# THOMAS K. MAKEDON

# ENGINEERING GEOLOGIST PhD LABORATORY TEACHING STAFF, AUTH

CURRICULUM VITAE
PUBLICATIONS

#### 1. BIO - STUDIES - PROFESSIONAL CTIVITY

#### 1.1. BIO

Name: Thomas Makedon

Father's Name: Konstantinos

Profession: Geologist

Title: PhD, Aristotle University of Thessaloniki

Specialty: Engineering GEOLOGY

Date of birth: 31-3-1965

Place of birth: Veria

Current position: Laboratory Teaching Staff, Department of Geology, AUTH

#### 1.2. Studies

6/1982 High School 5th Lyceum of Thessaloniki (Grade 18.5/20)

3/1987 Degree from the Department of Geology of the Aristotle University of Thessaloniki (Grade

7.96/10)

5/1988 PhD Candidate Department of Geology of the Aristotle University of Thessaloniki

3/1994 PhD Thesis "Contribution to the Prediction of the Behavior of Rock Mass around

Underground Excavations with Geological and Numerical Research Methods.

Platanovrysi Nestos HEP»

1999–2000 Postdoctoral research on "Geological – Engineering Geological and Hydrogeological

parameters in the design of construction works".

#### 1.3. Foreign Languages

English: Certificate of Proficiency in English, University of Cambridge).

French: Very good

German: Listening and writing comprehension

#### 1.4. Scholarships – excellence

1. 1982: Excellence in Progress (induction to School of Geology AUTH)

2. **1999**: Scholarship of IKY Foundation for postdoctoral research

#### 1.5. Military service – Other activities

1. **28-3-1994** to **28-10-1995**: Military service, Conscript Sergeant Hellenic Army Corps of Engineers

2. **Basketball Player**: (E.KA.S.TH. Men's Championship)

#### 1.6. Undergraduate Seminars

- 1. **1985**: Seminar "Geology and Construction Works", Athens, ELKEPA Association of Greek Geologists.
- 2. **1986**: Coursework: «Well Construction», Institute of Geology and Palaeontology, Tübingen, Germany.

# 1.7. Postgraduate Seminars

- 1. **1991**: Specialization training seminar "Water Resources Identification, Research and Management, construction of projects for regional development", 300 hours, School of Geology, Aristotle University of Thessaloniki.
- 2. **1992-1993**: Specialization training seminar "Earthen Irrigation Dams", 300 hours, School of Geology, Aristotle University of Thessaloniki.

## 1.8. Professional activity

- **1990 2002**: Freelance Geologist Designer.
- **1997 1999**: Scientific associate at "GEOTECHNOLOGIKIS.A." Geoengineering surveys studies.
- 1998 2000: Tutor of courses for Marble Technicians K.E.T.E.K. Thessaloniki
- **1997 2008**: Tutor of Geology Paleontology, School of Hellenic Tourism Organization
- **1998 1999 2002**: Materials Engineer, Tunnels Specialist Assistant for the Construction Manager of Egnatia Odos S.A. Supervision team of Section 5.2-5.3, Kouloura Veria Lefkopetra.
- **2002 present** Laboratory Teaching Staff of the School of Geology of the Aristotle University of Thessaloniki (Department of Geology Laboratory of Engineering Geology & Hydrogeology).

#### 2. RESEARCH PROJECTS - PROGRAMS - STUDIES

#### 2.1. Research as a PhD candidate

- 1. Numerical analysis methods for the calculation of stresses around underground excavations.
- 2. Rock mass failure study in cases of underground excavations
- 3. Stability analysis of rocky and soil slopes in civil engineering projects
- 4. Physical and mechanical properties of geo-materials

# 1988 - 2007: Research subjects:

- 1. Geological and engineering-geological parameters of large construction projects (dams, urban development, major road works)
- 2. Seismic risk Active tectonics and construction of large construction projects (New national road Kozani Larissa, dams, etc.).
- 3. Research, exploitation and management of water resources (water supply of Athens, Thessaloniki) Geological parameters in the protection of monuments.

# 2.2. Research projects

#### 1991

1. Research for the water resources management in the area of Akropotamos in the Pieria valley (Prefecture of Kavala) and study of the Akropotamos dam in Marmaras stream.

Funding: Prefecture of Kavala

Scientific Coordinator: Prof. G. Dimopoulos.

Geological, engineering-geological and hydrogeological parameters of the Pieria basin and foundation conditions at the construction site of the Akropotamos dam in the Pieria basin.

2. Research and management of water resources, construction of hydroelectric projects for the development of the region.

Funding: Community of Pontokerasia, Kilkis – European Union

Scientific Coordinator: Prof. G. Dimopoulos.

3. Hydrogeological study of surface and groundwater resources management in the wider area of Pontokerasia in the Prefecture of Kilkis for the development of the region.

Scientific Coordinator: Prof. G. Dimopoulos.

#### 1993

1. The sea wind and polluted atmosphere as factors of deterioration of monuments in the Mediterranean coastal environment. EV5V-CT92-0102

Scientific Coordinator (Greek side): Prof V. Christaras.

Geological parameters (mapping, identification of geological formations, tectonic deformation of the foundation area, identification of construction materials) and physico-mechanical properties of rocks in the study of Protection of Monuments - The case of the Temple of Eleusis.

2. Geological - Geoengineering Survey of the Suitability of the New Cemeteries of the Municipality of Volos and N. Ionia, Volos.

Scientific Coordinator: Prof. G. Dimopoulos.

Investigation of the geological, hydrogeological and geoengineering parameters in relation to the suitability for construction of the new cemeteries in the Municipalities of Volos and N. Ionia in the prefecture of Magnesia.

3. Modelling of groundwater management of the Axios basin.

Scientific Coordinator: Prof. G. Terzidis

Development of a mathematical model for the simulation of the underground aquifer system of the hydrological basin of the river Axios. Investigation and evaluation of the hydrogeological and hydraulic parameters of the system.

1. Safety of slopes in road networks and large civil engineering works.

Scientific Coordinator: Prof. V. Christaras.

Determination of stability conditions and failure mechanisms on artificial slopes along important road networks.

#### 1995

1. Slope stability at the location of the "Hermes" Communications Node on Mount Pangaio. Scientific Coordinator: Prof. G. Dimopoulos.

Geological and tectonic reconnaissance of the construction area of the mobile node building. Analysis and stability calculations of artificial rocky slopes. Proposals and measures to support the rock mass.

2. Engineering-geological study of selected sections along the alignment of the Egnatia Motorway. Sections a) East entrance of Metsovo - Panagia Tunnel (km 1+620 to 2+400) and b) Panagia - Venetikos (km 3+400 - 5+700 and 7+200 - 7+700).

Scientific Coordinator: Prof. V. Christaras.

Investigation of the geological and engineering-geological conditions along the Egnatia Odos in sections a) East entrance of Metsovo - Panagia Tunnel and b) Panagia - Venetikos. Detailed mapping and study of kinematics of failures. Investigation of the triggering of landslides in the area and the failures during the construction of the projects. Determination of the mechanism of landslide creation and mapping of landslide-prone areas.

3. Seismic hazard studies – control – completion of construction studies of the Kozani-Larissa National Road. Tectonic – engineering geological study for the construction of the new road axis Kozani - Larissa in the section Kozani - Triangular after the earthquake of 13-5-1995.

Scientific Coordinator: Prof. V. Christaras

Tectonic - technogeological study along the new road axis Kozani - Larissa in the section Kozani - Triangular. Detailed mapping of active faults and other fault structures. Identification of landslide-prone zones.

#### 1996

1. Scientific investigation for the Natural History Museum in the Municipality of Axioupolis N. Kilkis. Scientific Coordinator: Prof. G. Dimopoulos

Composition of the geological and paleontological departments of the Museum (collection and processing of material for the construction of exhibits)

1. Neotectonic study in the wider area of the dams of Polyfytos - Ilarion - Elafi in the valley of Aliakmonas.

Scientific Coordinator: Prof. D. Mountrakis.

Study of the active faults in the wider area and in the basin of the dams along Aliakmon river. Determination of geometry, kinematics and reactivation rate of fault structures. Investigation of the

effect of the surface effects of the earthquake of 13 May 1995 on the safety of works. Seismic hazard assessment.

#### 1997

1. Study of the thermal springs of N. Apollonia, Thessaloniki.

Scientific Coordinator: Prof. M. Fytikas

Geological – geoEngineering description and evaluation of exploratory boreholes and laboratory – in situ soil mechanics and permeability tests in the hot springs of N. Apollonia.

2. Hydrological study of Mount Paiko and the karst system of Aravissos springs.

Scientific Coordinator: Prof. G. Dimopoulos

Geological and tectonic investigation of the relationship between the different geological formations of the aquifer system of Mount Paiko to evaluate its hydrogeological and hydraulic behavior.

#### 1998

1. Construction of Kavala bypass section road from km. 4+937 to km 9+400. O7 and O9 Slopes.

Scientific Coordinator: Prof. V. Christaras

Engineering geological and tectonic analysis - description of artificial slopes at the sites of O7 and O9 Slopes. Classification of rock mass, stability analysis and description of potential failure mechanisms.

2. Modelling study for water resources management of the Mavrossouvala basin (E.Y.D.A.P.)

Scientific Coordinator: Prof. G. Dimopoulos

Geological mapping, tectonic study, digital processing and evaluation of data to develop a model for the underground aquifer of the Mavrossouvala basin, Attica. Determination of hydrogeological characteristics and behavior of the aquifer.

#### 2003

**17.** Hydrogeological research in the wider area of the District of Aidonia of the Municipality of Irakleotes, Grevena for the detection of underground aquifers and urban water supply (2003)

Scientific Coordinator: Prof. G. Dimopoulos

Geological and hydrogeological research, geophysical surveys for the proposal of water catchment of underground aquifers in the wider area of the District of Aidonia.

#### 2007

18. Additional research of water resources development projects of Chalkidiki – Olynthios dam

Scientific Coordinator: Prof. D. Karamouzis

Geological and geoEngineering investigation and evaluation of the "Psalida" dam site and geoEngineering evaluation of the "Louziki" dam site on the Olynthios river.

#### 2.3. Studies

#### 1991

- Hydrogeological research for the identification of favorable aquifer conditions in the wider area of the Community "Athitos" of the Kassandra peninsula and drilling of boreholes. Community of Athitos.
- 2. Hydrogeological research for the identification of favorable aquifer conditions in the community of Agios Petros, Prefecture of Kilkis and proposal for the drilling of water wells. (collaboration with N. Zouros).

#### 1992

- Geological study for the construction of a water reservoir in an area of the community of Ouranoupolis, Halkidiki. Community of Ouranoupolis (collaboration with S. Athanasias, N. Zouros).
- 2. Hydrogeological research for the location of water wells in the Community of Efkarpia. Community of Efkarpia (Prefecture of Thessaloniki) (collaboration with S. Athanasias, N. Zouros).
- 3. Hydrogeological research for the determination of a drilling location in an area of the Community of Sitochoro (Province of Farsala, Prefecture of Larissa). (collaboration with S. Athanasias).

#### 1996

- GeoEngineering research study for Section 13.6 of Egnatia Odos, from N. Peramos to Karvali -Aspra Homata area. Project: Construction of two bridges (km 10+163 - 10+250 and 10+845 -10+915) and high embankments of the Aspra Chomata interchange. Egnatia Odos S.A. (GEOTECHNOLOGIKI S.A.)
- GeoEngineering research study for Section 13.7 of Egnatia Odos, Section II of Kavala bypass. Project: Construction of 6 bridges (km 0+700 - 10+200). Bridges No 4, 5 and 6. Egnatia Odos S.A. - AKTOR S.A. – ERGAS T.S.A. (GEOTECHNOLOGIKI S.A.)

#### 1997

- 1. Investigation of possibilities for urban development of land in Galatista, Halkidiki, (National Bank of Greece).
- 2. Quality control of base materials of the asphalt pavement in the area of camps "MAKEDONIA" in Paliouri, Chalkidiki (GEOTECHNOLOGIKI S.A.).

#### 2006

• Design for flood protection on the provincial road Argalasti-Hortou, Magnesia Prefecture (in collaboration with N. Chatzigogos).

#### 2.4 Geological – Engineering Geological Mapping published in studies and projects

1987 - Geological map of the "Elafi" dam area on the river Aliakmonas (scale 1:2000)

- Geological mapping of 2 exploratory adits on the right slope of the dam site "Elafi" on the river Aliakmonas (scale 1:100)
- **1993** Map of geoEngineering suitability of the area of new cemeteries of the municipality of Nea Ionia, Volos (scale 1:500)
- **1994** -Engineering-geological map of the Platanovrysis dam area on the river Nestos (scale 1:1000)
- 1995- Engineering-geological map of Hermes junction area on Mount Paggaio (scale 1:100)
  - Geological maps of Egnatia Odos, section Panagia Venetikos from km 3+400 5+700 and km 7+200 7+700 (scale 1:1000)
- **1996** Engineering-geological map & length of Egnatia Odos, section East entrance of Metsovo Tunnel Panagia km 1+620 2+400 (scale 1:500)
  - Geological tectonic map along the new road axis Kozani Larissa in the section Kozani Trigoniko (scale 1:100000)
  - Geological map in part of Mount Paiko (scale 1:50000)
  - -Geological map of Egnatia Odos, section I of Kavala bypass, km 4+937 9+400 Tunnel O7 (scale 1:500)
  - Geological map of Mavrossouvala Attica area (scale 1:5000)
- **2007** Geological map and cross sections of Olynthios dam axis and Psalida dam basin (scale 1:5000)

#### 2.5. Scientific Conferences – Workshops

# A. Abroad

- 1. Conference on Fractured and Jointed Rock Masses, Lake Tahoe, California, USA, 3-5 June 1992 (paper).
- 2. 3rd International Conference on Case Histories in Geoengineering Engineering, St. Louis, Missouri, USA, June 1-4, 1993 (paper).
- 3. 7th International Congress of the IAEG (International Association of Engineering Geology), Lisboa, Portugal, 5-9 September 1994 (paper)
- 4. XI European Conference on Soil Mechanics and Foundation Engineering, Copenhagen, Denmark 28 May 1 June 1995 (paper).
- 5. -30th International Geological Congress, 4-14 August 1996, Beijing, China, (paper).
- 10th I.A.E.G. Congress, Geoengineering Investigation and Design, Nottingham U.K. 2006 (paper)
- 2. 1st Sri Lankan Geoengineering Society (SLGS) International Conference on Soil and Rock Engineering, Colombo, Sri Lanka, August 2007 (paper)

#### B. In Greece

1. 1st Hellenic Geological Weekend, 19-20 May, Athens, Geological Society of Greece.

- 1st Hellenic Geological Conference, 3-5 December, Athens, Association of Greek Geologists.
- 2. 1st Hellenic Marble Conference, May, Thessaloniki.
- 3. International Conference on Thermal Mineral Waters, 20-25 October, Thessaloniki, SDKIPLE.
- 4. 3rd Scientific Conference of the Geological Society of Greece, 22-25 May, Athens, Geological Society of Greece.
- 5. 1st Hellenic Geographical Conference, February, Athens, Hellenic Geographical Society.
- 6. 4th Scientific Conference of the Geological Society of Greece (E., G.E.), 25-29 May, Athens, Geological Society of Greece.
  - 1st Symposium on new developments in Seismology and Geophysics of Greece, 1-3 July, Thessaloniki, Laboratory of Geophysics, Aristotle University of Thessaloniki.
  - 2nd Conference on Thermal Mineral Waters, 7-9 October, Thessaloniki, S.D.K.I.P.L.E. International three-day scientific conference "Modern Applications of Remote Sensing", 10-12 October, Thessaloniki.
- 7. Hellenic Conference "Environmental Protection and Agricultural Production", 21-23 March, Thessaloniki, Geoengineering Chamber of Greece.
  - Hellenic Conference "The Greek Marble", 23-24 May, GEOT.E.E., S.E.G., Thessaloniki.
  - 2nd Greek-Bulgarian symposium on the geological and physico-geographical problems of the Rhodope mass 14-17 October, School of Geology, Aristotle University of Thessaloniki
- 8. 5th Scientific Conference of the Geological Society of Greece, 24-27 May, Thessaloniki, Geological Society of Greece.
  - Conference "Water Supply of Thessaloniki", December, Thessaloniki, GEOT.E.E., Municipality of Thessaloniki.
- 9. Conference "Geology and Dams: Experiences from Greece", 20 November, Athens, GEOT.E.E., S.E.G.
- 10. Hellenic Scientific Symposium "Water Shortage and Floods", Geoengineering Chamber of Greece (GEOTEE), Thessaloniki 17-18 March.
- 11. 6th Congress of the Geological Society of Greece, with emphasis on Aegean Geology, Athens, May 25-27, Geological Society of Greece.
  - Workshop «World map of active faults The North Anatolian (Turkey) and the Aegean (Greece) active fault systems» International Lithosphere Project ILP-II UNESCO, Thessaloniki, June 1-8.
- 12. 1st International Conference on the Environment: "Mediterranean Environment Rural Development Quality of Life". Geoengineering Chamber of Greece (GEOTEE), Athens 21-24 March.
  - 2nd Symposium on Archaeometry "Archaeometric and Archaeological Research in MAKEDONia and Thrace", Thessaloniki, 26-28 March.
- 1995 Workshop "Landfills" Committee of Hydrogeology E.G.E.-GEOT.E.E.SEG Thessaloniki April

Conference "Seismic policy and earthquake protection measures" Geoengineering Chamber of Greece (GEOTEE) - Central MAKEDONia, Thessaloniki, January.

Conference "Water Supply of Thessaloniki - Present and Future", 14 May, GEOT.E.E., SEG, Thessaloniki.

International Scientific Conference "The Earthquake of May 13, 1995 - Kozani and Grevena. Scientific and social approach", Kozani, 24-28 May, (paper).

- **1997** International Symposium "Engineering Geology and the Environment", Committee of Engineering Geology of the GSG (I.A.E.G.), Athens, June 23-27 (paper).
  - I.A.S.P.E.I. 97.29th General Assembly of the International Association of Seismology and Physics of the Earth's Interior, Θεσσαλονίκη 18-29 Αυγούστου.
- 1. Conference "Egnatia Odos", Egnatia Odos S.A. Polytechnic School of Aristotle University of Thessaloniki, Aristotle University of Thessaloniki, 29 April 1999.
  - International Conference "HELECO 99 Environmental Technology for the 21st Century", HELEXPO TIF, Thessaloniki 3-6 June.
  - Interbalkan Meeting "The role of Local Government in dealing with emergencies and natural disasters", Thessaloniki HELEXPO TIF 26-27 November.
  - Two-day conference "Seismic Disaster Response: Scientific Approach Social Dimension", Thessaloniki Amfith. Papageorgiou Hospital 3 4 December.
- 2. Conference "Shielding Thessaloniki from Natural Disasters. Seismic Flood protection". Ceremony Hall of the Old School of Philosophy. Association of Greek Geologists, Department of Geology, Aristotle University of Thessaloniki GEOTEE/Central MAKEDONia Branch, I.G.M.E./Perif. Mon.
  - K. MAKEDONia, 24 February (member of the Organizing Committee)

#### 2004

- 10th International Congress of the Geological Society of Greece, Thessaloniki April (paper).
- 2. 11th International Congress of the Geological Society of Greece, Athens, May (paper).
- 3. 3rd Hellenic Conference on Earthquake Engineering and Engineering Seismology, Athens, November (paper)

#### 2011

- 1. 7th Hellenic Conference of G.G.M.E. (Society of Agricultural Engineers of Greece), Athens, November (paper)
- 2. 13th International Congress of the Geological Society of Greece, Chania, September (paper)
- 3. 7th Hellenic Conference on Geoengineering Engineering, Athens, November (paper)

#### 2016

14th International Congress of the Geological Society of Greece, Thessaloniki, May (paper)

#### 2.6. Participation in Scientific – Professional Bodies

Member of the following scientific bodies:

- 1. Geoengineering Chamber of Greece (GEOTEE)
- 2. Geological Society of Greece
- 3. Association of Greek Geologists (S.E.G.)
- 4. Association of Special Laboratory Staff of Aristotle University of Thessaloniki (S.E.DI.P. AUTH)

#### 2.7. Elected Member

- 1. 1983 1985: Senate of the Aristotle University of Thessaloniki (Student)
- 2. **1983 1987**: Member of the Collective Bodies of the Faculty of Sciences and the School of Geology of the Aristotle University of Thessaloniki
- 3. **1985 1987**: President of the Geological Students Association of the Aristotle University of Thessaloniki
- 4. **1986-1990, 1991-2001, 2001-2003**: Member of the Committee of the Association of Greek Geologists Northern Greece Branch
- 5. 1988 2008: Representative of the Geoengineering Chamber of Greece
- 6. 1999 2000: Member of the Committee of Geologists of GEOTEE Northern Greece Branch
- 7. 1999 2001: Vice-President of the Association of Greek Geologists
- 8. 2008 2014: Member of the Committee of the Central MAKEDONia Branch of GEOT.EE.
- 9. 2014-today: Member of S.E.DI.P. Aristotle University of Thessaloniki and P.O.S.E.E.DI.P.

#### 3. TEACHING ACTIVITY

# 3.1. <u>Undergraduate Program of Studies, School of Geology, Aristotle University of Thessaloniki</u>

#### 1988 - 1994 (as PhD candidate)

- 1. Engineering Geology (Lab courses)
- 2. Geological Studies of Construction Works
- 3. Soil Mechanics Rock Mechanics

#### 2002-present

- 1. Engineering Geology, Geology of Greece (Lab)
- 2. Soil mechanics rock mechanics
- 3. Geological Studies of Construction Works
- 4. Single and Multi-day Field Trips
- 5. English Terminology

# 3.2. Postgraduate Studies Program, School of Geology, Aristotle University of Thessaloniki

# "Applied and Environmental Geology"

#### **Postgraduate Courses**

2004 - 2014

- 1. Earthworks, road construction & paving, requirements & quality control
- 2. Construction works Dams

# "Engineering Geology - Environmental Hydrogeology"

#### **Postgraduate Courses**

2004 - today

- 1. Construction Works Dams
- 2. Professional Practice in Engineering Geology Environmental Hydrogeology, Professional Presentations
- 3. Principles of Soil Mechanics, laboratory and field tests
- 4. Engineering Geological Mapping
- 5. Field Exercises
- 6. Geological Models in Applied Geology
- 7. Site Investigation Methods

# 3.3. <u>Interdepartmental Postgraduate Program of Studies of the Department of Geography of the University of the Aegean</u>

#### "NATURAL HAZARDS AND DISASTER RESPONSE"

# **Postgraduate Courses**

2019 - present

• Landslides

# 3.4. Extracurricular teaching

1997-2006 & 2007-2010

"Geology & Paleontology" at the School of OTEK (Organization of Tourism Education and Training)

1998-2000

Department of Marble Technicians of K.E.TE.K. Oreokastro

- 1. Geology
- 2. Marbles
- 3. Quarrying mining
- 4. Training of workers in the marble industry
- 5. Quarrying and mining regulations

#### 3.5. Lectures – Seminars (as instructor)

<u>1991-1993</u>: Training programs for highly qualified young unemployed of the European Social Fund organized by the Department of Geology, Aristotle University of Thessaloniki, the Geoengineering Chamber of Greece and Local Authorities of Thessaloniki.

- 1. <u>1991</u>: ESF training program "Protection of environment and forests", Lectures: Computer applications in environmental protection techniques.
- 2. <u>1992</u>: Educational program of the ESF "Sliding mechanisms slope safety in road networks", School of Geology, Aristotle University of Thessaloniki
  - <u>Lectures:</u> Computer program applications in slope stability, slope stability analysis in road networks.
- 3. <u>1993</u>: Seminar "Slope Safety in Road Networks and Large Engineering Works" Department of Geology, AUTH
  - Lectures: Rock mass classification methods, rock and soil failure criteria
- 4. <u>1993</u>: Seminar "Preparation of Hydrogeological Studies and Geological Studies of Engineering Works (Dams Landslides Surface and Underground Road Works)" School of Geology, Aristotle University of Thessaloniki
  - <u>Lectures</u>: Preparation of geological suitability studies for cemetery construction, rock slope stability, classification of rock mass support of tunnels with numerical analysis methods

#### 4. REVIEW OF SCIENTIFIC PAPERS

Reviewer in scientific journals and conferences (<a href="https://publons.com/dashboard/summary/">https://publons.com/dashboard/summary/</a>):

- 1. Engineering Geology, Elsevier, ISSN: 0013-7952
- 2. IAEG XII Congress 2014
- 3. 14th 15th International Congress of the Geological Society of Greece
- 4. Bulletin of Engineering Geology and the Environment (I.A.E.G.)

#### 5. PUBLICATIONS

# 5.1. Dissertations

- 5.1.2. **MAKEDON Th**. (1994): "Contribution to the prediction of the behaviour of rock mass around underground excavations with geological and numerical investigation methods. Hydro-electric Project (H.E.P) of Platanovrisi, Nestos River. Doctoral Thesis, No 27 of the Annex to the Scientific Yearbook of the Department Geology, Aristotle University of Thessaloniki, p. 302.
- 5.1.1. **MAKEDON TH.** & ATHANASSIAS S. (1987): Research and Evaluation of Data on Boreholes and Adits of Elafi Dam, Graduate thesis, Department of Geology, Aristotle University of Thessaloniki.

Engineering-geological mapping of the location and exploration adits of the "Elafi" dam on the Aliakmon river. Processing and evaluation of sample drilling data and Lugeon permeability tests. Assessment of the geological suitability of the site.

#### **5.2. Scientific Papers - Publications**

# 5.2.A. In foreign scientific journals

- 5.2.7. CHATZIGOGOS, N-P., **MAKEDON**, **T.K.**, TSINDARIS, G.E., TSOTSOS, S.C., CHRISTARAS B.C., (2016). Estimation of the Hydroconsolidation Susceptibility of the Anthropogenic Fill of the Historical Center of Thessaloniki, Greece. International Journal of Geoengineering Case Histories, Vol. 4, Issue 1, pp 46-56.
- 5.2.6. **MAKEDON Th.,** CHATZIGOGOS N. (2012). Failure mechanism of overhanging slopes in sedimentary rocks with dissimilar mechanical properties. Bulletin of Engineering Geology and the Environment, Volume, Issue 4 (2012), pp 703–708, Springer.
- 5.2.5. **MAKEDON Th.**, TREMOPOULOU E., DIMOPOULOS G. (2008). The influence of gradation on the insitu compaction of geo-materials in road construction. Bulletin of Engineering Geology and the Environment, Volume 68, Issue 1 (2009), pp 81-87, Springer.
- 5.2.4. **MAKEDON Th.**, CHATZIGOGOS N., VOGIATZIS D., DIMOPOULOS G., KARAMOUZIS D. (2008). The effect of geology on the suitability of the Olynthios river dam site, Northern Greece. Bulletin of Engineering Geology and the Environment, Volume 68, Issue 3 (2009), Page 355, Springer.
- 5.2.3. **MAKEDON Th.**, CHATZIGOGOS P.N, SPANDOS S. (2008). Engineering geological parameters affecting the response of Thessaloniki's urban fill to a major seismic event. Engineering Geology, Volume 104, Issues 3-4, p.p. 167-180, Elsevier.
- 5.2.2. CHRISTARAS B., ZOUROS N. & **MAKEDON Th.,** (1995): Behaviour of the Votonosi formation in Pindos Mountain (Greece). Proceedings, XI European Conference on Soil Mechanics and Foundation Engineering, Copenhagen '95, Vol. 7, 11, pp 23-28. In Danish Geoengineering Society (dgf) Bulletin «The Interplay between Geoengineering Engineering and Engineering Geology»
- 5.2.1. MOROPOULOU A., BISBIKOU K., CHRISTARAS B., KASSOLI-FOURNARAKI A., ZOUROS N., **MAKEDON Th.**, FITZNER B. & HEINRICHS K. (1995). Examination of the Weathering Susceptibility of the Building Stones of Demeter Sanctuary in Eleusis: 1: Origin, Petrography and Physical, Mechanical and Microstructural Properties. *Bolletino Geofisico*, 18,1, p.37-48.

#### 5.2.B In foreign scientific journals (abstracts only after review)

5.2.8. CHRISTARAS B., **MAKEDON Th.**, DAFNIS S., GIOKA D., & EFTHIMIADOU M., (1990). «Landslide phenomena along the new Ring Road of Thessaloniki, Greece». Conf. EUG VI, Strasbourg, France. In Terra Nova, Terra Abstracts, Vol. 3 No 1, March 1991.

#### 5.2. F. Bulletin of the Geological Society of Greece

- 5.2.15. PAPATSIKOURAKIS D., CHATZIGOGOS N., **MAKEDON Th.**, (2019). «The effect of the degree of saturation on shear strength of sandy soils. The example of Geni Tzami of Edessa, Northern Greece». Proceedings of the 15th International Conference, Athens . DOI: 10.13140/RG.2.2.33173.68320.
- 5.2.14. AMPATZI G., CHATZIGOGOS N., **MAKEDON M**., PAPATHANASSIOU G. & MARINOS V., (2016). «Application of Terrestrial Laser Scanning (Lidar) in Rock Slope Stability. An Example from Northern Greece». Bulletin of the Geological Society of Greece vol. L, 2016, Proceedings of the 14th International Conference, Thessaloniki.
- 5.2.13. VARGEMEZIS G., DIAMANTI N., FIKOS I., STAMPOLIDIS A., **MAKEDON Th.**, CHATZIGOGOS N. (2013): «Ground penetrating radar and electrical resistivity tomography for locating buried building foundations: a case study in the city centre of Thessaloniki, Greece». Bulletin of the Geological Society of Greece vol. XLVII, 2013, Proceedings of the 13th International Conference, Crete.
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