

# Curriculum Vitae

**Name:** Kalliopi Violaki

**Nationality:** Hellenic

**Marital Status:** Single

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**e-mail:** [kviolaki@chemistry.uoc.gr](mailto:kviolaki@chemistry.uoc.gr)

## **Present Position**

Post doc researcher at the Environmental and Chemical Processes Laboratory, Chemistry Department, University of Crete.

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## **Research Interests**

-Atmospheric chemistry and physics with focus on the role of atmosphere as nutrient path to marine ecosystems.

- Study of the human-driven changes in the atmospheric composition and impact on the biogeochemical cycle of main nutrients (C,N,P) and trace metals.

-Environmental Analytical Chemistry with emphasis to the chemical characterisation of atmospheric organic fraction.

## **Education**

Bachelor of Science - Chemistry, University of Thessaloniki (March 2002)

Master of Science - Environmental and Analytical Chemistry, Department of chemistry, Univ. of Crete (July 2005)

Ph.D - Environmental and Analytical chemistry, Department of chemistry, Univ. of Crete. (May 2009)

## **Professional Experience**

**2010-** Post doc researcher in the Environmental and Chemical Processes laboratory, Chemistry Department, University of Crete.

Topic: Biogeochemical cycle of atmospheric phosphorous, source identification, atmospheric deposition fluxes and the biogeochemical implication for the oligotrophic status of the Eastern Mediterranean.

**2004-2009** Graduate student in the Environmental and Chemical Processes laboratory,  
Chemistry Department, University of Crete.

*Topic: Biogeochemical cycling of carbon and nitrogen in atmospheric deposition samples and size- segregated particles over the East Mediterranean.*

**2000 (3 months)** Training chemistry student in the environmental branch of the Ministry of  
Macedonia/Thrace (Greece).

*Topic: BOD and COD determination in waste water samples from industries, rivers (Loudia and Axio), and lakes (Koronia and Volvi). Mn and Pd determination in aerosols samples from urban air sheds of Thessaloniki.*

**1999 (6 months)** Training chemistry student in the physical chemistry laboratory, Univ. of  
Thessaloniki.

*Topic: Photocatalytic oxidation of Nitrite and Ammonium in drinking water*

#### **Fieldwork and cruise experience**

- Participation in environmental sampling station of University of Crete<sup>1</sup>
- Participation in aerosol sampling during ship cruise in South Atlantic Ocean in the frame of European research program OOMPH<sup>2</sup> (19 January- 28 February 2007)
- Participation in the international scientific research MESOAQUA-ATMOMED Experiment at the mesocosms facilities of the Hellenic Centre for Marine Research. (3-20 May 2012)

#### **Training**

1. University of Crete, Department of Chemistry Heraklion, Crete, 4 November, 2012 .  
"Training in Metrology in Chemistry" ([www.trainmic.org](http://www.trainmic.org))
2. Max Plank Institute and University of Utrecht, 7-13 October 2006.  
"Autumn school on measurement techniques in atmospheric research".
3. University of Crete, Department of Chemistry Heraklion, Crete, 17-28 May, 2004  
"Physicochemical Processes and Environmental Measurements".

#### **Analytical skills:**

- Chromatographic techniques such as IC, HPLC, HPLC-PAD and GC-FID
- Spectrophotometer analysis UV-Vis
- Analysis of Organic carbon (WSOC)

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<sup>1</sup> <http://finokalia.chemistry.uoc.gr>

<sup>2</sup> [http://www.atmosphere.mpg.de/enid/40d050a08675c220a561969b4e23561c,0/Contact\\_\\_\\_Home/Home\\_4qb.html](http://www.atmosphere.mpg.de/enid/40d050a08675c220a561969b4e23561c,0/Contact___Home/Home_4qb.html)

#### **Collaborators outside the University of Crete**

- a. Professor Michael D. Krom, Director Earth and Biosphere Institute School of Earth and Environment, Leeds University in the frame of the project: "Understanding the delivery of phosphorus nutrient to the oceans".
- b. Dr. Barak Herut, Senior Scientist at National Institute of Oceanography, Haifa, in the frame of MESOAQUA-ATMOMED project.
- c. Dr. Christos Panagiotopoulos, permanent position researcher at the MIO, Marseille University, in the frame of the MESOAQUA-ATMOMED project collaboration.

#### **Publications:**

1. **Violaki K.**, Sciare J., Baker A., Williams J. and Mihalopoulos N., Organic nitrogen in marine aerosols: A global perspective. in preparation.
2. Im U., Christodoulaki S., **Violaki K.**, Zarbas P., Kocak M., Mihalopoulos N., Kanakidou M., 2013. Atmospheric deposition of nitrogen and sulfur over Europe with focus on the Mediterranean and the Black Sea. Submitted to Atmospheric Environment.
3. **Violaki K.** and Mihalopoulos N. Urea: An important piece of WSON over the Eastern Mediterranean, Science of The Total Environment, 409 (22), 4796-4801, 2011. <http://dx.doi.org/10.1016/j.scitotenv.2011.07.060>
4. **Violaki K.** and Mihalopoulos N. Water-soluble organic nitrogen (WSON) in size-segregated atmospheric particles over the Eastern Mediterranean, Atmospheric Environment, 44, 4339-4345, 2010. [doi:10.1016/j.atmosenv.2010.07.056](https://doi.org/10.1016/j.atmosenv.2010.07.056)
5. **Violaki K.**, P. Zarbas and Mihalopoulos N.: Long-term measurements of water-soluble organic nitrogen (WSON) in atmospheric deposition in the Eastern Mediterranean: Fluxes, origin and biogeochemical implications, Marine Chemistry, 120, 179–186, 2010. [doi:10.1016/j.marchem.2009.08.004](https://doi.org/10.1016/j.marchem.2009.08.004)
6. Markaki, Z., Loje- Pilot, M.D., **Violaki, K.**, Benyahya, L., Mihalopoulos, N., Variability of atmospheric deposition of dissolved nitrogen and phosphorus in the Mediterranean and possible link to the anomalous seawater N/P ratio, Marine Chemistry, 120, 187-194, 2010. [doi:10.1016/j.marchem.2008.10.005](https://doi.org/10.1016/j.marchem.2008.10.005)

#### **Workshops and Scientific Presentations:**

1. Ulas Im, **Kalliopi Violaki**, Pavlos Zarmpas, Sylvia Christodoulaki, Mustafa Kocak, Nikos Mihalopoulos, Maria Kanakidou, Vol. 15, EGU2013-2582, 2013 EGU General Assembly, 7-12 April 2013. Title: "Atmospheric nitrogen deposition over the Mediterranean, Black Sea and Europe as simulated by the WRF-CMAQ model system"

2. **Violaki Kalliopi**, Mara Paraskevi, Spyros Apostolos, Kanakidou Maria, Mihalopoulos Nikos. 12<sup>o</sup> IGAG Conference, 17-21 September, 2012, Beijing, China. Title: "Atmospheric deposition of P over the East Mediterranean" (Poster Presentation)
3. Christodoulaki S., Kanakidou M., Petihakis G., Mihalopoulos N., Tsiaras K., **Violaki K.**, Triantafyllou G., Air Quality and Climate Change: Interactions and Feedbacks, ACCENT-Plus Symposium, 2011, Urbino. Title: "Evaluating the importance of atmospheric deposition of nitrogen on the marine ecosystem in the east Mediterranean" (Oral Presentation)
4. **Violaki Kalliopi**, Zampas Pavlos, Mihalopoulos Nikos, 10<sup>o</sup> IGAG Conference, 7-12 September, 2008, Annecy-le-Vieux, France. Title: "Organic Nitrogen in Marine atmosphere" (Poster Presentation)
5. **Violaki Kalliopi**, Zampas Pavlos, Mihalopoulos Nikos, 2<sup>n</sup> SOLAS Open Science Conference, 6-9 March, 2007, Xiamen, China. Title: "Organic Nitrogen Cycle in East Mediterranean" (Poster Presentation)
6. **Violaki Kalliopi**, Zampas Pavlos, Mihalopoulos Nikos, Open Science Conference on the GHG Cycle in the Northern Hemisphere, 2006, Crete. Title: "Organic Nitrogen Cycle in Eastern Mediterranean" (Poster Presentation)
7. 9<sup>o</sup> IGAG Conference, 17-23 September, 2006, Cape Town.
  - a) **Violaki Kalliopi**, Zampas Pavlos, Mihalopoulos Nikos, Title: "Organic Nitrogen: a missing piece of the nitrogen cycle in the Eastern Mediterranean" (Oral Presentation)
  - b) Cecilia Arsene, Romeo-Iulian Olariu, **Kalliopi Violaki**, Nikolaos Mihalopoulos, Title: "Dissolved organic nitrogen deposition on land in the northeastern part of Romania" (Poster Presentation)
8. Cecilia Arsene, Romeo-Iulian Olariu, **Kalliopi Violaki** and Nikos Mihalopoulos, Workshop on Agricultural Air Quality, 2006, Washington, USA. Title: "Total Nitrogen Deposition on Land in the Northeastern part of Romania" (Poster Presentation)
9. **K. Violaki** and N. Mihalopoulos, ACCENT- Workshop on Understanding and quantifying the atmospheric nitrogen cycle (convenors: Paul Monks, Tony Cox, David Fowler), 2005, Barnsdale. Title: Organic Nitrogen: An important missing piece of the Global Nitrogen cycle.
10. I. Poullos, **K. Violaki**, P. Tsoubaris, B. Katsougianopoulos, 6<sup>th</sup> International Conference of Environmental Science and Technology, 1999, Greece.  
Title: Photocatalytic oxidation of Nitrite and Ammonium in drinking water. (Oral Presentation)

**Languages:**

1. Greek (mother tongue)
2. English (Certificate of Proficiency, University of Michigan)
3. German (Mittelstufe, Goethe-Institute)