



## Personal Data

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Name:	<b>Evangelos Akylas</b>
Date of birth:	September 19, 1971
Nationality:	Greek
Marital Status:	Married with four children
Position:	Associate Professor, Department of Civil Engineering and Geomatics, Cyprus University of Technology, Chair of the Department, Coordinator of the Departmental Undergraduate Studies Committee, Head of the Environmental Fluid Mechanics Group at CUT
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## Profile

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Dr Akylas specializes in the fields of Fluid Mechanics and Mathematical Modeling. Currently, he is an Associate Professor and Vice-Chair at the Department of Civil Engineering of the Cyprus University of Technology, where he teaches physics, hydrology, hydraulics and fluid mechanics. His principal research field is theoretical fluid mechanics, with emphasis on both analytical and numerical studies of fluxes in laminar and turbulent flows. He is also active in the field of subsurface hydrology, with emphasis in groundwater flow, aquifer depletion/seawater intrusion and aquifer recharge problems, as well as in experimental and computational studies of water quality and transport phenomena in reservoirs. The study of these challenging flow problems has resulted in publications in a wide range of different research areas (from meteorology to hydraulics and to fundamental fluid mechanics), whilst the attained expertise has led to scientific contributions to numerous research projects. His published work, as an author or co-author, includes 32 papers in refereed international journals and more than 70 papers in edited volumes, refereed conference proceedings and conference presentations, as well as 9 technical reports. He also acts as a reviewer, on a systematic basis, for several journals in the field of fluid mechanics and hydrology.

Dr Akylas received his BSc in Physics in 1994, his MSc in Environmental Physics in 1997, and his PhD in Physics in October 2005, all from the National and Kapodestrian University of Athens, Greece. In 2006, Dr Akylas was elected Assistant Researcher at the Institute of Environmental Research and Sustainable Development of the National Observatory of Athens (NOA), where he continued research on fundamental and applied aspects of fluid mechanics. He also proceeded with

his work in the field of hydrology-hydraulics (modelling of subsurface flow and stream-aquifer interaction, and solute transport in water). Furthermore, he represented NOA'S team (under contract to WDD Cyprus) supervising, monitoring and evaluating the project for the development of an Integrated Monitoring Program and related Data Bases to support the implementation of the Water Framework Directive 2000/60 of the European Union in Cyprus. At the end of 2012 he initiated the Environmental Fluid Mechanics research Group, working in turbulence modelling and applied fluid mechanics with applications in environmental flows. The joint activity of the Group seeks innovative modelling ideas for interesting dynamical problems fundamental and applied, providing wide opportunities for collaborations with specialists of different fields within and outside the academic environment.

Dr Akylas actively pursues research collaborations and holds close and continuous relations with scientific and professional teams in Europe (ERCOFTAC Group; NOA-Greece; University of Athens, University of Aegean, University of Cyprus) and in the United States (SANDIA Labs) exchanging ideas and know-how on mathematical modelling. In 2008, he won a Marie Curie European Reintegration Grant (45000 €) for continuing his research on turbulence modeling, with emphasis on the extension of Particle Representation Modelling to applications (PRIMA project). He also coordinated from 2011 to 2012 the AIOLOS project, for studying and modelling the wind power in Cyprus (85000 €). Finally he participated in more than 10 projects related to the topic.

## Education

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01/1998 – 03/2005: Doctoral student in Physics Department, University of Athens, Greece (from 01/2000–12/2001 on leave for military services).

Thesis: *Parameterizations of momentum and heat fluxes in the ABL during strong instability* (Advisor: Prof. M. Tombrou), **PhD in Physics (07/2005)**

09/1995 – 06/1997: **MSc in Atmospheric Physics** (July 1997), Laboratory of Environmental Physics and Meteorology, *Department of Physics, University of Athens, Greece*

10/1989 – 07/1994: **BSc in Physics** (September 1994), Department of Physics, University of Athens, Greece

## Scholarships

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- Marie Curie Fellowship for Post-Doctoral Research (2005 -2007) at MHD turbulence
- Hellenic State Research Scholarship (1998-2000) for studying turbulent fluxes during strong instabilities

## Languages

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- Greek: Native
- English: Proficiency of the University of Michigan
- Spanish: Fluent
- French: Basic knowledge

## Scientific and Professional Experience

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- 7/2015 – present: Associate Professor at the Department of Civil Engineering and Geomatics (Chair), Cyprus University of Technology, Cyprus.
- 11/2009 – 7/2015: Assistant Professor at the Department of Civil Engineering and Geomatics, Cyprus University of Technology, Limassol, Cyprus.
- 06/2008 – 11/2009: Visiting Lecturer at the Department of Mechanical Engineers, Frederick University, Nicosia, Cyprus.
- 10/2006: Elected as a Lecturer at the Department of Physics, University of Patras, Greece (Dr. Akylas did not accept the position for personal reasons).
- 09/2005 – 08/2007: Post-Doctoral Researcher (Marie Curie Fellowship), Department of Mechanical Engineers, University of Cyprus, Nicosia, Cyprus.
- 05/2006 – 11/2009: Assistant Researcher (elected) in the Institute of Environmental Research and Sustainable Development, National Observatory of Athens, Athens, Greece (on leave from 2006 to 2007)
- 12/2001 – 05/2006: Research Associate (Permanent Position) at the Institute of Environmental Research and Sustainable Development, National Observatory of Athens, Athens, Greece (on leave from 2005 to 2006)
- 01/2000 – 12/2001: Hellenic Meteorological Service, Hellenic Air Force (military services), Athens, Greece.
- 06/1996 – 12/1999: Graduate Research at the Department of Physics, University of Athens, Greece.

## Teaching Experience

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### Undergraduate Courses

- 12/2009 – present: Undergraduate courses of Physics (Mechanics), Scientific Programming, Hydrology, Hydraulics, Environmental Sustainability and Engineering Law, at the Cyprus University of Technology, Department of Civil Engineering and Geomatics, Limassol, Cyprus.
- 09/2008 – 11/2009: Undergraduate courses of Physics (Mechanics, Kinematics and Electromagnetism), at the Frederick University, Department of Mechanical Engineers, Nicosia, Cyprus
- 10/2004 – 09/2005: Undergraduate Laboratory of Fluid Dynamics, and Laboratory of Physics, Technological Educational Institute of Piraeus, Athens, Greece
- 09/1996 – 06/1999: Undergraduate Laboratories of Mechanics, Thermodynamics, Statistical Physics and Physics of Atmosphere, Department of Physics, University of Athens, Greece

### Graduate Courses

- 09/2013 – present: Computational Fluid Mechanics, MSc in Civil Engineering and Sustainable Design, at the Cyprus University of Technology, Department of Civil Engineering and Geomatics, Limassol, Cyprus.

### BSc Thesis Advising (12)

**Ioanna Pelasela (2009)**, *Study of the wind power on the island of Cyprus*, BSc Thesis, Department of Mechanical Engineers, University of Cyprus, Nicosia, May 2009, Cyprus

**Ioannis Kastanas (2012)**, *Wind Power Estimation at Coastal Areas of Cyprus*, BSc Thesis, CUT, Department of Civil Engineering and Geomatics, Limassol, June 2012, Cyprus.

**Christianna Georgiou (2012)**, *Quasi - Steady flow in inclined aquifers*, BSc Thesis, CUT, Department of Civil Engineering and Geomatics, Limassol, June 2012, Cyprus.

**Alexis Neofytides (2013)**, *A virtual 3-D Navigation Tool for CUT*, BSc Thesis, CUT, Department of Civil Engineering and Geomatics, Limassol, June 2013, Cyprus.

**Ioannis Varvaris (2013)**, *Nonlinear storage models of unconfined flow through a shallow aquifer on an inclined base and their quasi-steady flow application*, BSc Thesis, CUT, Department of Civil Engineering and Geomatics, Limassol, June 2013, Cyprus.

**Zambela Pittaki (2013)**, *Application and Testing of Weibull Distribution in Wind Measurements at Cyprus*, BSc Thesis, CUT, Department of Civil Engineering and Geomatics, Limassol, June 2013, Cyprus.

**Niki Katzi (2014)**, *DNS of linearly forced isotropic turbulence*, BSc Thesis, CUT, Department of Civil Engineering and Geomatics, Limassol, June 2014, Cyprus.

**Nicolas Georgiou (2014)**, *Structure functions in linearly forced isotropic turbulence*, BSc Thesis, CUT, Department of Civil Engineering and Geomatics, Limassol, June 2014, Cyprus.

**Kyriakos Theodoulides (2014)**, *A conceptual quasi - steady model for sea – aquifer interaction*, BSc Thesis, CUT, Department of Civil Engineering and Geomatics, Limassol, June 2014, Cyprus.

**Giorgos Argyrou (2015)**, *Linear models for the flow in inclined aquifers*, BSc Thesis, CUT, Department of Civil Engineering and Geomatics, Limassol, June 2015, Cyprus.

**Michalis Pieris (2016)**, *Linearly forced EDQNM of isotropic turbulence*, BSc Thesis, CUT, Department of Civil Engineering and Geomatics, Limassol, June 2016, Cyprus.

**Filio Petsa (2016)**, *Statistical distributions for the description and the estimation of the wind power*, BSc Thesis, CUT, Department of Civil Engineering and Geomatics, Limassol, June 2016, Cyprus.

#### MSc Thesis Advising (9)

**Ria Demosthenous (2007)**, *On the RDT Stability Analysis of Plane strain Flow in a Rotating Frame*, MSc Thesis in Mechanical Engineering, Department of Mechanical Engineers, University of Cyprus, Nicosia, Cyprus (May 2007)

**Ioannis Kastanas (2013)**, *An Integrated Method for Wind Power Estimation: Application for West Cyprus Areas*, MSc Thesis in Civil Engineering and Sustainable Design, CUT, Cyprus September (2013).

**Georgios Zivlas (2013)**, *Assessment of the risk of environmental impact from gas industry in Cyprus*, MSc Thesis in Civil Engineering and Sustainable Design, CUT, Cyprus, September (2013).

**Michalis Polycarpou (2013)**, *Wave power resources of Cyprus coasts*, MSc Thesis in Civil Engineering and Sustainable Design, CUT, Cyprus, September (2013).

**Mohammad Iman Khozeymeh (2014)**, *Numerical study and modelling of super-free fall in liquids*, MSc Thesis in Mechanical Engineering, CUT, Cyprus, December (2014).

**Kyriakos Theodoulides (2015)**, *quasi - steady model for the flow development at a horizontal aquifer*, MSc Thesis, CUT, Department of Civil Engineering and Geomatics, Cyprus, September (2015).

**Stavros Charalambous (2016)**, *An analytical approximate model for the Bussinesq flow at a horizontal aquifer*, MSc Thesis, CUT, Department of Civil Engineering and Geomatics, Cyprus, September (2016).

**Meletis Theocharous (2016)**, *Study of the sea water intrusion at the Akrotiri aquifer*, MSc Thesis, CUT, Department of Civil Engineering and Geomatics, Cyprus, September (2016).

**Alexandros Nikolaidis (2016)**, *Afree basic EDQNM code for isotropic turbulence*, MSc Thesis, CUT, Department of Civil Engineering and Geomatics, Cyprus, September (2016).

#### List of courses taught at the Cyprus University of Technology (2010 - present)\*

A/A	CODE	MODULE	SEMESTER	ECTS	COURSE	Students' Evaluation (average)
1	CIV 114	Physics	1 <sup>st</sup>	6	BEng in Civil Engineering & BEng in Surveying Engineering and Geo-informatics	4.73/5
2	CIV 118	Programming I	2 <sup>nd</sup>	5	BEng in Civil Engineering & BEng in Surveying Engineering and Geo-informatics	4.81/5
3	CIV 215	Sustainability	3 <sup>d</sup>	4	BEng in Civil Engineering & BEng in Surveying Engineering and Geo-informatics	4.67/5
4	CIV 442	Hydrology	7 <sup>th</sup>	5	BEng in Civil Engineering & BEng in Surveying Engineering and Geo-informatics	4.75/5
5	CIV 481	Engineering Law	7 <sup>th</sup>	3	BEng in Civil Engineering	4.45/5
7	CIV 481/482	Final Year Project	7th & 8th	15	BEng in Civil Engineering & BEng in Surveying Engineering and Geo-informatics	5/5
8	CIV 271/272	Industrial Training	Summer Semesters	4	BEng in Civil Engineering & BEng in Surveying Engineering and Geo-informatics	N/A
9	CIV 535	Research Methods	1 <sup>st</sup>	6	MSc in Civil Engineering and Sustainable Design	N/A
10	CIV 501	Computational Fluid Mechanics	1 <sup>st</sup>	6	MSc in Civil Engineering and Sustainable Design	4.83/5
11	CIV 580	Dissertation	Summer Semester	30	MSc in Civil Engineering and Sustainable Design	5/5

\*For the courses' syllabus please visit the Department's web page

## Administrative Duties

### Participation in Committees at the Cyprus University of Technology (2010-present)

2010 – 2011	Chair of the Departmental Committee for the evaluation of the undergraduate students
2011-present	Member of the Departmental Committee for the post-graduate studies
2011-present	Chair of the Departmental Committee for the undergraduate studies
2011–present	Member of the School of Mechanics Committee for the undergraduate studies
2011-2012	Member of the QUESTE-SI Project (The Quality System of European Scientific and Technical Education- Labellisation and scoring)
2013- present	Member of the Departmental Quality Assurance Team (to be prepared for external evaluation)
2014- present	Representative of the School of Mechanics in the University Committee for problems of research ethic
2017-present	Chair of the Department of Civil Engineering and Geoinformatics

### List of other administrative activities at the Cyprus University of Technology (2010-present)

- Head of the Departmental Committee for the updating of the undergraduate syllabus for both BEng courses in Civil Engineering and Surveying Engineering & Geoinformatics.
- Head of the Departmental Committee for evaluating the applications for student transfer from other universities.
- Responsible for checking and evaluating the Departmental student performance and identifying specific studying problems
- Responsible for the ECTS syllabus allocation and its continuous evaluation
- Participation in the design and development of the existing Departmental lab of Hydraulics.
- Presentations to Schools and open days (promote our profile, activities, courses, open lectures)
- Member of independent evaluation Committees for applications at CYPRUS COUNCIL FOR THE RECOGNITION OF HIGHER EDUCATION QUALIFICATIONS (KY.S.A.T.S.)
- MSc Courses: MSc in Civil Eng. & Sustainable Design, MSc in Geoinformatics - Member of the committee for preparing the MSc courses (Department of Civil Engineering & Geomatics)

### List of past administrative duties

- **Frederick University of Technology** (Responsible for the design of the Labs of mechanics and electromagnetism, Responsible for the automatic conducting of the time-schedule of the courses at the General Department of the University)

## Research Interests

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My principal research field is fluid mechanics, with emphasis in isotropic turbulence and its structure, and more applied aspects such as subsurface hydraulics and flow in porous media, as well as computational and analytical studies of transport phenomena and development of fluxes in the atmospheric boundary layer and ocean. In particular:

fluid mechanics: theory of isotropic turbulence, structure of turbulence, closures of *Karman-Howarth* equation, DNS, EDQNM, RDT

subsurface hydrology-hydraulics: storm flow - aquifer interaction, slug test in confined aquifers, sea-aquifer interaction

atmospheric modeling: fluxes and transport in the ABL, dispersion, wind flow over complex topography, estimation and short term prediction of the wind power

oceanographic modeling: circulation development, perilous waves, fluxes and transport, rehabilitation of missing data

## Supervising of Post-Doctoral Research (1)

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**Dr. Elias Gravanis (2010 - 2013):** *The structure of isotropic turbulence: Karman Howarth implications for linearly forced turbulence*, Department of Civil Engineering and Geomatics, Cyprus University of Technology, funded by *AIOLOS* and *PRIMA* projects.

## PhD Students (6)

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**Argyro Nisantzi (finished 2015):** *Integrated use of remote sensing and lidar techniques for the study of air pollution and the optical properties of the atmosphere in Cyprus*. Advising committee: Dr. Diofantos Hantzimitsis, Dr. Evangelos Akylas, Dr. Helena Floca.

**Andreas Nikolaidis (started 01/2013):** *Modeling of perilous waves on the marine areas of Levantine sea and Eastern Mediterranean coasts*. Advising committee: Dr. Evangelos Akylas (supervisor), Dr. Diofantos Hantzimitsis, Dr. Georgios Georgiou (defense expected by early 2017).

**Eleni Savvidou (started 12/2012):** *Hydrologic Response Units (HRUs) in hydrological modelling*. Advising committee: Dr. Dimitrios Skarlatos, Dr. Evangelos Akylas, Dr. Antonis Koussis (defense expected by early 2017).



**Chrysostomos Italos (started 12/2012):** *Monitoring sustainability using satellite remote sensing and smart systems.* Advising committee: Dr. Diofantos Hantzimitsis, Dr. Evangelos Akylas, Dr. Dimitrios Karidis (defense expected by early 2017).

**Marios Tzouvaras (started 06/2013):** *Intelligent maritime transport planning.* Advising committee: Dr. Diofantos Hantzimitsis, Dr. Evangelos Akylas, Dr. Andreas Andreou (defense expected by early 2017).

**Andreas Christofi (started 01/2015):** Advising committee: Dr. Diofantos Hantzimitsis, Dr. Evangelos Akylas, Dr. Dimitrios Karidis.

## Participation in PhD Evaluation Committees (2)

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**George Papadauid** (completed: Jan. 2011), *Estimating evapotranspiration for annual crops in Cyprus using remote sensing.* Department of Civil Engineering and Geomatics, Cyprus University of Technology. Supervisor: Diofantos Hadjimitsis.

**Kyriacos Themistocleous** (completed: Feb. 2011), *Improving atmospheric correction methods for aerosol optical thickness retrieval supported by in-situ observations and GIS analysis.* Department of Civil Engineering and Geomatics, Cyprus University of Technology. Supervisor: Diofantos Hadjimitsis.

## Funded research projects (2)

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**PRIMA** (Particle Representation in Modelling Applications): FP7 Marie Curie Re-Integration Grant 228389, 1/9/2008 – 31/8/2011, Host-Institution: National Observatory of Athens (NOA), Greece, (Role: Principal Investigator), budget: 45000 euros.

**AIOLOS** (Mapping the wind power of Cyprus): Cyprus University of Technology (CUT) internal funding, 1/1/2010 – 31/12/12, (Role: Coordinator), budget: 90000 euros.

## Participation in funded research projects (12)

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2012 – 2015: **HydroGIS project:** Upgrade of the hydraulics laboratory for the modeling of water supply networks & design and operation optimization study, Funded by the ANABAΘMΙΣΗ/0609/34, Cyprus Research Promotion Foundation, Start Year: 2012, Budget (euros): 406, 000

- 2012 – 2015: **CASCADE project:** Catastrophic shifts in drylands: how can we prevent ecosystem degradation? 'CASCADE', Funded under FPT-ENV-2011, Start Year: 2012, Total Budget (euros): 5, 890, 000
- 2012 – 2015: **LIDAR project:** Integrated use of remote sensing and lidar techniques for the study of air pollution and the optical properties of the atmosphere in Cyprus, Funded by ΠENEK/0311, Start Year: 2012, Total Budget (euros): 87, 480
- 2012 – 2015: **MEDNET project:** Mediterranean Network for Custom Procedures and Simplification of Clearance in Ports, Funded by the MED PROGRAMME, 2S-MED11-14, Start Year: 2012, Total Budget (euros): 6, 454, 850
- 2011 – 2014: **PM3 project:** air pollution using earth observation, Funded by LIFE+, Start Year: 2011, Total Budget (euros): 1, 294, 871
- 2011 – 2014: **EUREKA project** Web and 3G mobile phone based air quality management: particulates, public health, co-benefits. EUREKA project, Start Year: 2011, Total Budget (euros): 800, 000
- 2006 – 2008: Supervision, monitoring and evaluation of the project for the development of an Integrated Monitoring Programme and related Data Bases that support the implementation of the Water Framework Directive 2000/60 of the European Union in Cyprus, Ministry of Agriculture, Natural Resources and Environment (Water Development Department) of the Republic of Cyprus, Expert-member of the Consortium "National Observatory of Athens - ELXIS Consulting Engineers Inc.- Styliani Kaimaki".
- 2002 – 2004: **RUPIOH** (Relationship between Ultrafine and fine Particulate matter in Indoor and Outdoor air and respiratory Health). EC Research DG, QLK4-CT-2001-00452
- 2002 – 2004: **MICE** (Modelling the Impact of Climate Extremes), funded by the Energy, Environment and Sustainable Development Programme (Contract EVK20CT2001-0018)
- 2002 – 2004: **MANTLE** (Mapping Night Time Light Emissions) EU Contract No. IST-1999-14208 HTS/350848/SIR\_1/1.0
- 1998 – 2000: **SFINCS** (Surface Fluxes In Climate Systems) Environmental Research Programme of DG-XII of the European Commission (ENV4-CT97-0573)
- 1996 – 1998: **PREDICT** (Implementing short term predictions at utilities), Non-Nuclear Energy Programme of DG-XII for Science, Research and Development (JOR3-CT95-0008)

## Other research activities

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National representative of Greece at ESSEM Action COST ES0604 “Atmospheric Water Vapour in the Climate System”, from 2008 to 2010.

## Participation in Conference Committees, Session Chairman

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- RSCY 2015 Third International Conference on Remote Sensing and Geo-information (Scientific Committee), Pafos, Cyprus (April, 2015)
- RSCY 2014 Second International Conference on Remote Sensing and Geo-information (Scientific Committee), Pafos, Cyprus (April, 2014)
- RSCY 2013 First International Conference on Remote Sensing and Geo-information-SPIE (Scientific Committee, Session Chairman), Pafos, Cyprus (April, 2013)
- HSTAM 2010 9<sup>th</sup> International Congress on Mechanics (Session Chairman), Limassol, Cyprus, 12 – 14 July, 2010.

## Invited Talks

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- *The Horizontal aquifer: Being simple is sometimes difficult.* National Observatory of Athens, Institute of Environmental Research and sustainable Development, Athens, Greece, invited lecture (September 2016)

- *DINOFF an alternative method for reconstructing missing information from continuous fields and applications to image processing,* Invited talk at Democritus University of Thrace, Medical School, Alexandroupolis, Greece, open lecture (December 2012).

- *Quasi – Steady Analysis and evolving non-linear systems,* Invited talk at National Kapodestrian University of Athens, Department of Physics, Athens, Greece, open lecture (December 2011).

- *Modeling structure functions in linearly forced isotropic turbulence,* Invited talk at the University of Cyprus, Department of Mechanical Engineers, Nicosia, Cyprus, open lecture (December 2010).

- *Modeling structure functions in linearly forced isotropic turbulence*, Invited talk for the 9th HSTAM International Congress on Mechanics, Limassol, Cyprus, 12 – 14 July, 2010.

- *An Interacting Particle Representation Model for Homogeneous Turbulence*, Invited Talk for ERCOFTAC/SIG 42, at 3d Workshop on Synthetic Turbulence Models, July 3-4 2008, Newcastle, UK.

- *Development of heat and momentum fluxes in the ABL during strong instability*, Invited talk at the University of Patras, Physics Department, Greece, open lecture (June 2006).

## Reviewer

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Reviewing articles on a systematic basis for the following journals

- Physics of Fluids
- Physics Letters A
- Physical Review E
- Journal of Environmental Fluid Mechanics
- Hydrological Sciences Journal
- Journal of Hydraulic Engineering
- Journal of Applied Meteorology
- Boundary Layer Meteorology

Reviewer in International Conferences:

- RSCY2013 - First International Conference on Remote Sensing and Geo-information, Pafos, Cyprus (Spie)
- RSCY2014 - Second International Conference on Remote Sensing and Geo-information, Pafos, Cyprus (Spie)
- RSCY2015 - Third International Conference on Remote Sensing and Geo-information, Pafos, Cyprus (Spie)
- RSCY2016 - Fourth International Conference on Remote Sensing and Geo-information, Pafos, Cyprus (Spie)

## Scientific Memberships

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- European Geophysical Union
- Hellenic Physicists Union
- Hellenic Committee for Water Resources Management

## Scientific Publications

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The total published work of Dr. Evangelos Akylas is summarized below (a complete list and full texts are available at [www.evangelosakylas.weebly.com](http://www.evangelosakylas.weebly.com))

1. Refereed Publications in International Journals	(32)
2. Book Chapters	(3)
3. Refereed Papers in International Conference Proceedings	(37)
4. Presentations in International Conferences with Abstracts	(17)
5. Scientific and Technical Reports	(9)
6. Dissertations	(3)
7. Lecture Notes	(3)
<b>Total</b>	<b>100</b>

## Citations

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- **Google Scholar** (Date of last update, 17/2/2017)

Total Citations: 468, h-index: 12, i10-index: 14

- **Scopus** (Date of last update, 17/10/2016)

Total Citations: 308, h-index: 11

- **Web of Science** (Date of last update, 17/10/2016)

Total Citations: 308, Excluding self-citations: 241, h-index: 11

## publications in international peer-reviewed journals

- J1. E. GRAVANIS and **E. AKYLAS** (2017), *Isotropic turbulence in compact space*, under review for publication to the Journal of Fluid Mechanics
- J2. **E. AKYLAS** and E. GRAVANIS (2017), Early time response of the horizontal aquifer, accepted for publication to the Water Resources Research.
- J3. **E. AKYLAS** and E. GRAVANIS (2015), Quasi steady flow in sloping aquifers, *Water Resources Research*, 51(11), pp. 9165 – 9181, (impact factor 3.149).
- J4. GRAVANIS E. and **E. AKYLAS** (2015), Generalized Bachelor functions for isotropic turbulence, *Physics of fluids* 27(1), pp. 1 -10, 015101, (impact factor 1.926).
- J5. ROZOS E., **AKYLAS E.** and A. KOUSSIS (2015), An automated inverse method for slug tests – over-damped case – in confined aquifers, *Hydrol. Sci. J.* 60(2), 285-293, (impact factor 2.132).
- J6. PAPOUTSA C., **AKYLAS E.** and D. HADJIMITSIS (2014), The spectral signature analysis of inland and coastal water bodies acquired from field spectroradiometric measurements, *Central European Journal of Geosciences*, 6(1), 67-78, (impact factor 0.506).
- J7. KASTANAS I., GEORGIU A., ZAVROS P. and **E. AKYLAS** (2014), An integrated GIS based method for wind power estimation: application for the western part of Cyprus, *Central European Journal of Geosciences* (impact factor 0.506).
- J8. NIKOLAIDIS A., GEORGIU G., HADJIMITSIS D. and **E. AKYLAS** (2013), Applying a DINEOF algorithm on cloudy sea-surface temperature satellite data over the eastern Mediterranean Sea, *Central European Journal of Geosciences* 5(4), pp. 1-16, (impact factor 0.506).
- J9. KOUSSIS A. and **E. AKYLAS** (2012), Slug Test in Confined Aquifers, the Over-Damped Case: Quasi-Steady Flow Analysis, *Ground Water*, 50 (4), pp. 608-613, (impact factor 2.132).
- J10. KOUSSIS A. and **E. AKYLAS** (2012), Steady state groundwater seepage in sloping unconfined aquifers RP Chapuis, *Bull Eng Geol Environ* 70, 89–99. doi:10.1007/s10064-010-0282-2 (impact factor 0.667).
- J11. GRAVANIS E. and **E. AKYLAS** (2011), Stationarity of linearly forced turbulence in finite domains, *Physical Review E* 84 (4), 046312, (impact factor 2.313).
- J12. DROULIA F., LYKOUDIS S., TSIROS I., ALVERTOS N., **AKYLAS E.** and I. GAROFALAKIS (2010), Ground temperature estimations using simplified analytical and semi-empirical approaches. *Solar Energy* 83(2), pp. 211–219 (impact factor 2.952).

- J13. MA S., KASSINOS S.C., KASSINOS D.F, and **E. AKYLAS** (2008), Modeling the impact of bottom water withdrawal on the dynamics of pesticides in the Kouris dam. *Global Nest Journal*, 10(3), 350 – 358 (impact factor 0.698).
- J14. MA S., KASSINOS S., FATTA D. and **E. AKYLAS** (2008), Effects of Selective Withdrawal Schemes on Thermal Stratification in Kouris Dam (Cyprus). *Lakes & Reservoirs: Research and Management*. Doi: 10.1111/j.1440-1770.2007.00353 (impact factor 0.452).
- J15. C.A. LANGER, **E. AKYLAS** and S.C. KASSINOS (2007), Linear Analysis of Generalized Turbulent Hyperbolic low in a Rotating Frame. *Physics of Fluids*, 19(12), 128106 (impact factor 1.926).
- J16. **AKYLAS E.**, KASSINOS S.C., LANGER C.A. and R. DEMOSTHENOUS (2007), On the stability of turbulent plane strain flow in a rotating frame. *Physics of Fluids*, 19(7), 075108 (impact factor 1.926).
- J17. **AKYLAS E.**, KASSINOS, S.C. and C.A. LANGER (2007), Rapid shear of initially anisotropic turbulence in a rotating frame. *Physics of Fluids*. 19(2)025102 (impact factor 1.926).
- J18. **AKYLAS E.**, KOTRONI V. and K. LAGOUVARDOS (2007), Sensitivity of high-resolution operational weather forecasts to the choice of the planetary boundary layer scheme, *Atmospheric Research*, 84(1), 49-57 (impact factor 2.364).
- J19. KOUSSIS A. D., **AKYLAS E.** and K. MAZI (2007), Response of sloping unconfined aquifer to stage changes in adjacent stream II. *Applications. J. Hydrol.* 338(1-2), 85-95 (impact factor 2.964).
- J20. **AKYLAS E.** and A. D. KOUSSIS (2007), : Response of sloping unconfined aquifer to stage changes in adjacent stream I. Theoretical analysis and derivation of system response functions. *J. Hydrol.* 338(1-2), 73-84 (impact factor 2.964).
- J21. KASSINOS S.C., **AKYLAS E.** and C. A. LANGER (2007), Rapidly sheared homogeneous stratified turbulence in a rotating frame. *Physics of Fluids*, 19(2), 021701 (impact factor 1.926).
- J22. M. TOMBROU, A. DANDOU, C. HELMIS, **E. AKYLAS**, H. FLOCAS, V. ASSIMAKOPOULOS and N. SOULAKELLIS (2007), The impact of various PBL parameterization schemes on the evolution of PBL and mixing layer heights. *Boundary-Layer Met.* 124(1), 61-79 (impact factor 2.291).
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