

ATHINA E. SAVVA, Dr. Civil Engineer, Professor

ADDRESS

Democritus University of Thrace (DUTH)
Department of Civil Engineering
Section of Architectural Structures, Building Construction and Building Materials
Laboratory of Building Materials
Building B, (office C.2.6), University Campus, Kimmeria, 67100 XANTHI, GREECE

Tel. +3025410 -79861

Fax: +3025410 -79495

E-mail: asavva@civil.duth.gr

EDUCATION-ACADEMIC CAREER

- 1980 Diploma in Civil Engineering (5-year course). Department of Civil Engineering, Democritus University of Thrace (DUTH), Greece.
- 1981- 1997 Scientific Collaborator at the Building Materials Laboratory of Civil Engineering Department of DUTH.
- 1991 Doctoral Degree (Ph.D.) in Civil Engineering, from Democritus University of Thrace, Greece.
- 1997 - 2002 Lecturer at Civil Engineering Department of DUTH, in the field of Building Materials
- 2002 - 2009 Assistant Professor in the field of Building Materials-Concrete Technology
- 2009 - 2016 Associate Professor in the field of Building Materials-Concrete Technology
- 2016-current Professor in the field of Building Materials-Concrete Technology

ADMINISTRATIVE POSITIONS

- 2011 - 2018 Director of the Post Graduate Course: “New Materials and Technologies for the Design of Reinforced Concrete”
- 2009 - current Director of the Laboratory of Building Materials of DUTH.
- 2017 - 2019 Director of Technical Council of DUTH.

FIELDS OF SPECIALTY

-Building and Construction Materials (conventional and innovative building materials and concretes for construction, repair and durability of building elements)
-Concrete Technology

RESEARCH INTERESTS

High Performance and High Strength Concretes

Durability of Concrete (carbonation, sulfates, chlorides, high temperatures)
Recycled Aggregate Concretes (with Recycled Concrete Aggregates, cork, plastic optical fibres etc.)
Green Concretes
Indirect Methods (Rebound Hammer, Pulse velocity etc.)

TEACHING EXPERIENCE

UNDERGRADUATE LEVEL

- **Civil Engineering Department**
 - Building Materials I (3st semester-core course)
 - Building Materials II (4nd semester-core course)
 - Special Topics on Building Materials (7th semester-elective course)
 - Technology of Special Concretes (7th semester-elective course)
- **Architectural Engineering Department**
 - Building Materials I (1st semester-core course), for more than 9 years
 - Building Materials II (2nd semester-core course), for more than 9 years

POST GRADUATE LEVEL

- Concrete Technology: Experimental Methods and Quality Control.

NOTES FOR EDUCATIONAL PURPOSES (in Greek)

She has written notes for the undergraduate and postgraduate studies of the Department of Civil Engineering of the DUTH, on the subject of Building Materials and Experimental Methods of Concrete Technology and Control.

DIPLOMA THESIS, POST GRADUATE DISSERTATIONS, PhD THESIS

Supervisor of over 130 undergraduate diploma theses and post graduate dissertations on Concrete Technology
Supervisor of two (on going) doctoral theses on Green Concretes
Member of the Advisory Committee (three member) or of the seven-member examination committees, in more than 10 Doctoral Theses, completed in the Department of Civil Engineering of the DUTH / AUTH.

RESEARCH PROJECTS

Participation in 8 research projects as a leader or an active member of the Research Team (PENED, PRENED, DUTH, indended companies).

SCIENTIFIC ORGANIZATIONS MEMBER

Member of Technical Chamber of Greece (1981-2016)
Member of Civil Engineer Society of Greece
Member of ACI (American Concrete Institute)
Member of RILEM (Réunion Internationale des Laboratoires et des Recherches sur les Matériaux et les Constructions)

PUBLICATIONS

Doctoral Dissertation

- **A. E. Savva (1991)** “Influence of Skydra’s Earth on the Compressive Strength and the Open Porosity of the Cement Paste”

Key Publications –Selected articles

- **Savva A., Trochoutsou N.:** «Compressive strength at normal and high temperatures and water absorption of concretes with recycled coarse aggregates». *Proceedings of the 18th Greek Conference on Concrete*, Athens, 2018.
- Mavridou S., **Savva A., Trochoutsou N.:** «Compressive Strength at Normal and High Temperatures of Transparent Concrete with Conventional or Recycled Aggregate». *Proceedings of the 18th Greek Conference on Concrete*, Athens, 2018.
- Savvidou E., Chalioris K., **Savva A.:** «Mechanical Properties of Recycled Aggregate Concrete». *Proceedings of the 18th Greek Conference on Concrete*, Athens, 2018
- **A.E. Savva:** «Effect of Cement Fineness on Recycled Aggregate Concrete Compressive Strength at Elevated Temperature». *International Journal of Current Engineering and Technology*, 2015, Vol.5, No3, pp 1743-1750
- **A.E. Savva:** «Recycled aggregate concrete: Effect of homogeneity of origin concrete». *International Journal of Current Engineering and Technology*, 2015, Vol.5, No3, pp 1751-1756
- Fakitsas C., Papakonstantinou P., Kioussis P., **Savva A.:** «Effects of Recycled Concrete Aggregates on the Compressive and Shear Strength of High-Strength Self - Consolidating Concrete». *J. of Materials in Civil Engineering (ASCE)*, 2012, Vol.24, No 4, pp 356-361
- **A. E. Savva.** “Recycled Aggregates Concrete: Influence of the Original Concrete’s Homogeny”. *Technika Chronika, Scientific Journal of Technical Chamber of Greece*, 2009, Vol. I, No 1-2.
- **A. Savva** “Effect of High Temperatures on the Compressive Strength of Concretes Prepared with Recycled Specimens as Aggregates”. *Proceedings of the 15th Greek Conference on Concrete Alexandroupolis*, 2006, Vol. IV, pp. 253-268
- **A. Savva, E. Skarlatos.** “Recycled Aggregate Concretes: Mechanical Properties and Durability Against Cl⁻ ”. *Proceedings of the 15th Greek Conference on Concrete Alexandroupolis*, 2006, Vol. IV, pp. 269-284
- **.KK Sideris, A. Savva, J. Papagianni.** “Sulfate Resistance and Carbonation of Plain and Blended Cements”. *Cement and Concrete Composites*, 2006, Vol. 28, No 1, pp 47-56.
- **A. Savva, P. Manita, KK Sideris.** “Influence of Elevated Temperatures on the Mechanical Properties of Blended Cement Concrete Prepared with Limestone and

Silicate Aggregates”. *Cement and Concrete Composites*, 2005, Vol. 27, No 2, pp 239-248

- KK Sideris, **A. Savva**. “Durability of Mixtures Containing Calcium Nitrite Based Corrosion Inhibitors”. *Cement and Concrete Composites*, 2005, Vol. 27, No 2, pp 277-287
- O. Dimitriadou, V.N. Kotsoglou, G.E. Thermou, **A. Savva**, S.I. Pantazopoulou. “Experimental Study of Concrete Interfaces in Sliding Shear”. *Technika Chronika, Scientific Journal of Technical Chamber of Greece*, 2005, Vol. , No 2-3, pp. 123-136
- **A. Savva**, S. Malamouli, M. Mavridou. « High Performance Concrete : Strength and Durability Against Sulfates with Chlorides”. *Proceedings of the 14th Greek Conference on Concrete, Kos Island, 2003*, Vol II, pp. 156-170
- K.K. Sideris, **A.E. Savva**. “Resistance of Plain and Blended Cements under Different Sulfate Environments”. *Proceedings of the International Conference held at the University of Dundee, Scotland, UK on September 9-11, 2002*, vol.: Concrete for extreme conditions, pp 73-82. Published by Thomas Telford, London 2002
- **A. Savva**, KK Sideris, P. Manita. “Main Technological Factors Affecting the Laboratory Test Results of Concrete Compressive Strength”. *J. of Scientific Review Ktirio*, Vol. B/2002, pp. 37-44.
- **A. Savva**, KK Sideris, P. Manita. “Estimation of in Situ Concrete’s Compressive Strength”. *J. of Scientific Review Ktirio*, Vol. B/2002, pp. 51-60
- K.K. Sideris, **A. Savva**, P. Manita. “Methods of Testing the in Situ Concrete’s Compressive Strength”. *J. of Scientific Review Ktirio*, Vol. B/2002, pp. 45-50
- K.K. Sideris, **A. Savva**, P. Manita. “Development of in situ concrete’s compressive strength after the age of 28 days up the end of cement hydration”. *J. of Scientific Review Ktirio*, Vol. A/2002, pp. 41-48
- **A.E. Savva**. “High Strength Concretes: Mechanical and Elastic Properties of Mixtures Containing Fly Ashes and Silica Fume”. *Proceedings (supplementary papers) of the 7th CANMET/ACI International Conference on Fly Ash, Silica Fume, Slag and Natural Pozzolans in Concrete*. July 22-27, 2001, Chennai (Madras), India.
- K.K. Sideris, **A.E. Savva**. “Resistance of Fly Ash and Natural Pozzolans Blended Cement mortars and Concrete to Carbonation, Sulfate attack and Chloride Ion Penetration”. *Proceedings of the 7th CANMET/ACI International Conference on Fly Ash, Silica Fume, Slag and Natural Pozzolans in Concrete*. Chennai (Madras), India, July 22-27, 2001. CANMET/ACI SP 119 Vol II, pp 275-293.
- K.K. Sideris, **A.E. Savva**. “Influence of Calcium Nitrite Based Corrosion Inhibitor on the Durability of Plain and Blended Cements”. *Proceedings (supplementary papers) of the 5th CANMET/ACI International Conference on Recent Advances in Concrete Technology*. July 29 - August 1, 2001, Singapore, pp 121-138
- **A. Savva**. “Influence of the Cement Type and the Aggregates Grading on the Compressive Strength and the Workability of High Strength Concretes”. *Proceedings of the 1st Greek Conference on Concrete Composite Materials, Xanthi, 2000*, Vol I, pp 96-109

- K. Sideris, K.K. Sideris, **A. Savva**, P.Manita. “Steel Fibres Shotcrete”. *Proceedings of the 1st Greek Conference on Concrete Composite Materials, Xanthi, 2000*, Vol I, pp 122-136
- K. Sideris, K.K. Sideris, P. Manita, **A. Savva**. “Composites Materials of Concrete: The Last Forty Years Development”. *Proceedings of the 1st Greek Conference on Concrete Composite Materials, Xanthi, 2000*, Vol I, pp 1-14.
- K.K.Sideris, **A. E. Savva**, I. Papagianni. “Contribution of Pozzolanic Materials to the Sulfates Resistance of Cements”. *J. of Scientific Review Ktirio*, Vol. A/2000, pp. 55-62.
- K. K. Sideris, **A.E. Savva**. “Durability of Blended Cements”. *Proceedings of the 2nd International Symposium: Cement and Concrete Technology in the 2000’s*, September 6-10, 2000, Istanbul, Turkey, Vol II, pp 283-292.
- K.K. Sideris, **A.E. Savva**, K. Sideris. “Quality Control of Ready Mixed Concrete Using the Cement Hydration Equation”. *Proceedings of International Conference: “Creating with Concrete”, held at the University of Dundee, Scotland, UK on September 8-10, 1999*, pp 247-255 (vol. Utilizing ready-mixed concrete and mortar. Published by Thomas Thelford, London 1999
- **A. Savva**, K.K. Sideris, P. Manita, K. Sideris. “Influence of Silica Fume on Concrete’s Compressive Strength”. *Proceedings of the 13th Greek Conference on Concrete, Rethymnon, Crete, 1999*, Vol. II, pp. 256-264.
- **A. E. Savva**, P. Manita, K.K Sideris, A. Baltzopoulou, C. Economou. “Influence of Elevated Temperatures on Aged Concretes Prepared with Limestone and/or Siliceous Aggregates and 7 Different Blended Cements”. *Proceedings of the 13th Greek Conference on Concrete, Rethymnon, Crete, 1999*, Vol. II, pp73-81
- K.K. Sideris, **A.E. Savva**, P. Manita, K. Sideris. “Effect of the Steel Fibres on the Concrete’s Plastic Deformation”. *Proceedings of the 13th Greek Conference on Concrete, Rethymnon, Crete, 1999*, Vol II, pp. 247-255
- K. K. Sideris, **A.E. Savva**, C. Malami, I. Marinos. « Influence of Pozzolanic Materials on the Corrosion of Concrete Reinforcement”. *Proceedings of the 13th Greek Conference on Concrete, Rethymnon, Crete, 1999*, Vol II, pp 353-361
- K.K. Sideris, **A.E. Savva**, M. Konsta-Gdoutos. “The Cylinder to Cube Strength Ratio of Concrete as a Function of the Hydration Age”. *Proceedings of the First Hellenic Conference on Composite Materials and Structures, July 2-5, 1997, Xanthi, Greece*, pp 803-808.
- K.K. Sideris, **A.E. Savva**, K.D. Baltzopoulou, C. M. Economou, K. Sideris. “Influence of Silica and Limestone Aggregates on the Final Compressive Strength of Blended Cement Concretes Prepared with the Use of Three Different Pozzolanas”. *Proceedings of the 10th International Congress on the Chemistry of Cement, Göthenburg, Sweden, June 2-6, 1997*, Vol.4, paper 4iv052 (Published by Amarkai AB Göthenburg, 1997).
- C. Economou, **A.E. Savva**, A. Baltzopoulou, K.K. Sideris, K. Sideris. “Effect of High Temperatures on the Compressive Strength of Concrete, Using Non Destructive Tests”. *Proceedings of the 12th Greek Conference on Concrete, Lemesos, Cyprous, 1996*, Vol. I, pp. 259-271.

- K.K. Sideris, **A.E. Savva**, A.D. Baltzopoulou, C. M. Economou, K. Sideris. “Influence of High Temperatures on the Compressive Strength and the Modulus of Elasticity of Concrete”. *Proceedings of the 12th Greek Conference on Concrete, Lemessos, Cyprous*, 1996, Vol. I, pp. 320-328.
- K.K. Sideris, A.D. Baltzopoulou **A.E. Savva**, K. Sideris, C. M. Economou. “A New Method for the Estimation of Concrete’s Compressive Strength Using the Rebound Hammer”. *Proceedings of the 12th Greek Conference on Concrete, Lemessos, Cyprous*, 1996, Vol. I, pp. 310-319.

Her publications have received a large number of citations in international scientific journals, proceedings of international conferences, diploma thesis, etc