

## CV Stelios Mavrigiannakis

Name: Stelios Mavrigiannakis  
Date of Birth: 28/08/1973  
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### **Education:**

10/1999 - 5/2003 M.S., Department of Mineral Resources Engineering, Technical University of Crete  
9/1992 - 9/1998 Diploma, School of Mining and Metallurgical Engineering, National University of Athens.

### **Professional Experience**

9/2006 – today Scientific Collaborator at the Computer Laboratory and the Rock Mechanics Laboratory, Department of Mineral Resources Engineering, Technical University of Crete.  
9/2000 - 8/2006 Scientific Collaborator at the Computer Laboratory and the Rock Mechanics Laboratory, Department of Mineral Resources Engineering, Technical University of Crete.  
7-8/1995 Practical exercise in the mining company «TVX - HELLAS», Stratoni, Chalkidiki, Greece.  
7-8/1996 Practical exercise in the mining company «TVX - HELLAS», Stratoni, Chalkidiki, Greece.

### **Publications**

#### Undergraduate and Graduate Theses

1. Mavrigiannakis, St., "Effectiveness of the support system with Swellex rock bolts in the mines of Madem Lakko and Olympiada (TVX - Hellas)", Diploma Thesis, NTUA, Athens, February, 1998.
2. Mavrigiannakis, St., "Study of resistance of artificial Stone in climatic weathering", MS Thess, TUC, Hania, February, 2004.

### Scientific Publications

- 1) Tsoutrelis, H., S. Maurigiannakis and V. Roumpos, Effectiveness of the Swellex rock reinforcement system in the Madem Lakkos and Olympias mines, 3rd National Congress of Mineral Wealth, Athens, 22-24 November, 2000 (in Greek).
- 2) Agioutantis, Z., S. Maurigiannakis and C. Stiakakis, Modeling the uniaxial compression test in rocks: Comparison of different approaches, Proceedings, 4th GRACM Congress On Computational Mechanics - GRACM 2002, Patras, Greece.
- 3) Maurigiannakis, S., Z. Agioutantis, P. Kokkiniotis and T. Kagiara, "Suitability of artificial stone as building material: a sustainable development option for the construction industry", Proceedings, International Conference on Sustainable Development Indicators in the Mineral Industry, 21-23 May 2003, Milos Greece.
- 4) Kourkoulis, S.K., Z. Agioutantis, S. Maurigiannakis and E. Papatheodorou, "Experimental and Numerical Analysis of Notched Marble Beams Under Bending: An Elastic Transversely Isotropic Model", International Conference on Computational & Experimental Engineering & Sciences 24-29 July 2003, Corfu, Greece.
- 5) Kourkoulis, S., Z. Agioutantis, S. Maurigiannakis and E. Papatheodorou, "Modeling three point bending of rock-type materials using an elastoplastic model with contact elements", 5th EUROMECH Solid Mechanics Conference, 17-22 August, 2003, Thessaloniki, Greece, (abstract and presentation, published 2005 in IJ of Mechanical Behavior of Materials).
- 6) Agioutantis, Z., S. Kourkoulis, S. Maurigiannakis and E. Papatheodorou, "Notched marble specimens under bending: Experimental study and numerical analysis using an elastoplastic model with contact elements", 5th EUROMECH Solid Mechanics Conference, 17-22 August 2003, Thessaloniki, Greece, (abstract and presentation, published 2005 in IJ of Mechanical Behavior of Materials).
- 7) Agioutantis, Z., S. Maurigiannakis, P. Maravelaki-Kalaitzaki, "Modeling the behavior of strengthening compounds on porous geomaterials", Proceedings, 7th National Congress on Mechanics, Hania, June 24-26, 2004, pp. 138-143.
- 8) Maravelaki-Kalaitzaki, P., Z. Agioutantis, S. Maurigiannakis and N. Kallithrakas-Kontos, Evaluation of the Effectiveness of Silicon-Based Strengthening Agents on Porous Limestones, Proceedings, 10th International Congress on Deterioration and Conservation of Stone, 27 June - 2 July 2004, Stockholm, Sweden (accepted for publication).

- 9) Stavrakas, I., D. Triantis, Z. Agioutantis, S. Maurigiannakis, V. Saltas and S. Vallianatos, (2004), Pressure Stimulated Currents along with mechanical properties in rocks, International Congress, Advances in Mineral Resources Management and Environmental Geotechnology, Hania 2004, Greece, pp. 733-738.
- 10) Stavrakas I., D. Triantis, Z. Agioutantis, S. Maurigiannakis, V. Saltas, F. Vallianatos, and M. Clarke, Pressure stimulated currents in rocks and their correlation with mechanical properties, Natural Hazards and Earth Systems Sciences (NHES), (2004) 4: 563–567.
- 11) Mitritsakis N., II. Stavrakas, Maurigiannakis S., Anastasiadis C., Triantis D. and Agioutantis Z., (2006), Investigation and quantification of damage in geomaterials with the technique of Dielectric Spectroscopy, 9th European Conference on Non-Destructive Testing, September 25-29, 2006, Berlin, paper no 317.
- 12) Foscolos A.E. and S. Maurigiannakis, (2006), Supply and demand of hydrocarbons – Trends and forecasts – Implications for power generation.
- 13) Maravelaki-Kalaitzaki, P., N. Kallithrakas-Kontos, D. Korakaki, Z. Agioutantis, and S. Maurigiannakis, Evaluation of silicon-based strengthening agents on porous limestones, Progress in Organic Coatings, 57 (2006) 140–148.
- 14) Markopoulos Th., Triantafyllou G. and Mavrigiannakis S., (2006), Composition of mortars of hydraulic lime that were produced by limestone raw material of Crete and control of their mechanic behavior 15<sup>o</sup> Congress of Concrete, October 25-27, Alexandroupoli, Volume C (page 492-499).
- 15) Kaklis K., S. Maurigiannakis, Z. Agioutantis, C. Istantso, (2007), Investigation of the indirect tensile strength of transversely isotropic Dionysos marble using the three point bending test, ICEM13, Alexandroupolis, Greece, July 1-6.
- 16) Kaklis K., Z. Agioutantis, G. Alevizos, and S. Maurigiannakis, (2007), Microhardness testing of marbles and correlation with mechanical properties, 8th HSTAM International Congress on Mechanics, Patras, 12-14 July.
- 17) Agioutantis, Z. P. Viopoulos, S. Maurigiannakis, Elastoplastic modeling of the chimney failure potential at the face of underground openings, 11th ACUUS Conference: Underground Space: Expanding the Frontiers, 10-13 September 2007, Athens, Greece.
- 18) Maravelaki-Kalaitzaki, P., N. Kallithrakas-Kontos, Z. Agioutantis, S. Maurigiannakis, D. Korakaki, A comparative study of porous limestones treated with silicon-based strengthening agents, Progress in Organic Coatings,.

- 19) Agioutantis Z., P. Viopoulos, H. Papantoni, S. Maurigiannakis, Numerical Modeling of Forepoling Applications in Tunnel Construction, Ecomining 2007, 24-26 October, Sovata Romania.
- 20) Deák, Gy., Şt. Deák, Z. Agioutantis, S. Mavrigiannakis, Assessment of Rock Salt Micro-Properties Using Pfc-2d Modeling, Ecomining 2009, 4-5 September 2009, Milos, Greece, pp.126-134.
- 21) Agioutantis, Z., N. Gouveris, Ch. Steiakakis, P. Viopoulos, S. Maurigiannakis, Thermo-mechanical simulation of monolithic concrete lining of an underground opening, 9th HSTAM International Congress on Mechanics, Limassol, Cyprus, July 12-14, 2010.
- 22) Paganis, L.K, Z. Agioutantis, S. Maurigiannakis, S. Steiakakis, An investigation of the mechanical behavior of fiber concrete and potential applications to the support of underground excavations, 6th Panhellenic Conference on Geotechnics and Geoenvironmental Engineering, Volos, 29 Sept-1 Oct, 2010 (*in Greek*).
- 23) Kaklis, K., S. Maurigiannakis, Z. Agioutantis and G. Bazdanis, An investigation of the mechanical characteristics of Nestos Marble, Volume in Honor of the late Professor K. Kavouridis (accepted paper, in Greek).

### **Attendance of congresses**

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| 19-21 September 2001 | Attendance of international congress of “New Frontiers in Reclamation: Facts and Procedures in Extractive Industry”, Milos, Greece.         |
| 27-29 June 2002      | Attendance of international congress of the “4th GRACM Congress On Computational Mechanics - GRACM 2002”, Patra, Greece.                    |
| 17-22 August 2003    | Attendance of international congress of the “5th EUROMECH Solid Mechanics Conference”, Thessaloniki, Greece.                                |
| 21-23 May 2003       | Attendance of international congress of “Sustainable Development Indicators in the Mineral Industry”, Milos, Greece.                        |
| 7-9 June 2004        | Attendance of the 1 <sup>st</sup> international congress of “Advances in Mineral Management and Enviromental Geotechnology”, Hania, Greece. |
| 25-27 September 2006 | Attendance of the 2 <sup>nd</sup> international congress of “Advances in Mineral Management and Enviromental Geotechnology”, Hania, Greece. |

- 17-20 June 2007 Attendance of international congress of “Sustainable Development Indicators in the Mineral Industry”, Milos, Greece.
- 07-09 September 2009 Attendance of the 3<sup>rd</sup> AMIREG international congress “Towards sustainable development: Assessing the footprint of resource utilization and hazardous waste management, Athens, Greece.

### **Rewards and Recognitions**

- Scholarship of record for the import and the record in the Postgraduate Program of Environmental Geotechnology of Department of Mechanic Mining Resources of Technical University of Crete for the semesters 9/1999-2/2000 and 3/2000-8/2000.

### **Professional Activities**

- Member of Technical Chamber of Greece.

### **Technical Skills**

#### *Operating Systems and Software*

- MS Windows 95-98
- MS Windows NT, 2000, XP, 7
- MS Office
- Corel Suite
- Marc - Mentat
- Visio

### **Languages**

- English, First Certificate in English.