

SHORT CURRICULUM VITAE

KONSTANTIA MAKRA

Dr Civil Engineer

Researcher ITSAK

Head of Soil Dynamics Division

Born: 14/06/1972, Alexandroupolis, Greece

Family status: Married with one child

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Education

Diploma in Civil Engineering, Aristotle University of Thessaloniki (AUTH), Greece, 1996

PhD in Civil Engineering, Aristotle University of Thessaloniki (AUTH), Greece, 2000

Research Interests

Geotechnical Engineering with emphasis to Geotechnical Earthquake Engineering and especially with:

- Soil dynamics
- Strong motion site characterization and soil categorization
- Empirical and theoretical studies on strong ground motion
- Site effects
- Microzonation studies
- Soil Structure Interaction
- Seismic behavior and design of geotechnical structures
- Numerical and analytical methods in geotechnical earthquake engineering

Research and professional experience

- Private civil engineer, 1997-2002
- Participation in research projects at the Civil Engineering Department of Aristotle University of Thessaloniki, 1997-2002
- Teaching experience in undergraduate and postgraduate courses at the Civil Engineering department of Aristotle University of Thessaloniki, 1998 – present

Member of scientific organization

- Technical Chamber of Greece
- Hellenic Association of Civil Engineers
- Hellenic Society for Earthquake Engineering
- Hellenic Society of Soil Mechanics Foundation Engineering
- International Society of Soil Mechanics Foundation Engineering
- Organizing Committee of the 4th International Conference in Geotechnical Earthquake Engineering (4ICEGE 2007, Thessaloniki, Greece)

Scientific Achievements

Referred Scientific publications (journals, conferences and special editions): 53

Other scientific publications: 7

Invited papers in scientific conferences (co-author): 3

Reviewer for scientific journals and conferences: 3

Research projects: 28 (4 acting as scientific responsible)

Selected publications (in international refereed journals and books during the last 7 years)

- Pitilakis K., D. Raptakis, K. Makra, M. Manakou & F.J. Chávez-García, 2010. **EUROSEISTEST 3D Array for the Study of Complex Site Effects**. *Invited Lecture in 2nd Euro-Mediterranean Accelerometric Data Exchange and Archiving workshop*, November 10-12, 2009, Ankara (in press by Springer in Geotechnical, Geological, and Earthquake Engineering book series).
- Raptakis D. and K. Makra, 2010. **Shear wave velocity structure in western Thessaloniki (Greece) using mainly alternative SPAC method**. *Soil Dynamics and Earthquake Engineering*, 30(4), 202-214. (online <http://dx.doi.org/10.1016/j.soildyn.2009.10.006>)
- Makra K., F.J. Chávez-García, D. Raptakis & K. Pitilakis, 2005. **Parametric analysis of the seismic response of a 2D sedimentary valley: Implications for code implementations of complex site effects**. *Soil Dynamics & Earthquake Engineering*, 25, 303-315 (online <http://dx.doi.org/10.1016/j.soildyn.2005.02.003>).
- Lekidis V., M. Tsakiri, K. Makra, Ch. Karakostas, N. Klimis & I. Sous, 2005. **Evaluation of dynamic response and local soil effects of the Evripos cable-stayed bridge using multi-sensor monitoring systems**. *Engineering Geology*, 79, 43-59. (online <http://dx.doi.org/10.1016/j.enggeo.2004.10.015>)
- Semblat J.F., M. Kham, E. Parara, P.Y. Bard, K. Pitilakis, K. Makra & D. Raptakis, 2005. **Seismic wave amplification: Basin Geometry vs Soil layering**. *Soil Dynamics & Earthquake Engineering*, 25, 529-538 (online <http://dx.doi.org/10.1016/j.soildyn.2004.11.003>)
- Raptakis, D.G., M.V. Manakou, F.J. Chávez-García, K.A. Makra, & K.D. Pitilakis, 2005. **3D configuration of mygdonian basin and preliminary estimate of its site response**. *Soil Dynamics & Earthquake Engineering*, 25(11), 871-887 (online <http://dx.doi.org/10.1016/j.soildyn.2005.05.005>)
- Raptakis D., K. Makra, A. Anastasiadis & K. Pitilakis, 2004. **Complex site effects in Thessaloniki (Greece): I. Soil structure and confrontation of observations with 1D analysis**. *Bulletin of Earthquake Engineering*, 2(3), 271-300 (online <http://dx.doi.org/10.1007/s10518-004-3799-6>)
- Raptakis D., K. Makra, A. Anastasiadis & K. Pitilakis, 2004. **Complex site effects in Thessaloniki (Greece): II. 2D SH modeling and engineering insights**. *Bulletin of Earthquake Engineering*, 2(3), 301-327 (online <http://dx.doi.org/10.1007/s10518-004-3803-1>)
- Pitilakis K., K. Makropoulos, P. Bernard, F. Lemeille, C. Berge-Thierry, Th. Tika, M. Manakou, D. Diagourtas, D. Raptakis, P. Kallioglou, K. Makra, D. Pitilakis & L.F. Bonilla, 2004. **The Corinth Gulf soft soil array (CORSSA) to study site effects**. *Compte Rendus Geoscience (Tectonics)*, 336, pp. 353-365 (online <http://dx.doi.org/10.1016/j.crte.2003.11.013>).