-19, Ibiza Island, Spain, 2013 (**invited paper**).
34. V.A. Salomoni, K. Hashiguchi, R. Fincato, G. Xotta, "An unconventional plasticity approach for a coupled visco-elasto-plastic analysis for concrete", Coupled Problems 2013, V International Conference on Computational Methods for Coupled Problems in Science and Engineering, June 17-19, Ibiza Island, Spain, 2013 (**invited paper**).
35. C. Majorana, V. Salomoni, G. Xotta, B. Pomaro, G. Mazzucco, "Computational issues in multifield, multiscale, 3D structural engineering", In J. Kruis, Y. Tsompanakis and B.H.V. Topping (Eds.), Computational techniques for Civil and Structural Engineering, Saxe-Coburg Publications, 1-41, 2015 (ISSN: 1759-3158) (**invited paper**).

36. C. Maiorana, V. Salomoni, G. Mazzucco, G. Xotta, B. Pomaro, "Multiscale Analysis of Concrete under High Temperature and Fire", International Symposium on Plasticity 2015, January 4-9, Montego bay, Jamaica, 2015 (**keynote paper**).

#### PUBBLICAZIONI SU ATTI DI CONGRESSO INTERNAZIONALE

1. C.E. Majorana, V. Salomoni, S. Secchi, "An approach to strain localisation in concrete structures by damage mechanics", Joint Conference of Italian Group of Computational Mechanics and Ibero-Latin American Association of Computational Methods in Engineering, Sept. 25-27, Padua, Italy, 317-320, 1996.
2. B.A. Schrefler, V. Salomoni, L. Simoni, "Modelling of soil deformation induced by offshore and onshore gas recovery", Proc. Workshop on Baugrund-Tragwerk-Interaction, Technische Universität Darmstadt, November 21, Darmstadt, Germany, 27-38, 1997.
3. B. A. Schrefler, L. Simoni, V. Salomoni, "Prediction of surface subsidence above gas reservoirs", In: F. Casciati, F. Maceri, M.P. Singh, P. Spanos (Eds.), Proc. Int. Sym. on Civil Infrastructure System, Intelligent Renewal, 315-327, World Scientific, Singapore, 1998.
4. M. Sacchetto, G. Cibin, G. Di Dio, V. Salomoni, M. Soranzo, "Comparison between CPTU data and consolidation behaviour of soils - Statistical and mathematical analysis", In: Robertson & Mayne (Eds.), Geotechnical Site Characterization, 1153-1158, Balkema, 1998.
5. C.E. Majorana, V. Salomoni, B.A. Schrefler, "A constitutive relationship for High Performance and Ultra-High Performance Concrete", EURO-C 1998, March 30-April 2, Badgastein, Austria, 203-208, 1998 (ISBN: 94 5410 946 7).
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