

Konstantinos E. Kakosimos, PhD

Assistant Professor of Chemical Engineering Texas A&M University at Qatar

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Date of Birth : Completed 08.08.2007 : 29.03.1980 Military Services Place of Birth : Filippiada Preveza, Greece **Family Status** : Married with 2 children

E D U C A T I O N

10/1997 - 06/2002 Dipl. Of Chemical Engineer

Chemical Engineering Dept. Aristotle University of Thessaloniki, Greece

grade 8.7/10 (among 3% of Department's all times best)

11/2002 - 02/2009 **Doctorate on Chemical Engineering**

> thesis subject "Simulation of the dispersion of toxic gases in residential areas" Chemical Engineering Dept. Aristotle University of Thessaloniki, Greece.

WORKING EXPERIENCE

2013 -Assistant Professor, Chemical Engineering Program, Texas A&M University at Qatar

2010-2012 Consultant and Design Engineer – Project Manager (HYETOS GP, Greece) 2002-2009 Research Assistant/Associate (Aristotle University of Thessaloniki, Greece

2002 -Charted Chemical Engineer (Greece) Software developer (in research projects) 2001-2002

PUBLICATIONS FUNDED PROJECTS

: 3/1 **Greek & EU Foundations** Books / Chapters 15 Peer reviewed papers : 35 **Qatar Foundation** 7 Conferences 68 Other 16

Google Scholar Citations : 536 TOTAL (own) Value :> \$4.5M

ACADEMIC HONORS & AWARDS

Research Laboratory Safety Award, Texas A&M University at Qatar 2016

Texas A&M Engineering Experiment Station Genesis Award (Team Leader Dr N. Elbashir) Best Paper award to A. Kalyva (supervised PhD student), International Conference on Hy-

drogen Production, Hangzhou, China

2015 Hutchison Medal, IChemE, UK

Richard E' Wing Award to K. Abdulaziz (supervised student) for her research performance

2014 Best paper award, Engineering Leaders Conference, Doha, Qatar

2013 Winning Project in the 1st Teaching Innovation with Technology Competition, TAMUQ

2009, 2010 2 Short Term Scientific Missions, COST Action ES0602

2009 PostDoc Honorable distinction by the Research Committee of Aristotle University 2008 PhD Honorable distinction by the Research Committee of Aristotle University 2006 Marie Curie Assistantship-Training Course EUA4X as young Researcher

2001-2002 Honorable distinction by the Technical Chamber of Greece (1st in the Department)

1997-1998 Honorable distinction by the National Foundation of Scholarships

LANGUAGES

Fluently, Mother Tongue Greek

English Certificate of Proficiency in English, The University of Michigan (2001), CEF level: C2

Italian Diploma di Lingua Italiano, Instituto Italiano (2000), CEF level: B1

Zertifikat auf Deutch als fremde Sprache, Goethe Institute (1997), CEF level: B1 German

RECOMMENDATIONS

Ioannis Economou Professor, Department of Chemical Engineering, Texas A&M University at Qatar

t: +974.442.30549 e: ioannis.economou@gatar.tamu.edu

Professor, Department of Physics, Aristotle University of Thessaloniki **Dimitris Melas**

t: +30.2310.998124 e: melas@auth.gr

Ole Hertel Professor, Aarhus University, Denmark, Professor at Roskilde University, Denmark

t: +45.46301148 e: oh@dmu.dk

SKILLS AND COMPETENCES

Work Experience,
Studies and Re-
search

- Environmental Fluid Mechanics, especially on Air Quality
- Development, use and application of integral and numerical atmospheric dispersion models and of air quality monitoring apparatus
- Solar photo- and thermo- chemical processes
- Risk assessment and hazard identification of industrial activities Process design of Water
 Wastewater Treatment Facilities
- Energy efficient design of buildings with advanced computational models
- Development of Thermophysical properties sensors
- Structural mechanics with advanced computational models

Information Technology

- : Development of advanced and complex algorithms
 - Advanced knowledge of programming
 - Expert Command of Software concerning CAD, CFD, Multimedia, WebDesign etc.

Administration/ Organization

- Research projects funded by national, European, international, and private institutions
 - Participation in the administration boards of associations
 - Member of working groups and organization committees

Education

- : Teaching of undergraduate and post-graduate courses and training seminars
 - Supervision of undergraduate and graduate thesis and PhD thesis
 - Research on new educational methods and technology tools

DETAILED DESCRIPTION OF SKILLS AND COMPETENCES

RECENT PROJECTS

 Redefine the Education Experience via Augmented Reality Tools EduART TAMUQ¹ Academic Affairs "Transformative Education Experience"

LPI: K.E. Kakosimos; Pls: Marcelo Castier, Ghada Salama; 2016-2017, \$12,000

- Assessment of the current state of air pollution and air quality management efforts with a view to informing the activities under National Development Strategy 2 and to realize the environmental sustainability vision for Qatar; The World Bank, 6 months; LPI: Kakosimos K. is leading
- Provision of Consultancy Services to Study Associations between Airborne Particulate Matter (PM2.5 & PM10)
 Pollution and Exhaled Breath Condensate (EBC) Biomarkers at Work Places
 Supreme Council of Health, 2 months; LPI: Kakosimos K., \$22,000
- Study the infiltration of toxic gases in non-process areas

Funded by MKOPSC-Q

Graduate Student: Atif Mohammed Ashraf, Supervisor: K.E. Kakosimos

2014-2016, extended to 2017 [own budget: \$196,000]

- Utilization of the Qatar Surface Carbonates for energy storage and CO2 capture
 Office of Research and Graduate Studies "Support of Proof-of-Concept and Seed Projects"
 - LPI: K.E. Kakosimos, PIs: A.G. Konstandopoulos, Sr. Vadiraju, Gr. Matenoglou; 2015-2016, \$87,000
- A Unique High Flux Solar Simulator for Innovative Research in Energy, Environment and Materials Office of Research and Graduate Studies "Major Research Equipment"
 - LPI: K.E. Kakosimos, supported by multiple PIs from TAMUQ/TAMU; 2015-2017 \$560,000
- Research Methods and Experiences: A Special Topic Course For Promoting Undergraduate Research Academic Affairs "Transformative Education Experience"
- LPI: B. Guo, Pls: K.E. Kakosimos, S. El-Borgi, R. Sadr, R. Tafreshi; 2015-2016 \$20,000 [own budget: \$4,000]
- Cost Effective Concentrated Photovoltaic System with Thermal Energy Storage Qatar National Research Fund PDRA 2-1105-14044, 2016, 2 years, \$395,000

Mentor: K.E. Kakosimos, PD: J. Sarwar

- Qatari Birth Cohort: Primary Prevention Program of Risk Factors for Reproductive Health, Pregnancy and Child Health- A "crossomics" study, Ministry of Public Health/ Qatar BioBank, 5 years
- LPI: M. Kogevinas; (many PIs) Kakosimos K. is leading Work Package 3 [own budget \$1,100,000]
- Design of Novel Catalysts and Processes for CO2 Conversion from Micro- to Macroscale
 Octor National Research Fund NRRR V. 100, 3, 034, 3015, 5 years.

Qatar National Research Fund NPRP X - 100 - 2 - 024, 2015, 5 years

LPI: N. Elbashir, **PIs:** E. Weitz & P. Stair & T. Marks (Northwestern University), M. Atilhan (Qatar University), M. El-Halwagi (Texas A&M University), D. & **K.E. Kakosimos** (Texas A&M University at Qatar), H. Mamlouk & D. Curulla Ferré (Total Research & Technology) [prorated own budget \$555,000]

¹ TAMUQ: Texas A&M University at Qatar

- Advanced emergency preparedness and response tools for airborne hazardous materials in urban environments, Qatar National Research Fund NPRP 7 - 674 - 2 - 252, 2015, 3 years, \$880,000
 - LPI: KE. Kakosimos, PIs: Sp Andronopoulos & A. Venetsanos (National Center for Scientific Research, Greece), I Kovalets (Ukrainian Center of Environmental and Water Projects), E. Fthenou (Supreme Council of Health, Qatar)
- Emission models for fugitive particulate matter towards an online emission inventory for the Middle East Area Qatar National Research Fund NPRP 7 - 649 - 2 - 241, 2015, 3 years, \$840,000
 - LPI: KE. Kakosimos, PIs: D. Melas (Aristotle University of Thessaloniki, Greece), P. Kumar (University of Surrey, UK), S Chellam (University of Houston)
- Evaluate and improve airborne particulate matter passive samplers for personal exposure monitoring Qatar National Research Fund UREP 15 - 001 - 2 - 001, 2014, 1 year, \$20,000
 - LPI: KE. Kakosimos, PI: Abdullah Kadri (Qatar Mobility and Innovations Center, QSTP)
- Solar Hybrid Hydrogen Production Cycle with In-situ Thermal Energy Storage Qatar National Research Fund: NPRP 6 - 116-2-044, 2014, 3 years, \$950,000
 - LPI: Prof Arun Srinivasa (TAMU), co-LPI: KE. Kakosimos PI: Dr Nazim Muradov (Florida Solar Energy Center)
- Emission free co-production of carbon nanotubes and hydrogen via concentrated solar energy Qatar National Research Fund: Joined the last year of the project and was assigned its closure years, \$1,050,000 LPI: Nesrin Ozalp (TAMUQ), co-LPI: KE. Kakosimos
- Study for Process Wastewater Discharge and NOx Emission Environmental Costs Qatar Petrochemical Company, 2013
- LPI: Prof Ahmed Abdel-Wahab (TAMUQ), PI: KE. Kakosimos [own budget \$18,000]
- Evaluation, improvement and guidance for the use of local-scale emergency prediction and response tools for airborne hazards in built environments

EU RTD:COST Action ES1006

LPI: Prof. Bernd Leitl (University of Hamburg), representative from Qatar: KE. Kakosimos

WORKGROUPS & COMMITTEES

06/2015-today	: Principal Investigators Council (Chair 2016/17), CHEN-TAMUQ
11/2013-06/2014	: Coordinator of the Services Subgroup for the 2014-18 Strategic Plan for CHEN-TAMUQ
11/2012 – today	: Chair of the Publicity, Outreach and Communication committee of CHEN-TAMUQ
05/2013 – 11/2015	: Society of Environmental Toxicology and Chemistry – Arabian Gulf Branch, Secretary
09/2009-10/2012	: Vice Chairman of the Administration Board of the Hellenic Association of Chemical Engineers, Department of Central- and West-Northern Greece
12/2009-09/2010	: Founding Member and Vice-Chairman of the Postgraduate and PhD Students Society of the Chemical Engineering Dept, Aristotle University.
12/2007-03/2010	: Member of the Working Group on the Environment of the Technical Chamber of Greece, Department of Northern Greece.
12/2007-09/2009	: Member of the Administration Board of the Hellenic Association of Chemical Engineers, Department of Central- and West-Northern Greece
01/2005-12/2006	: Coordinator of the Education Working Group of the Hellenic Association of Chemical Engineers, Department of Central- and West-Northern Greece.
08/2004	: Volunteer in Athens Olympic Games 2004, Spectator Services
09/2000 -12/2010	: Administrator of the Computer Center of the Chemical Engineering Dept, AUTh ² . Dept. of Chemical Engineering, Aristotle

ORGANIZATIO	N OF CONFERENCES AND MEETINGS
2017	: Chair of the Texas A&M at Qatar Research Showcase
2014, 2015, 2016 &	
2017	: Co-Chair of the Qatar Fertilizer Company-TAMUQ Conference (annual)
2011	: Member of the Organization Committee of the IATP Meeting, Thessaloniki 2011
2011	: Member of the Organization Committee of 19th European Conference on Thermophysical Properties, Thessaloniki, Greece
2011 & 2005	: Member of the Organization Committee of the Panhellenic Scientific Conference in Chemical Engineering, Thessaloniki, Greece

2009 : Workshop on the "Particulate Matter Pollution in GTA", Technical Chamber of Greece, Department

of Northern Greece

2005 : Member of the Organization Committee of the IAWPS Meeting, Santorini Greece

² AUTh: Aristotle University of Thessaloniki

TEACHING & MENTORING EXPERIENCE

Undergraduate Level:

: Numerical Analysis for Chemical Engineers (Mandatory CHEN 320 TAMUQ) 2016 - today

2016 - today : Bioprocess Engineering (Mandatory CHEN 382 TAMUQ)

: Transport Processes in Petroleum Production (Mandatory PETE 314 TAMUQ) 2014 2013 - today : Chemical Engineering Fluid Operations (Mandatory -CHEN 304 TAMUQ)

--- before TAMUQ --

: Mass Transfer on Environmental Processes (Mandatory -CHEN AUTH) 2010 - 2012

2009-2010 : Technical Drawing with SolidWorks (Mandatory -CHEN AUTH)

: Risk Assessment (elective-CHEN AUTH) 2007-2010

: Environmental Laboratory II (elective-CHEN AUTH) 2004 - 2007: Thermophysical Properties (elective-CHEN AUTH) 2002 - 2004

2002 - 2004: Computer Applications in Chemical Engineering (Mandatory -CHEN AUTH)

Research Mentoring of 11 students at TAMUQ and two students visiting from non-Qatar universities for a period of at least a month (plus 23 students in AUTh before 2012)

TAMUQ : Abdulaziz (2015), Al-Nadji (2016), Abdulla (2016), Elebiary (2017), De Abreu (2017)

Al-Haddad, Lokesh, Al-Heidous, AlSa'di, Al-Ansari, Shrouf

Other : M.A. Abraham (2017, Queen Mary University of London UK; two summer terms 2015 & 2016), B.

Akbar (2017, Lafayette College in PA, USA; one summer term 2015), T. Faiz (2018, Delhi Techno-

logical University, India; one summer term 2016)

Graduate Level:

: Quantitative Risk Analysis CHEN 660, TAMUQ 2013-today

2013-2014 : Seminar CHEN 681, TAMUQ

2013-today : Special Topics in Airborne Pollution Modeling and Control CHEN 689, TAMUQ

- - - - - - before TAMUQ - -

: Computational Mechanics and Applications, at the interdepartmental course of "Processes of Ad-2008-2009

vanced Materials Technology", AUTH

Advisor of 10 (5 graduated) MSc Students at TAMUQ, co-advisor of 2 (1 graduated) at QU³, and 2 (all graduated) at AUTh:

: Taha (2014), Hassan (2015), Elkhalifa (2016), Ashraf (2016), Abdulraheem (2016) TAMUQ (advisor)

Naser, Hamza, Shazeed, Soelem, Abbas

QU (co-advisor) : Al-Naimi (2013), Ahmad (in progress) AUTh (co-advisor) : Plitsis (2010), Kouparanis (2010)

Doctorate Level (co-advisor; TAMUQ does not have a local PhD program):

Doctorate Level (co-advisor; TAMUQ does not have a local PhD program):		[time in Qatar]
2013-2016	: Thor-Bjørn Ottosen, University of South Denmark, Denmark	[70%]
2014 (in progress)	: Arsenis Hadjimihailides, Aristotle University of Thessaloniki, Greece	[0%]
2015 (in progress)	: Agni Kalyva, Aristotle University of Thessaloniki, Greece	[90%]
2015 (in progress)	: Hala Hassan, University of Surrey, UK	[100%]
2016 (in progress)	: Jibran Khan, University of Aarhus, Denmark	[33%]
2017 (in progress)	: Surav Das, Texas A&M University at Qatar	[0%]

Post Doctorate Level:

2013-2015 : Dr Vasilik Tsiouri (National Technical University, Greece) : Dr. Jaward Sarwar (Dublin Institute of Technology, Ireland) 2013-today : Dr. Christos Argyropoulos (Imperial College London, UK) 2016-today

Continuing Education Courses:

2014 - (regularly) : Principles and Practice of Quantitative Risk Assessment (co-instructor; 2days; MKOPSC-Q⁴)

2014 : Write an effective Process Safety Analysis (co-instructor; 1day; MKOPSC-Q)

2017 : Air Quality Modelling Tools for Environmental and Consequences Analysis (organizer/instructor;

1day; TAMUQ)

2017 : Sustainable Solar Photovoltaics- A Road Map from Materials to Grid Connection (co-instructor;

1day; TAMUQ)

³ QU: Qatar University

⁴ MKOPSC-Q: Mary Kay 'O Connor Process Safety Center- Qatar

EDITORIAL OF INTERNATIONAL JOURNALS

- International Journal of Chemical Engineering, Hindawi
- Journal of Environment and Pollution, Canadian Center of Science and Education

REVIEWER OF INTERNATIONAL JOURNALS

• Chemical Engineering Education, IChemE/ Elsevier • Environmental Technology, Taylor & Francis • International Review of Chemical Engineering, Praise Worthy Prize • Atmospheric Pollution Research, Turkish National Committee for Air Pollution Research and Control • International Journal of Environment and Pollution • Environment and Pollution, Canadian Center of Science and Education • Journal of Hazardous Materials, Elsevier • Air Quality, Atmosphere and Health, Springer • International Journal of Environmental Analytical Chemistry, Taylor & Francis • Journal of Environmental Chemical Engineering, Elsevier • Thermal Science, Vinca Inst Nuclear Sci • Journal of Nanomaterials, Hindawi • Structural Engineering and Mechanics, Techno Press • Atmospheric Research • Journal of Loss Prevention in the Process Industries • Emission Control Science and Technology • Environmental Pollution • Applied Mathematical Modelling • International Journal of Exergy • International Journal for Hydrogen Production • Ceramics International • Science of the Total Environment • Clean Technologies and Environmental Policy • Environmental Science & Technology • Environmental Technology • Journal of the Air & Waste Management Association • Society for Mining, Metallurgy, and Exploration

REVIEWER FOR FUNDING AUTHORITIES AND STAGE AGENCIES

- Ministry of Municipalities and Environment, Qatar
- Qatar National Research Fund, Challenge 22, Qatar
- University Coalition for Fossil Energy Research, United States

VISITING RESEARCHER TO

- Florida Solar Energy Centre, University of Central Florida, US; Contact Person Dr. N. Muradov, Dr A. T-Raisi (director)
- National Environmental Research Institute, University of Aarhus (NERI DMU), Denmark; Contact Person Prof. Ol. Hertel, PhD M. Ketzel
- Bocazici University, Turkey; International Cultural and Academic Meeting of Engineering Students
- EU Energy Efficiency Centre (EEC), Albania; Contact Person Head of EEC, Prof. Edmond Hido
- Istituto per le Applicazioni del Calcolo Consiglio Nazionale delle Ricerche (CNR-IAC), Italy ; Contact Person Prof. R-M Spitaleri, Prof. E. Sani, PhD Fr. Pistella
- · National Properties Laboratory (NPL), UK; Contact Person Prof. B. Wakeham, PhD P. Quested

PUBLICATIONS

(with ▶ are marked works of lead by supervised under- and graduate students and in bold own research group)

Theses:

- Doctorate Thesis (with honors),
 - "Simulation of the dispersion of toxic gases in residential areas", Chemical Engineering Dept., Aristotle University, public defense March 2009.
- Engineering Diploma Thesis (Grade 10/10),
 - "Estimation of the Atmospheric Dispersion from Stacks", Chemical Engineering Dept, Aristotle University in Collaboration with Hellenic Petroleum S.A (Thessaloniki) 2002 .
- Last year's undergraduate project (grade 10/10),
 - "Feasibility and Technical Study on the Production of Fertilizers", Chemical Engineering Dept, Aristotle University, 2001-2002.

Books/ Book Chapters:

- M.J. Assael and K.E. Kakosimos "Risk Assessment: A Handbook on the Calculation of Fires, Explosions and Toxic Gas Dispersions", Tziolas 2007 (in Greek).
- M.J. Assael and K.E. Kakosimos "Fires, Explosions and Toxic Gas Dispersions: A Calculation and Risk Analysis Handbook", CRC Press 2010.
- - - - before TAMUQ - - -
- M.J. Assael, K.E. Kakosimos, K.D. Antoniadis and K.P. Panagiotopoulos: Mass Transfer in Environmental Processes, Tziolas Editions, 2013 (in Greek)
- Hassan H., Abraham M., Kumar P. and Kakosimos K.E., "Sources and emissions of fugitive particulate matter" in Airborne Particles: Origin, Emissions and Health Impacts, edited by P. Kumar (NOVA, 2017), ISBN: 9781536109887.

Journal Papers (underlined the Corresponding Author) peer-reviewed:

- 36 Experimental and Numerical Study of Liquefied Natural Gas (LNG) Pool Spreading and Vaporization on Water. Gopalaswami N., Kakosimos K.E., Zhang B., Liu Y., Mentzer R., Mannan M.S. Journal of Hazardous Material (2017) doi.org/10.1016/j.jhazmat.2017.04.025. [lead author is not my student but I supervised the numerical work, thus being 2nd author].
- 35 ► Saraga D., Maggos T., Sadoun E., Fthenou E., Hassan H., Tsiouri V., Karavoltsos S., Sakellari A., Vasilakos C. and Kakosimos K.E., "Chemical Characterization of indoor and outdoor Particulate Matter (PM2.5, PM10) in Doha, Qatar", Aerosol and Air Quality Research (Accepted).[my group coordinated the field campaign measurements and data interpretation]. [IF:3.29]
- 34 ► Kalyva A.E., Vagia E.C., Konstandopoulos A.G., Srinivasa A.R., T-Raissi A., Muradov N. and <u>Kakosimos K.E.</u>, "Hybrid photo-thermal sulfur-ammonia water splitting cycle: Thermodynamic analysis of the thermochemical steps", International Journal of Hydrogen Energy (2017). doi: 10.1016/j.ijhydene.2017.01.104 [IF:3.21]
- 33 ► Kalyva A.E., Vagia E.C., Konstandopoulos A.G., Srinivasa A.R., T-Raissi A., Muradov N. and Kakosimos K.E., "Particle model investigation for the thermochemical steps of the sulfur–ammonia water splitting cycle", International Journal of Hydrogen Energy (2017). doi: 10.1016/j.ijhydene.2016.09.003. [IF:3.21]
- 32 ► Ottosen T.-B., Ketzel M., Skov H., Hertel O., Brandt J. and <u>Kakosimos K.E.</u>, "A parameter estimation and identifiability analysis methodology applied to a street canyon air pollution model", Environmental Modelling & Software 84:165-176 (2016). doi: 10.1016/j.envsoft.2016.06.022 [IF:4.21]
- 31 ► Hassan H.A., Kumar P. and <u>Kakosimos K.E.</u>, "Flux estimation of fugitive particulate matter emissions from loose Calcisols at construction sites", Atmospheric Environment 141:96-105 (2016). doi: 10.1016/j.atmosenv.2016.06.054.
- 30 ► Farmaki M., Kyriafini T., Assael M. and <u>Kakosimos K.E.</u>, "Simulated and measured perfomance investigation of a bioclimatic summer residence in Greece", Fresenius Environment bulletin (2016). [IF:-]
- 29 Liora N., Poupkou A., Giannaros T.M., Kakosimos K.E., Stein O. and Melas D., "Impacts of natural emission sources on particle pollution levels in Europe", Atmospheric Environment 137:171-185 (2016). doi: 10.1016/j.atmosenv.2016.04.040
- 28 Bhosale R., Kumar A., AlMomani F., Ghosh U., Saad Anis M., Kakosimos K., Shende R. and Rosen M., "Solar Hydrogen Production via a Samarium Oxide-Based Thermochemical Water Splitting Cycle", Energies 9:316 (2016). [supported the thermodynamic calculations]
- 27 **Kalyva A.E., Vagia E.C.**, Konstandopoulos A.G., Srinivasa A.R., T-Raissi A., Muradov N. and Kakosimos K.E., Investigation of the solar hybrid photo-thermochemical sulfur-ammonia water splitting cycle for hydrogen production, in "Chemical Engineering Transactions" (2015) p. 361-366. [IF:-]
- 26 <u>Kakosimos K.E.</u>, A conceptual approach on downwind optimization of processes for air pollution control, in "Chemical Engineering Transactions" (2015) p. 913-918. [IF:-]
- 25 <u>Kakosimos K.E.,</u> "Example of a micro-adaptive instruction methodology for the improvement of flipped-classrooms and adaptive-learning based on advanced blended-learning tools", Education for Chemical Engineers 12:1-11 (2015). doi: 10.1016/j.ece.2015.06.001 [IF:New]
- 24 **Sarwar J.**, Srinivasa A. and <u>Kakosimos K.E.</u>, "Numerical investigations of the aperture size effect for maintaining a constant temperature in a novel sulfur-ammonia water splitting cycle application", Thermal Science (2015). doi: 10.2298/TSCI141220075S [IF:1.22]
- 23 Gopalaswami N., Kakosimos K., Vèchot L., Olewski T. and Mannan M.S., "Analysis of meteorological parameters for dense gas dispersion using mesoscale models", Journal of Loss Prevention in the Process Industries 35:145-156 (2015). doi: 10.1016/j.jlp.2015.04.009 [I supervised this work while the student was in Qatar] [IF:1.41]
- 22 ► Ottosen T.B., Kakosimos K.E., Johansson C., Hertel O., Brandt J., Skov H., Berkowicz R., Ellermann T., Jensen S.S. and Ketzel M., "Analysis of the impact of inhomogeneous emissions in the Operational Street Pollution Model (OSPM)", Geosci. Model Dev. 8:3231-3245 (2015). doi: 10.5194/gmd-8-3231-2015 [IF:3.65]
- **Ottosen T.-B.**, Ketzel M., Skov H., Hertel O., Brandt J. and <u>Kakosimos K.E.</u>, "Analysis of the Impact of Inhomogeneous Emissions in a Semi-Parameterized Street Canyon Model", Geoscientific Model Development Discussions 8:1-43 (2015). doi: 10.5194/gmdd-8-1-2015
- 21 **Sarwar J., Georgakis G., Kouloulias K.** and <u>Kakosimos K.E.,</u> "Experimental and numerical investigation of aperture size effect on the efficient solar energy harvesting for solar thermochemical applications", Energy Conversion and Management 92:331-341 (2015). doi: 10.1016/j.enconman.2014.12.065 [IF:4.38]
- 20 **Tsiouri V.**, <u>Kakosimos K.E.</u> and Kumar P., "Concentrations, sources and exposure risks associated with particulate matter in the Middle East Area a review", Air Quality, Atmosphere & Health (2014). doi: 10.1007/s11869-014-0277-4 [IF:1.80]
- 19 ► Chatzimichailidis A.E., <u>Kakosimos K.E.</u> and Assael M.J., "Use of dispersion modelling for the assessment of primary particulate matter sources on the air quality of Greater Thessaloniki Area", Fresenius Environmental Bulletin (2014). [IF:0.53]
- 18 <u>Kakosimos K.</u>E., Assael M.J., "Application of Detached Eddy Simulation to Neighbourhood Scale Gases Dispersion Modelling, Journal of Hazardous Materials (2013) doi: 10.1016/j.jhazmat.2013.08.018. [IF:4.53]

----- before TAMUQ -----

- 17 <u>Kakosimos K.E.</u>, Assael M.J., Lioumbas J.S. and Spiridis A.S., "Atmospheric Dispersion Modelling of Particulate Matter from Overburden Dumps: The Case of Amyndaion's Mines", Atmospheric Pollution Research 2:24-33 (2011) doi: 10.5094/APR.2011.004. [IF:1.37]
- 16 Assael M.J., <u>Kakosimos K.E.</u> and Katsarou A.S., "Application and evaluation of AERMOD on the assessment of particulate matter pollution caused by industrial activities in the Greater Thessaloniki Area", Environmental Technology 32(5-6): 593-608 (2011) DOI: 10.1080/09593330.2010.506491. [IF:1.56]
- 15 <u>Kakosimos K.E.</u>, Hertel O., Ketzel M. and Berkowicz P., "Operational Street Pollution Model (OSPM) a review of performed validation studies", Environmental Chemistry 7:485-503 (2010) doi:10.1071/EN10070. [IF:2.51]
- 14 Assael M.J. and Kakosimos K.E., "Can a course on the calculation of the effects of fires, explosions and toxic gas dispersions, be topical, enjoyable and meaningful?", IChemE Education for Chemical Engineers (2010), DOI: 10.1016/j.ece.2010.05.001. [IF:New]
- 13 Kakosimos K.E. and Mihailidi E., "European Workshop on Teaching Safety in Chemical Engineering", Chemical Engineering Research and Design 88:iii-v (2010).
- 12 Assael M.J., Melas D. and <u>Kakosimos K.E.</u>, "Monitoring Particulate Matter Concentrations with Passive Samplers. Application to the Greater Thessaloniki Area", Water, Air, & Soil Pollution 1-14 (2010), DOI 10.1007/s11270-009-D308-1. [IF:1.55]
- 11 Assael M.J., Kakosimos K.E., Antoniadis K.D. and Assael J-A.M, "Applying Thermal Comfort Indices to Investigate Aspects of the Climate Change in Greece", Int. Rev. Chem. Eng. (I.RE.CH.E.) 2:204-209 (2010). [IF:-]
- 10 Assael M.J., Kalyva A.E., Kakosimos K.E. and Antoniadis K.D., "Correlation and Prediction of Dense Fluid Transport Coefficients. VIII. Mixtures of Alkyl Benzenes with Other Hydrocarbons", International Journal of Thermophysics 30:1733-1747 (2009). [IF:0.96]
- 9 <u>Kakosimos K.E.</u> and Assael M.J., " A New 3D-Mesh Generator Based on Geometry Decomposition for Use in Urban-Terrain Simulations ", Computers and Structures 87:28-38 (2009). [IF:2.13]
- 8 Assael M.J., Delaki M. and Kakosimos K.E., "Applying the OSPM model to the calculation of PM10 concentration levels in the historical centre of the city of Thessaloniki", Atmospheric Environment 42:65-77 (2008). [IF:3.46]
- 7 Assael M.J., Antoniadis K.D., Kakosimos K.E. and Metaxa I.N., "An improved application of the transient hot-wire technique for the absolute accurate measurement of the thermal conductivity of pyroceram 9606 up to 420 K", International Journal of Thermophysics 29:445-456 (2008). [IF:0.96]
- 6 Assael M.J., Delaki M. and Kakosimos K., "Local scale vehicles pollution study in the absence of sufficient data: The case of the city of Thessaloniki", WIT Transactions on Ecology & the Environment 101:137-146 (2007). [IF:-]
- 5 Assael M.J., Metaxa I.N., Kakosimos K. and Konstantinou D., "Thermal conductivity of nanofluids Experimental and theoretical", International Journal of Thermophysics 27:997-1017 (2006). [IF:0.96]
- 4 Assael M.J., Kakosimos K., Banish R.M., Brillo J., Egry I., Brooks R., Quested P.N., Mills K.C., Nagashima A., Sato Y. and Wakeham W.A., "Reference data for the density and viscosity of liquid aluminum and liquid iron", Journal of Physical and Chemical Reference Data 35:285-300 (2006).
- 3 Assael M.J. and <u>Kakosimos K.</u>, "Finite Element Simulation of Toxic Gases Dispersion in Urban Terrain: Preliminary Results", WIT Transactions on Ecology and the Environment 82:379-387 (2005). [IF:-]
- 2 Assael M.I., Botsios S., Chamizidis E., Gialou K., Gkontosidou E. and Kakosimos K., "Optimizing the perforation pattern of Greek bricks", Brick and Tile Industry International 32-36 (2005). [IF:-]
- 1 Assael M.J., Gialou K., Kakosimos K. and Metaxa I., "Thermal conductivity of reference solid materials", International Journal of Thermophysics 25:397-408 (2004). [IF:0.96]

Submitted Journal Papers (peer-reviewed):

- Ottosen T.-B.O., Ketzel M., Hertel O., Brandt J., Skov H. and Kakosimos K.E., "Micro-scale modelling of the urban wind speed for air pollution applications", Urban Climate -: (submitted).
- **Argyropoulos C.D., Ashraf A.M.** and Kakosimos K.E., "Improved modelling of toxic gases building infiltration and exposure assessment", Environmental Modelling and Software (submitted).

Conferences (peer reviewed):

- 68 **Argyropoulos C.D., Ashraf A.M.,** Vechot L. and Kakosimos K.E., "Coupling multi-zone and CFD models for investigating indoor air quality", Proc. Second International Conference on Energy and Indoor Environment for Hot Climates by ASHRAE, Doha, Qatar (2017).
- 67 ► Shazed A.R., Vagia E.C., Srinivasa A.R., T-Raissi A., Muradov N. and Kakosimos K.E., "Chemical plant analysis of hydrogen production from the hybrid sulfur-ammonia water splitting cycle", Proc. 20th Conference on Process Integration, Modelling and Optimization for Energy Saving and Pollution Reduction, Tianjin, China (2017).
- 66 ► Argyropoulos C.D., Ashraf A.M., Vechot L. and Kakosimos K.E., "Coupling multi-zone and CFD models for investigating indoor air quality", Proc. Second International Conference on Energy and Indoor Environment for Hot Climates by ASHRAE, Doha, Qatar (2017).
- 65 Ismail M., Parsaei H. and Kakosimos K., Incorporating human factors in course design: Utility of wearable technologies, in "Advances in Intelligent Systems and Computing" (2017) p. 159-170.

- 64 ► Argyropoulos C.D., Hassan H., Saraga D.E., Maggos T., Fthenou E. and Kakosimos K.E., "Modeling of PM10 and PM2.5 building infiltration during a dust event in Doha, Qatar", Proc. 2nd International Conference on Atmospheric Dust, Taranto, Italy (2016).
- 63 ► Ashraf A., Argyropoulos C., Vechot L. and Kakosimos K.E., "Study of toxic gas ingress in non-process areas", Proc. Qatar Process Safety Symposium, Doha, Qatar (2016).
- 62 ► Ashraf A.M., Argyropoulos C.D., Olewski T., Vechot L. and Kakosimos K.E., "Comparative study on toxic gas infiltration in a non-process area using CFD and multi-zone models", Proc. Institution of Chemical Engineers Symposium Series, (2016).
- 61 Chatzimichailidis A., Assael M., Ketzel M. and Kakosimos K.E., "Modelling the recirculation zone in street canyons with different aspect ratios, using CFD simulation", Proc. 17th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Budapest, Hungary (2016).
- 60 Efthimiou G.C., Andronopoulos S., G. V.A., Kovalets I.V., **Argyropoulos C.** and Kakosimos K.E., "Validation of an inverse method for the source determination of a hazardous airborne material released from a point source in an urban environment", Proc. 35th International Technical Meeting on Air Pollution Modelling and its Applications, Chania, Greece (2016).
- 59 Efthimiou G.C., Andronopoulos S., G. V.A., Kovalets I.V. and Kakosimos K.E., "Validation of a data assimilation method for estimation of the location and rate of an unknown point source of passive atmospheric pollutant in a complex urban environment", Proc. 17th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Budapest, Hungary (2016).
- 58 ► Elkhalifa S., Argyropoulos C.D., Efthimiou G.C., Andronopoulos S., G. V.A., Kovalets I.V. and Kakosimos K.E., "On the exploitation of dose-response information for the source-reconstruction in the case of atmospheric hazardous material releases", Proc. 17th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Budapest, Hungary (2016).
- 57 Gopalaswami N., Kakosimos K.E., Zhang B., Liu Y., Mentzer R. and Mannan M.S., "Application of Computational Fluid Dynamics (CFD) for Liquefied Natural Gas (LNG) Pool Spreading and Vaporization on Water", Proc. 12th Global Congress on Process Safety, Houston, US (2016).
- 56 ► Hassan H., Kakosimos K.E. and Kumar P., "Fugitive particulate matter emissions from loose soils rich in carbonates", Proc. 2nd International Conference on Atmospheric Dust, Taranto, Italy (2016).
- 55 Kakosimos K.E., "Experience on the Combination of Micro-Adaptive Instruction and Problem-Creation Methodologies for Teaching External Flows", Proc. 12th Teaching with Technology Conference, College Station, US (2016).
- 54 ► Sarwar J., Shrouf T. and Kakosimos K.E., "Thermal Ageing Characterization of Materials under Concentrated Solar Power", Proc. AiCHE Annual Meeting, San Francisco, US (2016).
- 53 ► Hassan H., Kumar P., Liora N., Melas D. and Kakosimos K.E., "The Impact of Fugitive Particulate Matter on the Environmental Health and Sustainability of Dry and Arid Regions", Proc. 2016 AIChE Annual Meeting, San Francisco, US (2016).
- 52 Ismail M., Parsei H., Guo B., Dufresne R. and Kakosimos K.E., "Advancing Engineering Education through Technology Driven Teaching Innovations", Proc. ASEE Annual Conference & Exposition, New Orleans, US (2016).
- 51 Kakosimos K.E., "Experience on the Combination of Micro-Adaptive Instruction and Problem-Creation Methodologies for Teaching External Flows", Proc. 12th Teaching with Technology Conference, College Station, US (2016).
- 50 ► Kakosimos K.E., **Al-Haddad G.,** Sakellariou K.G., Pagkoura C. and Konstandopoulos A.G., "Characterization of Qatar's Surface Carbonates for CO₂ Capture and Thermochemical Energy Storage", SolarPACES, AbuDhabi, UAE (2016).
- 49 ► Kalyva A., Vagia E., T-Raissi A., Muradov N., Konstandopoulos A.G., Srinivasa A.R. and Kakosimos K.E., "Investigation of the Solar Hybrid Photo-Thermochemical Sulfur-Ammonia Water Splitting Cycle for Hydrogen Production", Proc. 21st World Hydrogen Energy Conference, Zaragoza, Spain (2016).
- 48 ► Kalyva A., Vagia E., T-Raissi A., Muradov N., Konstandopoulos A.G., Srinivasa A.R. and Kakosimos K.E., "Solar reactor investigation for the thermochemical steps of the sulfur-ammonia water splitting cycle", International Conference on Hydrogen Production, Hangzhou, China (2016). Won the Best Paper Award and was Invited for a full Journal Paper
- 47 Ketzel M., Krishnan V., Brandt J., Im U., **Ottosen T.-B.,** Jensen S.S., Ellerman T., Kakosimos K.E., Poulsen M.B. and Hertel O., "Flow and dispersion modelling study at one of Denmarks traffic hot-spot", 17th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Budapest, Hungary (2016).
- 46 Ketzel M., Krishnan V., Brandt J., Im U., **Ottosen T.-B.,** Jensen S.S., Ellerman T., Kakosimos K.E., Poulsen M.B. and Hertel O., "Detailed investigation of traffic pollution dispersion near Denmarks NO2 hot-spot", Proc. Air Quality, Milan, Italy (2016).
- 45 Konstandopoulos A., Dimitrakis D. and Kakosimos K.E., "Challenges and Prospects for Solar Thermochemical Reactor Engineering", Proc. Qatar Foundation Annual Research Conference, Doha, Qatar (2016).
- 44 Muradov N., Kakosimos K.E., **Vagia E.,** T-Raissi A. and Srinivasa A.R., "Photocatalytic production of hydrogen from aqueous solutions of a regenerable donor", Proc. 21st World Hydrogen Energy Conference, Zaragoza, Spain (2016).
- 43 Muradov N., T-Raissi A., Kakosimos K.E., Qin N. and Srinivasa A.R., "Solar hybrid water-splitting cycle with thermal energy storage as integral part of the cycle", Proc. 21st World Hydrogen Energy Conference, Zaragoza, Spain (2016).
- 42 ▶ Ottosen T.-B., Ketzel M., Hertel O., Brandt J., Skov H. and Kakosimos K.E., "Modelling urban hourly wind speeds based on measured nearby airport wind speeds", Proc. Air Quality, Milan, Italy (2016).

- 41 Ottosen T.-B., Ketzel M., Skov H., Hertel O., Brandt J., Berkowicz R. and Kakosimos K.E., "Modelling NOx and NO2 in two street canyons in Copenhagen using an improved version of OSPM", Proc. 17th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Budapest, Hungary (2016).
- 40 Saraga D.E., Maggos T., Kakosimos K.E., Fthenou E., ► Hassan H., Truman Z., Tsiouri V., Karavoltsos S., Sakellari A., Vasilakos C. and Sadoun E., "Chemical Characterization of indoor and outdoor PM2.5, PM10 and VOCs in a public building in Doha City, Qatar",14th International Conference of Indoor Air Quality and Climate, Ghent, Belgium (2016).
- 39 Sarwar J., Kakosimos K.E. and Norton B., "Effect of the phase change material's melting point on the thermal behaviour of a concentrated photovoltaic system in a tropical dry climate", Eurosun 2016, Palma de Mallorca, Spain (2016).
- 38 ► Sarwar J., Shrouf T. and Kakosimos K.E., "Characterization of Thermal Performance and Optical Properties of a Material under Concentrated Radiation Using a High Flux Solar Simulator", Proc. SolarPACES, AbuDhabi, UAE (2016).
- 37 Kakosimos K.E., "Development of a methodology and information technology tools for micro-adaptive instruction: An engineering course case study", QScience Proceedings 2015:13 (2015). doi: 10.5339/qproc.2015.elc2014.13
- 36 ► Kakosimos K.E., Vagia E., Kalyva A., T-Raissi A., Muradov N., Konstandopoulos A.G. and Srinivasa A.R., "A Thermodynamic and Process Analysis of the Thermochemical Steps of the Hybrid Photo-Thermal Sulfur-Ammonia Water Splitting Cycle", Proc. 2015 AIChE Annual Meeting, Salt Lake, US (2015).
- 35 Muradov N., T-Raissi A., Qin N. and Kakosimos K.E., "Solar hybrid photo-thermochemical water-splitting cycle with in-situ thermal energy storage", Proc. HYdrogen POwer THeoretical and Engineering Solutions International Symposium XI, Toledo, Spain (2015).
- 34 ► Taha M.A.K., Konstantinos E., "Assessment of the Integrated Health Effects of Airborne Industrial Emissions Based on the Chemical Mixture Methodology", Proc. 2015 AIChE Annual Meeting, Salt Lake, US (2015).
- 33 **Sarwar J., Georgakis G.** and Kakosimos K.E., "Numerical Investigations of the Aperture Size Effect for Maintaining Constant Temperature in a Novel Sulfur-Ammonia Water Splitting Cycle Application", Proc. Third International Conference on Water, Energy and Environment, March 24-26, United Arab Emirates (2015).
- 32 ► Kakosimos K.E., Vagia E., Kalyva A., T-Raissi A., Muradov N., Konstandopoulos A.G. and Srinivasa A.R., "Updated technology feasibility of the hybrid photo-thermal sulfur-ammonia water splitting cycle for hydrogen production", Proc. 18th Conference of Process Integration, Modelling and Optimization for Energy Saving and Pollution Reduction, Malaysia (2015). Invited to a full journal paper
- 31 Kakosimos K.E., "A conceptual approach on downwind optimization of processes for air pollution control", 18th Conference of Process Integration, Modelling and Optimization for Energy Saving and Pollution Reduction, Malaysia (2015).
- 30 ► Hassan H., Tsiouri V. and Kakosimos K.E., "Developing Emission Factors of Fugitive Particulate Matter Emissions for Construction Sites in the Middle East Area", Proc. XIII International Conference on Air Pollution and Control, Paris, France (2015).
- 29 ► Abdulaziz K., Al-Nadji K., Kadri A. and Kakosimos K.E., "Airborne particulate matter passive samplers for indoor and outdoor exposure monitoring: Development and Evaluation", Proc. 30XIII International Conference on Air Pollution and Control, Paris, France (2015).
- 28 Kakosimos K.E., "Development of a methodology and information technology tools for micro-adaptive instruction: An engineering course case study", Proc. Engineering Leaders for Grand Challenges, November 9-11, Doha, Qatar (2014). Best paper award at the Engineering Leaders Conference (in the Engineering Education Models for 2020 and Beyond category).
- 27 Alaeddine N., Kakosimos K., Guo B. and Mansoor B., "Leading Educational Innovation Through Implementations", Proc. 6th International Conference on Education and New Learning Technologies, Barcelona Spain (2014).
- 26 ► Ottosen T-B, Kakosimos K, Ketzel M, Hertel O, Skov H, Brandt Jan, Berkowicz P, " Analysis of parameter values and emission geometry of the Operational Street Pollution Model (OSPM)", Proc. Harmo 16, Varna, September (2014)
- 25 Ketzel M, Jensen SS, Brandt J, **Ottosen T-B**, Skov H, Hertel O, Kakosimos K, "Validation of newest Developments within OSPM", Proc. Harmo 16, Varna, September (2014)
- 24 Tsiouri V, Kovalets I., Kakosimos K.E., Andronopoulos Sp, Bartzis JG, "Evaluation of advanced Emergency Response methodologies to estimate the unknown source characteristics of the hazardous material within urban environments" Proc. Harmo 16, Varna, September (2014). Plenary Session (presenter Kakosimos K.)
- 23 ► Ottosen T.-B., Ketzel M., Berkowicz R. and Kakosimos K., "Modelling traffic induced pollution in complex urban areas and tropical dry climates", Proc. 9th International Conference on Air Quality, Garmisch-Partenkirchen, Germany, 24-28 March (2014).
- 22 Ketzel M., Hertel O., **Ottosen T.-B.**, Kakosimos K. and Berkowicz R., "Validation of the new paramerizations for the operational street pollution model (OSPM)", Proc. 9th International Conference on Air Quality, Garmisch-Partenkirchen, Germany, 24-28 March (2014).
- 21 Al-Naimi N., Goktepe I., Balakrishnan P. and Kakosimos K., "Measurement and modeling of traffic-related NO2 pollution in Doha, Qatar", Proc. Qatar Foundation Annual Research Conference, Doha, Qatar, 24-25 November (2013)
- 20 Kakosimos K.E. and Marc J. Assael, "Application of detached eddy simulation to neighborhood scale atmospheric dispersion", Proc. Harmo 15, Madrid, May (2013).

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- 19 Kakosimos K.E., Ketzel M., Rordam Olesen H. and Berkowicz R., "Smoke Dispersion from Low Stacks on Pitched-Roof Buildings: Model Calculations Using WinMiskam in Comparison with Wind Tunnel Results", Proc. Harmo 13, Paris, June (2010).
- 18 Assael M.J. and Kakosimos K.E., "The Use of Passive Collectors in the Measurement of Particle Matter in Atmosphere", Proc. Metrologia 2010, Lefkosia, February (2010).
- 17 Kakosimos K.E. and Assael M.J., "Can calculating the effects of fires, explosions and toxic gas dispersion, be enjoyable and meaningful?", Proc. European Workshop on Teaching Safety in Chemical Engineering, Manchester, 18-19 January (2010).
- 16 Assael M.J., Kalyva A., Kakosimos K.E. and Antoniadis K.D., "On the Prediction of the Viscosity and Thermal Conductivity of Liquid Hydrocarbon Mixtures on Considerations Based Upon the Hard Sphere Theory", Proc. 9th IATP Meeting, Boulder, June (2009).
- 15 Assael M.J., Kakosimos K.E., Taggeridis K., Manolopoulou E. and Zoidou M., "HVAC Simulation of Internal Rooms and Bioclimatic Applications", Proc. 7th Panhellenic Scientific Chemical Engineering Conference, Patra, 3-6 June (2009) (in Greek).
- 13 Assael M.J., Kakosimos K.E., Kalyva A., Tsirogiannis P. and Hatzifotis G., "Development of Low-Cost Airborne Particulate Matter Monitoring Network", Proc. International Cultural and Academic Meeting of Engineering Students, Istabul, 8-15 May (2009).
- 12 Assael M.J., Kakosimos K.E., Assael I.-A.M. and Alexandridis A., "Study and Application of Discomfort Indices for Greece", Proc. 7th Panhellenic Scientific Chemical Engineering Conference, Patra, 3-6 June (2009) (in Greek).
- 11 Kakosimos K.E., Assael M.J., Lioumbas J.S. and Spiridis A.S., "Atmospheric Dispersion Modelling of Particulate Matter from Overburden Dumps: The Case of Amyndaion's Mines", Proc. 6th GR.A.C.M. International Congress on Computational Mechanics, Thessaloniki, 19-21 June (2008).
- 10 Assael M.J., Delaki M. and Kakosimos K.E., "Study of Atmospheric Polution from Cars. Application to a Central Junction in Thessaloniki", Proc. Environmental Problems of Thessalonki. The AUTh perspective, Thessaloniki, 5 June (2007) (in Greek).
- 9 Assael M.J., Delaki M. and Kakosimos K.E., "Local Scale Vehicles Pollution Study in the Absence of Sufficient Data: The Case of the City of Thessaloniki", Proc. Air Pollution XV, Algavre, 1-2 June (2007).
- 8 Assael M.J., Delaki M. and Kakosimos K.E., "Traffic Pollution in the Historical Centre of Thessaloniki CityTraffic Pollution in the Historical Centre of Thessaloniki City", Proc. 6th Panhellenic Scientific Chemical Engineering Conference, Athens, 1-2 June (2007) (in Greek).
- 7 Assael M.J., Antoniadis K.D., Kakosimos K.E. and Metaxa I.N., "An Improved Sensor for the Measurement of the Therml Conductivity of Ceramic Solids", Proc. Assian Thermophysical Properties Conference, Fukuoka (2007).
- 6 Kakosimos K.E. and Assael M.J., "A novel 3D-mesh generator based on geometry decomposition for the use in urbanterrain simulations", Proc. EUA4X Computational Field Simulation Days IIEUA4X Computational Field Simulation Days II, Rome, 4-6 October (2006).
- 5 Assael M.J. and Kakosimos K.E., "Finite Element Simulation of Toxic Gas Dispersion in Urban Terrain: Preliminary Results", Proc. 5th Panhellenic Scientific Chemical Engineering Conference, Thessaloniki, 2-4 June (2005).
- 4 Assael M.J. and Kakosimos K.E., "Finite Element Simulation of Toxic Gas Dispersion in Urban Terrain: Preliminary Results", Proc. Air Pollution XIII, Cordoba, 16-18 May (2005).
- 3 Assael M.J., Gialou K., Kakosimos K.E. and Metaxa I.N., "Thermal conductivity of nanofluids Theoretical review and simulation", Proc. 17th ECTP, Bratislava (2005).
- 2 Assael M.J., Botsios S., Chamizidis E., Gialou K., Gkontosidou E. and Kakosimos K.E., "Optimizing the perforation pattern of Greek BricksOptimizing the perforation pattern of Greek Bricks", Proc. 5th Panhellenic Scientific Chemical Engineering Conference, Thessaloniki, 2-4 June (2005).
- 1 Assael M.J., Vagia K., Kakosimos K.E. and Parthenopoulos T., "Simulation of the Dispersion of Heavy Gases", Proc. 4th Panhellenic Scientific Chemical Engineering Conference, Patra, 29-31 May (2003) (in Greek).
- 1 Assael M.J., Kakosimos K.E., Petousis V., Tsirogiannis P. and Hatzifotis G., "Use of Particulate Matter Passive Samplers in the Greater Area of Thessaloniki City", Proc. 7th Panhellenic Scientific Chemical Engineering Conference, Patra, 3-6 June (2009) (in Greek).

Invited Lectures:

- Developing a research culture in Qatar: Structure, Examples and Challenges, K.E. Kakosimos, Department of Environmental Science, Aarhus University, Denmark, 21 March 2014
- Air Quality Modelling and Monitoring, K.E. Kakosimos, Qatar University, Qatar, March 2014
- Solar Chemical Engineering for Renewable Resource Utilization & Polygeneration: Challenges and Prospects, K.E. Kakosimos, Qatar University, Qatar, 06 April 2016

Honorable Editions:

- Assael M.J., Antoniadis K.D., Kakosimos K.E. and Melas D., "The Use of Passive Samples to Monitor Particulate Matter Concentration in the Greater Thessaloniki Area" in Honorary Volume for Prof. N. Spyrellis (2009).
- Assael M.J. and Kakosimos K.E., "PM10 Concentration Levels in the Historical Center of Thessaloniki" in Honary Volume for Prof. Chr. Tzimopoulos (Ziti Publications, 2009) p. 337-351.

Other:

- Kakosimos K.E., "Responsible Citizens and Government", Newspaper Kathimerini on 19-10-2008 (in Greek)
- Assael M.J., Assael I-A.M. and Kakosimos K.E., "Discomfort Indexes", Technografima 362:12-13 (2009) (in Greek)
- Assael M.J. and Kakosimos K.E., "Particulate Matter in the Greater Thessaloniki Area", Technografima 383:9 (2009) (in Greek)
- Kakosimos K.E and Assael M.J., "The Use of Passive Collectors in the Measurement of Particle Matter in Atmosphere", Technical Review (in press- in Greek)

CITATIONS & IF:

CITATIONS & II.					
(as of 2017.Feb)	Google Scholar	r Web o	f Science	Scopus	
Number of Documents	59	29		39	
Citations	606	333		384	
h-index	11	8		9	
Title of Journal		# of Papers	IF (2014)	IF (2015)	5-year IF
Aerosol and Air Quality Research		1		3.29	
Air Quality, Atmosphere & Health		1	1.80		
Atmospheric Environment		3	3.28	3.46	3.78
Atmospheric Pollution Research		1	1.37		1.44
Chemical Engineering Transactions		2	-		
Computers and Structures		1	2.13		2.53
Education for Chemical Engineers (IChemE)		2	new	new	new
Energies		1		2.08	
Energy Conversion and Management		1	4.38		
Environmental Chemistry		1	2.51		2.94
Environmental Modelling & Software		1		4.21	
Environmental Technology		1	1.56		1.59
Fresenius Environmental Bulletin		2	0.38	0.38	
Geoscientific Model Development		1	3.65		
Geoscientific Model Development Discussio	ns	1	-		
International Journal of Hydrogen Energy		2		3.21	
International Journal of Thermophysics		3	0.96		1.02
Journal of Loss Prevention in the Process Inc	dustries	1	1.41		
Journal of Physical and Chemical Reference	Data	1	2.8		4.25
Thermal Science		1	1.22		
Water, Air, & Soil Pollution		1	1.55		1.87

10/2012 - today

: Texas A&M University - Qatar

Assistant Professor, Chemical Engineering Department

- Research on air pollution modeling, monitoring and control
- Solar photo- and thermo- chemical Processes
- Research on particulate matter monitoring; development of monitoring devices
- Teaching of all levels of Chemical Engineering
- Training on Risk Assessment; consequences and quantitative risk analysis

02/2011 - 09/2012

: Spyridis A. – Koutalou V. HYETOS G.P. (www.hyetos.gr)

Consulting Engineer

- Process design of Water & Wastewater Treatment facilities
- Project Management and Proposals Application (Head of National, European & International Cooperation's Dept.)
- Environmental Studies

11/2001 - 09/2012

: Associate Researcher/ Research Assistant

Laboratory of Thermophysical Properties and Environmental Processes

Aristotle University of Thessaloniki

INDICATIVE LIST

- Release and Atmospheric Dispersion of PM and Gaseous Pollutants from the Cement TITAN SA facilities in Thessaloniki, Greece, 2010, 3 months
- Fugitive Dust from the loading unloading of Hellas Gold Facilities in the Port of Thessaloniki,
 Greece, Hellas Gold SA. 2009, 2 months
- Study on the simulation of air pollutants dispersion in the area of Amyntaion city regarding the establishment of an overburden site by PPC, Yetos Ltd, 2008, 8 Months
- INCO: Integrating and Strengthening the European Research Area Specific Measures in Support of International Corporation WEB-ENV; Subcontractor to AL-GIS and partner to CERTH, 2005-2007, 2 years
- Development of Cross-Border Networks and Transfer of Know-How on Waste Minimization and Industrial Risk Assessment Issues; (INTERREG IIIA/PHARE CBC Greece, Bulgaria) Min. of Env., 2005-2006, 16 months
- Modelling of Spreading of Chemical Substances, Greek Ministry of Defense; Thessaloniki's and Athens Chemical Engineering Dept., and SIGMA Consultants Ltd., 2002, 6 months.

INFORMATION TECHNOLOGY

Operating Systems : Expert Knowledge of MS Windows and Server (up to 2008), Ms-DOS – Basic Knowledge of Unix

Office Applications : Expert Command of Microsoft Office Applications Word, Excel, PowerPoint, Access, etc

Programming : Advanced Knowledge of Fortran, Basic, Visual Basic v6.0 and .NET

Intermediate Knowledge of Turbo C, C++, Pascal, JAVA, Unity

Graphic Design : Advanced Knowledge of Adobe Photoshop, Illustrator, Indesign, Corel Xara

Video Editing : Advanced Knowledge of Adobe Premiere, After Effects

Web Design : Advanced Experience in Web Sites , Databases, CMS, CRM (MS SQL, MySQL, ASP, PHP)

Multimedia : Advanced Experience in Multimedia Development Applications(Articulate, Flash)

CFD : Advanced Experience in COMSOL, Ansys Workbench/Fluent/CFX, MISKAM and QUIC

Atmospheric : Advanced Experience in Development and Application of numerical and integral atmospheric

Dispersion dispersion models: e.g. AERMOD, ISC, CallPuff, SLAB, OSPM

CAD : Intermediate Command of Autodesk AutoCAD/LAND /Map 3D, SolidWorks, ArcInfo

Math Applications : Intermediate Knowledge of MatLAB, MathCAD, SigmaPlot, Origin

Process Design : Intermediate Command of Aspentech Plus/Properties/Dynamics, FactSAGE

I acknowledge that the CV being submitted in the most current and correct as of March, 2017.

Konstantinos F. Kakosimos