

# CURRICULUM VITAE

## ATHANASIOS VALAVANIDIS

National and Kapodistrian University of Athens  
Emeritus Professor of Organic Chemistry and Environment  
Department of Chemistry, Laboratory of Organic Chemistry

Date of birth: 11.01.1945 (Athens).

Address: Dpt of Chemistry, Laboratory of Organic Chemistry, National and Kapodistrian University of Athens, University Campus Zografou, 15784 Athens, Greece

Tel : +30-210-7274763, 210-9335876,

E-mail : [valavanidis@chem.uoa.gr](mailto:valavanidis@chem.uoa.gr)

Website: chem-tox-ecoto-orga

Family status: married with one child

### EDUCATION

BSc, 1963-1968, Chemistry University of Thessaloniki (1963-68),

MSc, 1970-1971, Polymer and Fiber Science, University of Manchester  
Institute of Science and Technology MIST (1970-71),

PhD, 1973-1977, King's College, University of London

Doctoral dissertation: A study of the heterogeneous base catalysis by Poly-(4-vinylpyridine), Supervisor Prof. V.Gold, FRS.

### EMPLOYMENT

1978, Dep. Of Chemistry, Lab. of Organic Chemistry Teaching Assistant

1981, Lecturer

1992., Assistant Professor

1999, Associate Professor

2009, Professor

### POSTDOCTORAL RESEARCH

1981-82, Visiting research postdoctoral fellow: University of Birmingham, England

1985-86 Postdoctoral research fellow, University of York, England

1988, postdoctoral research fellow, University of York, England

1998, postdoctoral research fellow, Louisiana State University, USA

### RESEARCH ACTIVITY

Free radical chemistry, Electron Paramagnetic Resonance, HPLC, applications of spin trapping techniques. Studies of mechanisms for antioxidant activity of plant extracts and measurements of polyphenols (fruits, vegetables, olive oil, wine) . Carcinogenic mechanisms of metals, PAHs and pollutants with redox potential (particulate matter, dusts, combustion of plastics materials etc). Medical waste management. Environmental Toxicological and Ecotoxicological studies with aquatic organisms

### PUBLICATIONS

## BOOKS

1. Valavanidis A. *Chemical Evolution and the Origin of Life*. Papazisis publisher, Athens, 1974, 2<sup>nd</sup> edition 1976.
2. Valavanidis A. *Environmental Causes of Malignant Neoplasms*. BHTA publs, Athens, 2000.
3. *Free Radicals and Mechanisms of Carcinogenesis*. BHTA publs, Athens, 2003.
4. Valavanidis A, Panagopoulos D. *Sick Building Syndrome*. Dpt of Chemistry, Lab. of Environmental Chemistry, Athens, 2000.
5. Valavanidis A. *Free Radicals and their Role in Biological Systems*. BHTA publs, Athens, 2006.
6. Valavanidis A. *Free Radicals in Organic Chemistry* (Dpt of Chemistry, Univ. of Athens, Athens, 2005. (also, in electronic form (PDF), [www.chem.uoa.gr](http://www.chem.uoa.gr), lessons of academic members of the Chemistry Dpt.)
7. Valavanidis A. *Spectroscopy of Organic Compounds*. University of Athens, Dpt of Chemistry, Athens, 2006 (electronic form (PDF), [www.chem.uoa.gr](http://www.chem.uoa.gr), lessons, Chemistry Dpt).
8. Valavanidis A. *Fundamental Principles of Molecular Spectroscopy and Applications in Organic Chemistry*. Synchrona Themata, Athens, 2008.
9. *Ecotoxicology and Environmental Toxicology*. Athens, 2007 (electronic PDF, [www.chem.uoa.gr](http://www.chem.uoa.gr), educational-lessons).
10. Valavanidis A. *Health and Safety in Chemical and Biochemical Laboratories*. Athens, 2007 (electronic PDF, [www.chem.uoa.gr](http://www.chem.uoa.gr), educational-lessons).
11. *Environmental Chemistry and Ecotoxicology. Ecosystem Management and Ecological Risk Assessment*. Athens, 2008 (electronic PDF, lesson, MSC course in Environmental Chemistry and Technology, [www.chem.uoa.gr](http://www.chem.uoa.gr))..
12. Vlachogianni Th, Valavanidis A. *Toxicological and Ecotoxicological Assays for Marine Species*. Dpt. Of Chemistry, Lab. of Environmental Chemistry, University of Athens, Athens, 2010.
13. Valavanidis A. *Phytochemicals of Diet with Antioxidant and Anticarcinogenic Properties*. BHTA publishers, Athens, 2010.
14. Valavanidis A, Vlachogianni Th. *Chemical Molecules that Transformed the Evolution of Life on Planet Earth*. Publication internet site : [www.chem-tox-ecotox.org](http://www.chem-tox-ecotox.org) and Synchrona Themata, Athens 2010.

## PUBLICATIONS 2020

1. Valavanidis A. *History of Vaccines and Immunization. Cornerstone of public health for 200 years that saved millions of human lives*. Website: [chem-tox-ecotox.org](http://chem-tox-ecotox.org), 2020.
2. Valavanidis A. *Malaria, a lethal human disease. Despite the progress, there were 228 million cases of malaria worldwide and 405,000 deaths in 2018*. Website: [chem-tox-ecotox.org](http://chem-tox-ecotox.org), 2020.
3. Valavanidis A. *Removal Technologies for atmospheric carbon dioxide. Negative emission technologies, carbon capture and catalytic conversion of CO<sub>2</sub> into valuable commodity chemicals*, Website: [chem-tox-ecotox.org](http://chem-tox-ecotox.org), 2020.
4. Valavanidis A. *Synthetic Organic Chemistry and the emergence of artificial intelligence-driven technology to synthesize target chemical compounds*. Website: [chem-tox-ecotox.org](http://chem-tox-ecotox.org), 2020.

5. Valavanidis A. Improving Early Cancer Diagnosis by artificial intelligence algorithms and machine learning models. *Website: chem-tox-ecotox.org, 2020.*
6. Valavanidis A. Artificial Intelligence with machine-learning algorithms identified a powerful broad-spectrum antibiotic. *Website: chem-tox-ecotox.org, 2020.*
7. Valavanidis A. Predicting 3D Protein Structure by computational approach from amino acid sequence. A leap forward in solving the classic problem of biochemistry. *Website: chem-tox-ecotox.org, 2020.*
8. Valavanidis A. Can Renewable energy Sources produce all the global electricity by 2050? Decarbonisation, ambitious climate goal by reducing carbon intensity of the electricity power sector. *Website: chem-tox-ecotox.org, 2020.*
9. Valavanidis A. Nobel Prize 2018. Discovery of cancer therapy by inhibition of negative immune regulation. New class of drugs for activated immune system as an effective strategy for harnessing attack on cancerous cells. *Website: chem-tox-ecotox.org, 2020.*