| CURRICULUM VITAE |  |
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|                  | University of Crete  |
|                  | Environmental Chemical Processes Laboratory (ECPL)  Department of Chemistry, University of Crete |
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**CHRISTINA N. THEODOSI** 

October 2012

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#### PERSONAL INFORMATION

Name : Christina Theodosi

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## 1. STUDIES

# 1.1. EDUCATION

2001 – 2005 Chemistry degree from the University of Crete awarded with the grade of eight

point forty at the scale of 10 (8.40/10).

2007 (July) MSc in Environmental and Analytical Chemistry (University of Crete) titled

"Iron Speciation in atmospheric deposition samples in the Eastern Mediterranean" awarded with the grade of eight point thirteen at the scale of 10

(8.13/10).

2011 (June) PhD in Environmental and Analytical chemistry (University of Crete) titled

"The Biochemical Cycles of Metals in the Eastern Mediterranean and Black

Sea".

## 1.2. CERTIFICATIONS

2009 Certification from the Hellenic Ministry for the Environment, Physical Planning

and Public Works with registration number "21814" to perform "Chemical studies and assessments (Category 17)" and "Environmental assessments

(Category 27)", degree "A".

2010 Certified Auditor/Lead Auditor of Food Safety Management Systems according

to ISO 22000:2005 Series Standards, IQMS/TUV HELLAS (Member of TUV

Nord Group).

## 1.3. SEMINARS - TRAINING COURSES

**February** – **March 2008:** Training in total digestion procedure using hydrofluoric acid in collaboration with the Israel Oceanographic and Limnological Reasearch (IOLR), National Institute of Oceanography (Tel-Shikmona, Haifa, Israel) as part of a NATO funded collaborative project involving three marine institutes in the surrounding of the Levantine Basin of the Eastern Mediterranean Sea.

**11-16 May 2008:** Participation in the Aerosol course in Hyytiälä, Finland entitled: "Measurements of atmospheric aerosols: Aerosol physics, sampling and measurement techniques". The course was

organized within the frame of the EU projects EUSAAR, EUCAARI, ACCENT and the Nordic Graduate School "Biosphere - Aerosol - Cloud - Climate Interactions" (CBACCI) in cooperation with the Integrated Land Ecosystem - Atmosphere Processes Study iLEAPS. Hyytiälä, Finland.

**04-06 December 2008:** Participation at a 20h seminar entitled: 'Education for a sustainable urban environment' Environmental Education Center of Neapoli, Crete, Greece.

**30 May – 1 June 2012:** Participation in the training course "Training in Metrology in Chemistry", "Are your Geotraces data reliable? held at the Joint Research Centre, Institute for Reference Material and Measurements (IRMM), Geel, Belgium.

## 1.4. LANGUAGE KNOWDLEDGE

*Greek* Mother tongue

English Fluent - First Certificate in English, University of Cambridge, Certificate Grade

В

German Intermediate - Zertifikat Grundstufe Deutsch, Palso.

## 1.5. COMPUTER LITERATE

Microsoft Office

Windows, Unix

Statistica, Fortran

Origin

**Photoshop** 

# 2. SCHOLARSHIPS AND AWARDS

| 2002-2003 | Honored with the annual scholarship from the State Scholarship Foundation       |
|-----------|---|
|           | ("IKY") during undergraduate studies as the first ranked student at the         |
|           | Department of Chemistry, University of Crete.                                   |
| 2003-2004 | Honored with the annual scholarship from the State Scholarship Foundation       |
|           | ("IKY") during undergraduate studies as the first ranked student at the         |
|           | Department of Chemistry, University of Crete.                                   |
| 2005      | 'Drettakis Award' for graduating with the highest diploma degree, among all the |
|           | chemists graduating in 2005. (''Εμμανουήλ Δρεττάκη'') Heraklion, Crete,         |
|           | Greece 25 <sup>th</sup> June 2005.  |
| 2006      | Annual fellowship Manassaki (''Μαρία Μιχαήλ Μανασσάκη'') for postgraduate       |
|           | studies at the School of Sciences and Technology, University of Crete, for the  |

academic year 2006-2007. This fellowship is granted to the MSc student with the

highest diploma degree.

2006 Z. Markaki, C. Theodosi, P. Zarbas, S. Pergantis, N. Mihalopoulos

«Iron Speciation, Solubility and Temporal Variability in Wet and Dry Deposition In The Eastern Mediterranean», Atmospheric Chemistry at the Interfaces, Cape Town, South Africa, 17-22 September 2006. (Poster

Presentation)" (http://www.eur-oceans.org/).

EUR-OCEANS Young Scientist Award, Cape Town, South Africa, September 2006.

Selected by the scientific review panel of the Council for the Lindau Nobel

Laureate Meetings to participate in the 63rd Lindau Nobel Laureate Meeting, 30

June - 5 July 2013, Lindau, Germany. Founded by the Onassis Foundation.

# 3. RESEARCH INTEREST

Atmospheric Chemistry and Physics, Environmental Analytical Chemistry and Global Biogeochemical Cycles.

In particular, aerosol chemical composition and fluxes from the atmosphere to the surface, mechanisms controlling the biogeochemical cycles and particulate matter transfer. Experimental qualitative and quantitative determination of fluxes of metals and carbonaceous material in the atmosphere and in the seawater.

# 4. SCIENTIFIC EXPERIENCE

## 4.1. LABORATORY – RESEARCH ASSISTANCE

Six month - laboratory assistant in Inorganic Chemistry I, Chemistry
Department, University of Crete.

2006-2007 Teaching Assistant - Analytical Chemistry I, Chemistry Department,
University of Crete.

2007-2008 Teaching Assistant - Analytical Chemistry I, Chemistry Department,
University of Crete.

2005-Today Assistance to One phD thesis, six master theses and one Erasmus

#### 4.2. RESEARCH/EXPERIMENTAL EXPERIENCE

High-performance liquid chromatography (HPLC)

Inductively Coupled Plasma Mass Spectrometry (ICP - MS)

Spectrophotometric speciation of iron forms in environmental samples

student work.

Spectrophotometric speciation of phosphorus forms in environmental samples

Organic and Elemental Carbon Aerosol Analyzer (Sunset Laboratory Inc.)

Dissolved Organic Carbon Analyzer (TOC-VCSH, Shimadzu)

Aerosol sample collection for the sampling station of Environmental Chemical Processes Laboratory (ECPL) at Finokalia.

# 4.3. REVIEWER AT PEER REVIEWED JOURNALS

2012 Rewiever for the «International Journal of Environmental Analytical Chemistry».

2013 Rewiever for «Particuology».

# 4.4. EMPLOYMENT – PROFESSIONAL AFFILIATION

| April 2006 - August 2007       | Participation in Reasearch Program «Organics Over The Ocean |
|--------------------------------|---|
|                                | Modifying Particles In Both Hemispheres (OOMPH)»,           |
|                                | Chemistry Department, University of Crete.                  |
| September 2007 - June 2011     | Participation in Reasearch Program «Circe – 036961          |
|                                | (Integrated Project)», Chemistry Department, University of  |
|                                | Crete.  |
| July 2011 - August 2012        | Participation in Reasearch Program «DARECLIMED              |
|                                | 262263», Chemistry Department, University of Crete.         |
| September 2012 - December 2012 | Participation in Reasearch Program «Perseus (G.A 287600)»,  |
|                                | Chemistry Department, University of Crete.                  |
| 2005-Today                     | Member of the Greek Chemical Society.                       |

#### 5 **PUBLICATIONS**

# 5.1. PEER REVIEWED PUBLICATIONS

| 2008 | E. Koulouri, S. Saarikoski, C. Theodosi, Z. Markaki, E. Gerasopoulos, G.            |
|------|---|
| 1    | Kouvarakis, T. Mäkelä, R. Hillamo and N. Mihalopoulos (2008). Chemical              |
|      | composition and sources of fine and coarse aerosol particles in the Eastern         |
|      | Mediterranean, Atmospheric Environment, 42, 26, 6542-6550.                          |
| 2009 | X. Querol, A. Alastuey, J. Pey, M. Cusack, N. Pérez, N. Mihalopoulos, C. Theodosi,  |
| 2    | E. Gerasopoulos, N. Kubilay and M. Koçak (2009). Variability in regional            |
|      | background aerosols within the Mediterranean. Atmospheric Chemistry and Physics,    |
|      | <b>9</b> , 4575-4591.   |
| 2010 | C. Theodosi, Z. Markaki and N. Mihalopoulos (2010). Iron Speciation, solubility and |
| 3    | temporal variability in wet and dry deposition in the Eastern Mediterranean, Marine |
|      | Chemistry, <b>120</b> , 100-107.  |
| 2010 | C. Theodosi, Z. Markaki, A. Tselepides and N. Mihalopoulos (2010). The              |

4 significance of atmospheric inputs of soluble and particulate major and trace metals to the Eastern Mediterranean Sea. Marine Chemistry, 120, 154–163. 2010 C. Theodosi, U. İm, A. Bougiatioti, P. Zarmpas, O. Yenigun and N. Mihalopoulos 5 (2010). Chemical Composition of aerosols over Istanbul, Turkey. Science of The Total Environment, 408, 12, 2482-2491. 2010 U. İm, K. Markakis, A. Unal, T. Kindap, A. Poupkou, S. İncecik, O. Yenigün, D. Melas, C. Theodosi, N. Mihalopoulos (2010). Study of a winter PM episode in 6 Istanbul using the high resolution WRF/CMAQ Modeling System. Atmospheric Environment, 44, p. 3085-3094. 2011 M.J.M. Séguret, M. Koçak, C. Theodosi, S.J. Ussher, P.J. Worsfold, B. Herut, N. Mihalopoulos, N. Kubilay, M. Nimmo (2011). Iron solubility in crustal and anthropogenic aerosols: The Eastern Mediterranean as a case study. Marine Chemistry, 126, 229-238. 2011 M. Koçak, C. Theodosi, P. Zarmpas, U. İm, A. Bougiatioti, O. Yenigun and N. 8 Mihalopoulos (2011). Particulate matter ( $PM_{10}$ ) in Istanbul: Origin, source areas and potential impact on surrounding regions. Atmospheric Environment, 45, (2011), 6981-6900. 2011 C. Theodosi, G. Grivas, P. Zarmpas, A. Chaloulakou and N. Mihalopoulos (2011). 9 Mass and chemical composition of size-segregated aerosols (PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>) over Athens, Greece: local versus regional sources. Atmospheric Chemistry and Physics, 11, 11895–11911, 2011, doi:10.5194/acp-11-11895-2011 2012 C. Theodosi, S. Stavrakakis, F. Koulaki, I. Stavrakaki, S. Moncheva, E. 10 Papanastasiou, A. Sanchez-Vidal, M. Koçak and N. Mihalopoulos (2012). The significance of atmospheric inputs of major and trace metals to Black Sea. Journal of Marine Systems, In Press, Accepted Manuscript. doi:10.1016/j.marsys.2012.02.016 2012 M. Koçak, C. Theodosi, P. Zarmpas, M.J.M. Séguret, B. Herut, N. Mihalopoulos, M. 11 Nimmo (2012). Influence of mineral dust transport on the chemical composition and physical properties of the Eastern Mediterranean aerosol. Atmospheric Environment, Accepted Manuscript doi:10.1016/j.atmosenv.2012.09.071 2012 A. Bougiatioti, P.Zarmpas, M. Antoniou, C. Theodosi, G. Kouvarakis, S. Saarikoski, 12 T. Mäkelä, R. Hillamo and N. Mihalopoulos (2012). Organic, elemental and water-

#### 5.2. TO BE SUBMITTED PUBLICATIONS

Biogeosciences).

2012

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E. Poulakis, <u>C. Theodosi</u>, J. Sciare, M. Bressi, V. Ghersi, N. Mihalopoulos (**2012**).

Airborne mineral components and trace metals in Paris region: Spatial and temporally variability (**Ready for submission to Atmospheric Environment**).

soluble organic carbon in size segregated aerosols, in the marine boundary layer of the Eastern Mediterranean. (Accepted for Publication in Atmospheric Environment).

C. Theodosi, A. Gogou, C. Parinos, A. Kokotos, J. Hatzianestis, S. Stavrakakis, V.

Lykousis and N. Mihalopoulos (2012). Downward fluxes of elemental carbon, metals and polycyclic 1 aromatic hydrocarbons in settling particles from the deep 2 Ionian Sea (NESTOR site), Eastern Mediterranean (Accepted for Discussion in

2012 C. Theodosi, A. Bougiatioti, D. Smouliotis, P. Zarmpas, S. Pateraki, M. Koçak and

- N. Mihalopoulos (2012). Overview of carbonaceous aerosols over the Eastern Mediterranean and Black Sea (Ready for submission to Atmospheric Environment).
- M. Bressi, J. Sciare, V. Ghersi, N. Mihalopoulos, J.-E. Petit, J. B. Nicolas, S. Moukhtar, A. Rosso, A. Féron, N. Bonnaire, E. Poulakis and <u>C. Theodosi</u> (2012). Sources and geographical origins of fine aerosols in Paris (France) (In Preparation).

## **5.3. ARTICLES IN BOOKS**

- 2009 <u>Theodosi C.</u> (2009). 'Atmospheric Pollution and Climate Change' in 'Education for a sustainable urban environment' Environmental Education Center of Neapoli, Crete, (eds), 89-101 (IBSN: 978-960-89322-7-2).
- D. Paraskevopoulou, E. Gerasopoulos, E. Liakakou, M. Gratsea, P. Zarmpas, <u>C. Theodosi</u> and N. Mihalopoulos (2012). 'Optical Properties of Aerosols Over Athens, Greece, and their Relation with Chemical Composition', Advances in Meteorology, Climatology and Atmospheric Physics, Springer Verlag Berlin Heidelberg (eds), Volume 2, 1159-1164, doi: 10.1007/978-3-642-29172-2.
- C. Theodosi, D. Smouliotis, M. Kocak and N. Mihalopoulos (2012). 'Particulate Organic Matter over the Mediterranean and Black Sea', Advances in Meteorology, Climatology and Atmospheric Physics, Springer Verlag Berlin Heidelberg (eds), Volume 2, 1233-1238, doi: 10.1007/978-3-642-29172-2.

## **5.4. CONFERENCE PROCEEDINGS**

- Z. Markaki, <u>C. Theodosi</u>, P. Zarbas, S. Pergantis, N. Mihalopoulos, "Iron Speciation
   In Environmental Samples", 4th International Conference on Instrumental Methods of Analysis (IMA 2005), Iraklion, Crete, Greece, 2-6 October 2005. (Poster Presentation)
- Z. Markaki, <u>C. Theodosi</u>, P. Zarbas, S. Pergantis, N. Mihalopoulos, "Iron Speciation,
   Solubility and Temporal Variability in Wet and Dry Deposition In The Eastern Mediterranean", Atmospheric Chemistry at the Interfaces, Joint CACGP, IGAC, WMO symposium, Cape Town, South Africa, 17-22 September 2006. (Poster Presentation) Awarded as the best poster presentation.
- Z. Markaki, <u>C. Theodosi</u>, P. Zarbas, S. Pergantis, N. Mihalopoulos, "Iron Speciation,
   Solubility and Temporal Variability in Wet and Dry Deposition In The Eastern Mediterranean", 7th Argo Data Management Team meeting, Tianjin, China, 31 October-3 November 2006. (Poster Presentation)
- 2008 <u>C. Theodosi</u> "Atmospheric Pollution and Global Change" at a 20h seminar entitled:
   4 'Education for a sustainable urban environment' Environmental Education Center of Neapoli, Crete, Greece, 4-6 December 2008. (Oral Presentation by C T.)
- M. Séguret, M. Koçak, N. Kubilay, B. Herut, N. Mihalopoulos, <u>C. Theodosi</u>, S. Ussher, P. Worsfold, M. Nimmo, "Physical and Chemical Factors impacting upon the Dissolution of Aerosol Iron in Seawater", American Society of Limnology and Oceanography (ASLO), Nice, France, 25-30 January 2009. (Oral Presentation)
- 2009 <u>C. Theodosi</u>, U. Im, A. Bougiatioti , P. Zarmpas, O. Yenigun and N. Mihalopoulos, 6 "Chemical composition and sources of aerosols over Istanbul, Turkey, 7th



Bonn, Deutschland, 20-24 September 2010. (Poster Presentation)

C. Theodosi, Z. Markaki and N. Mihalopoulos, "The Significance of atmospheric inputs of dissolved and particulate trace metals to the Eastern Mediterranean seawater", Geotraces Mediterranean Planning Workshop, Nice, France, 4-6 October 2010. (Poster Presentation)

2010 N. Mihalopoulos, <u>C. Theodosi</u>, Z. Markaki, S. Stavrakakis, A. Tselepidis and S.



