CURRICULUM VITAE

NAME Dimitrios Vlachos

QUALIFICATION Doctor of Physics

CURRENT POSSESSION Assistant Professor

ADDRESS Department of Physics

University of Ioannina Ioannina, Greece tel. ++30 2651 008578 e-mail: dvlachos@cc.uoi.gr

DATE OF BIRTH 18th of July, 1966

PLACE OF BIRTH Lefkas, Greece

MARITAL STATUS Married with two daughters

NATIONALITY Greek

EDUCATION 2nd High School of Lefkas, 1984

Bachelor in Physics, Univ. of Ioannina, 1988 Ph. D in experimental Surface Physics,

University of Ioannina, 1997

Ph D THESIS TITLE "Ba and hydrogen coadsorption on

semiconducting and metallic surfaces"

FIELD OF RESEARCH

Surface Physics and Chemistry: Interaction of metals and gases on metallic and semiconducting surfaces. Study of the electronic and structural properties of these systems by the use of the following techniques at ultrahigh vacuum conditions:

Auger Electron Spectroscopy (AES),

Ultraviolet Photoelectron Spectroscopy (UPS)

X-ray Photoelectron Spectroscopy (XPS)

Thermal Desorption Spectroscopy (TDS)

Electron Energy Loss Spectroscopy (EELS)

Low Energy Electron Diffraction (LEED)

Work Function measurements (WF)

Low Energy Ion Scattering (LEIS).

Metastable Impact Electron Spectroscopy (MIES)

Solid State Physics and Chemistry: Study of bulk electronic and structural properties of materials by using the following techniques:

Electron Microscopy (TEM and STEM)

Energy Dispersive x-ray Spectroscopy (EDS)

X-Ray Diffraction (XRD)

Electron Energy Loss Spectroscopy (EELS)

X-ray Absorption Spectroscopy by Synchrotron Radiation (XAS – transmission, fluorescence and total electron yield measurements)

Few words for my career

Likely or not, I have continuously been working in academia since 1989, with only a break of almost two years for doing my military service.

It was October in 1988 when I graduated from the Physics Department of the University of Ioannina in Greece. Almost half year later, I jointed again the same department as a Phd student in a funded postgraduate position. The subject of my Phd thesis was in the field of the experimental Surface and Interface Physics. Specifically, I studied the coadsorption of barium and hydrogen on mono-crystalline surfaces. Part of the measurements and analysis was carried out at the FOM Institute in Holland. In parallel with the work of my thesis, I participated in an international cooperation research project concerning the alkali adsorption on layer compounds. The experiments of that project took place at my home department and at BESSY Synchrotron Radiation Center in Berlin in Germany.

As a postgraduate student, beside my research work, I had also had some tutorial duties in the department, teaching and demonstrating for the undergraduate students. Furthermore I had the change to supervise few final year students doing their diploma thesis.

In February of 1998, I was appointed as post doctoral research assistant in the Physics and Astronomy Department in the University of Glasgow. My prior responsibility was to carry out the experimental part of a funded project concerning the study of doped zirconia by several oxides. The main tools of this research, were electron microscopy (TEM and STEM), electron energy loss spectroscopy (EELS) and x-ray absorption measurements. The latter were performed at Daresbury synchrotron radiation laboratory in UK. The main purpose of the project was the characterization of doped zirconia, by investigating the electron loss near edge structure (ELNES) and x-ray absorption near edge structure (XANES) for a number of electronic excitations. In this manner was possible to gain direct information on the influence of dopants and vacancies on the local structure and bonding. The final objective was to develop the relationship between structural information and material properties of novel zirconia composites. During that time, I developed collaboration with the Atomistic Simulation Group in Queen's University in Belfast in UK. This allowed a comparison of the experimental results with the theoretical predictions. Beside my research duties in the department, I also had some tutorial ones. Specifically I taught and demonstrated for the first year students in the general physics labs.

In October of 2000, I was appointed as lecturer in the department of Biological Applications and Technology of the University of Ioannina in Greece. My main duty was the teaching of General Physics and Physical Chemistry courses for the first year students. At the same time, in January of 2001, I started working in the Department of Physics of the University of Ioannina, within the frame of a founded project by the National Institute of Scholarships of Greece (IKY). This project was related to the development of ultrathin films of alkaline earth metal oxides on surfaces. The investigation was carried out by basic surface analytical techniques such as, Auger electron spectroscopy (AES), low energy electron diffraction (LEED), thermal desorption spectroscopy, (TDS), EELS and work function (WF) measurements. Complementary measurements of soft x-rays photoelectron spectroscopy (SXPS) and ultraviolet photoelectron spectroscopy (UPS) were performed at the national institute of synchrotron radiation of MAX-lab in Lund in Sweden. At about the same time a new cooperation was started between my home Department and the Physics and the Metallurgy Departments of the Technical University of Clausthal in Germany. The project concerned the possible catalytic action of Ni and Sr on the SrTiO₃(100) surface with interaction of several gases such as O2, CO2, H2S etc. The measurements were carried out at our lab in Grecee by using our home techniques as well as at the Physics department in Clausthal by the provided facilities there, XPS, UPS and metastable impact electron spectroscopy (MIES).

In October of 2004, I was appointed as lecturer at the department of Physics in the University of Ioannina in Greece. I work in a well equipped lab of Surface and Interface Physics. Although the instrumentation is not modern, the housing of five different analytical experimental techniques for surface analysis at the same ultra-high vacuum system, makes our research quite powerful and productive. My current interests are mainly focused on the development of metals and oxides in the form of ultrathin films on metallic and semiconducting surfaces, and the characterization of these systems by studying their electronic, structural and physicochemical properties. These systems are very useful and applicable in modern technology. My intention is to continue working on the already running projects and also to develop new collaborations with other institutes in abroad. For example, last years I have started a collaboration with the AMES laboratory in Iowa in USA, and more specifically with the condensed matter Physics division. The project concerns the development and characterization of metallic nanostructures on semiconducting surfaces from the structural and electronic point of view. A lot of fruitful experiments of this project have already been performed at Ioannina, at the ELETTRA synchrotron radiation laboratory in Trieste in Italy and at Max-lab the swedish national laboratory in Lund I Sweden. In general, the combination of our home techniques results with those taken by more modern and sophisticated facilities based in distinguished international institutes, gives to our scientific effort more valuable and reliable impact.

In June of 2011, I was promoted to the rank of assistant professor in the department of Physics, where I am serving till today.

LIST OF REFEREED PUBLICATIONS

- "The behaviour of K on the basal plane of MoS₂"
 C. A. Papageorgopoulos, M. Kamaratos, S. Kennou and <u>D. Vlachos</u> Surface Science 251/252 (1991) 1057-1061.
- "Coadsorption of K and O₂ on MoS₂(0001)"
 C. A. Papageorgopoulos, M. Kamaratos, S. Kennou and <u>D. Vlachos</u> Surface Science 277 (1992) 273-281.
- "Potassium adsorption on MoS₂ (0001) at low temperature"
 M. Kamaratos, <u>D. Vlachos</u> and C. A. Papageorgopoulos Journal of Physics - Condensed Matter 5 (1993) 535-540.
- 4. "Ba adsorption on Si(100)2×1"

 <u>D. Vlachos</u>, M. Kamaratos and C. A. Papageorgopoulos Solid State Communications 90 (1994) 175-181.
- "Photoelectron spectroscopy of UHV in situ intercalated Li/TiSe2. Experimental proof of the rigid band model"
 W. Jaegermann, C. Pettenkofer, A. Schellenberger, C. A. Papageorgopoulos
 M. Kamaratos, <u>D. Vlachos</u> and Y. Tomm
 Chemical Physics Letters 221 (1994) 441-446.
- 6. "Ba deposition on Ni(110)"

 <u>D. Vlachos</u>, S. D. Foulias, S. Kennou, C. Pappas, C. A. Papageorgopoulos Surface Science 331/333 (1995) 673-678.

- 7. "H⁻ formation in proton Ba/Ag(111) collisions: effects of the surface structure" W. R. Koppers, B. Berenbak, <u>D. Vlachos</u>, U. Van Slooten and A. W. Kleyn Nuclear Instrument and Methods in Physics Research B 100 (1995) 417-422.
- 8. "A synchrotron radiation study of the interaction of Na with WSe₂ and TaSe₂: oxygen-induced deintercalation"
 - S. D. Foulias, <u>D. Vlachos</u>, C. A. Papageorgopoulos, R. Yavor, C.Pettenkofer and W. Jaegermann

Surface Science 352/354 (1996) 463-467.

- 9. "Barium adsorption on hydrogenated Si(100)2×1 surfaces"

 <u>D. Vlachos</u> and C. A. Papageorgopoulos

 Journal of Physics Condensed Matter 8 (1996) 8799-8814.
- "Low-energy hydrogen-ion scattering from metal surfaces: Trajectory analysis and negative-ion formation"
 W. R. Koppers, B. Berenbak, <u>D. Vlachos</u>, U. Van Slooten and A. W. Kleyn Physical Review B 57 (1998) 13246-13256.
- 11. "Thermal desorption study of Ba and hydrogen coadsorption on Ni(110) surface"

 <u>D. Vlachos</u> and C. A. Papageorgopoulos

 Applied Surface Science 136 (1998) 230-237.
- "Effect of relaxation on the oxygen K-edge electron energy-loss near edge structure in yttria-stabilised zirconia"
 S. Ostanin, A. J. Craven, D. W. McComb, <u>D. Vlachos</u>, A. T. Paxton, A. Alavi and M. W. Finnis
 Physical Review B 62 (2000) 14728-14735.
- "The influence of dopant concentration on the oxygen K-edge ELNES and XANES in yttria-stabilised zirconia"
 <u>D. Vlachos</u>, A. J. Craven and D. W. McComb Journal of Physics Condensed Matter 13 (2001) 10799-10809.
- "Electron energy-loss near-edge shape as a stabilization probe of yttria-stabilised zirconia"
 S. Ostanin, A. J. Craven, D. W. McComb, <u>D. Vlachos</u>, A. Alavi, A. T. Paxton, and M. W. Finnis
 Physical Review B 65 224109 (2002).
- 15. "Li interaction with the group IV selenides layer compounds at low temperature" M. Kamaratos, <u>D. Vlachos</u>, C. A. Papageorgopoulos, A. Schellenberger, W. Jaegermann and C. Pettenkofer Journal of Physics: Condensed Matter 14 (2002) 8979-8986.
- 16. "Theory of the phases and atomistic structure of Yttria-doped zirconia" S. Ostanin, E. Salamatov, A. J. Craven and D. W. McComb and <u>D. Vlachos</u> Physical Review B 66 132105 (2002).
- 17. "AES and WF characterization of oxygen adsorption on Ba covered Ni(110)"

 <u>D. Vlachos</u>, N. Panagiotides and S. D. Foulias

 Journal of Physics: Condensed Matter 15 (2003) 8195-8206
- 18. "Ni ultrathin film development on SrTiO₃(100) surface"

- <u>D. Vlachos</u>, M. Kamaratos, S. D. Foulias, Ch. Argirusis, and G. Borchardt Surface Science 550 (2004) 213-222
- "The development of nickel ultra-thin films and the interaction with oxygen on the SrTiO₃(100) surface studied by soft x-rays photoelectron spectroscopy"
 M. Kamaratos, <u>D. Vlachos</u>, S.D. Foulias and Ch. Argirusis
 Surface Review and Letters 11 (2004) 419-425
- "Adsorption of oxygen on a nickel covered SrTiO₃(100) surface, studied by means of Auger electron spectroscopy and work function measurements"
 <u>D. Vlachos</u>, M. Kamaratos, S. D. Foulias, Ch. Argirusis, and G. Borchardt Journal of Physics: Condensed Matter 17 (2005) 635-642
- 21. "Specimen charging in X-ray absorption spectroscopy: correction of total electron yield data from stabilized zirconia in the energy range 250-915 eV"

 <u>D. Vlachos</u>, A.J. Craven and D.W. McComb

 Journal of Synchrotron Radiation 12 (2005) 224-233
- "Electronic properties of barium ultrathin layers on the Ni(110) surface"
 M. Kamaratos, <u>D. Vlachos</u> and S.D. Foulias
 Surface Review and Letters 12 Nos. 5&6 (2005) 721-726
- "Oxygen and potassium adsorption on a carbide-modified stepped-W(100) in contact with the carbon solid solution: An AES and WF study at 300 K and at elevated temperatures"
 S.D. Foulias, A. Perdikis and D. Vlachos
 Surface Review and Letters 12 Nos. 5&6 (2005) 787-792
- 24. "Barium and oxygen interaction on the Ni(110) surface at low coverages studied by soft x-ray photoemission spectroscopy: Ba negative binding energy shifts and their correlation with AES shifts"

 <u>D. Vlachos</u>, M. Kamaratos and S. D. Foulias
 Journal of Physics: Condensed Matter 18 (2006) 6589-6603
- 25. "Development and characterization of an ultrathin barium oxide film on a surface oxidized Ni(110) substrate"
 <u>D. Vlachos</u>, S. D. Foulias and M. Kamaratos
 Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry, 38 (2008) 400-404
- "Development and characterization of Fe ultrathin films on the SrTiO₃(100) surface"
 M. Kamaratos, <u>D. Vlachos</u> and S.D. Foulias
 Journal of Physics: Condensed Matter 20 (2008) 315009
- "Barium adsorption on the chemisorbed O(2×1)/Ni(110) surface: a combined Auger electron spectroscopy and synchrotron radiation study"
 <u>D. Vlachos</u>, S. D. Foulias and M. Kamaratos
 Journal of Physics: Condensed Matter 21 (2009) 445004
- 28. "Indium growth on the reconstructed Si(111)√3×√3 and 4×1–In surfaces"

 <u>D. Vlachos</u>, M. Kamaratos, S.D. Foulias, F. Bondino, E. Magnano and M. Malvtestuto Journal of Physical Chemistry C **114** (2010) 17693-17702
- 29. "Lead growth on Si(111) surfaces reconstructed by indium"

- <u>D. Vlachos</u>, M. Kamaratos, S.D. Foulias, S. Binz, M. Hupalo and M.C. Tringides Journal of Physics: Condensed Matter **24** (2012) 095006.
- 30. "A study of barium ultra-thin films on the SrTiO₃(100) surface by soft x-ray photoelectron spectroscopy"
 D. Vlachos, M. Kamaratos, Ch. Argirusis and S. D. Foulias Journal of Electron Spectroscopy and Related Phenomena 185 (2012) 615-620.
- 31. "The low energy Auger electron spectroscopy lines as an index of the Ba overlayer order on the Ni(110) surface"

 <u>D. Vlachos</u>, M. Kamaratos and S.D. Foulias
 International Journal of Spectroscopy, Vol **2014** (2014) 289346
- 32. "Cesium growth on the SrTiO₃(100) surface"

 <u>D. Vlachos</u>, E. Giotopoulou, S. D. Foulias, and M. Kamaratos Materials Research Express **2** (2015) 116501.

NATIONAL & INTERNATIONAL CONFERENCES

- 1. "Adsorption of K on MoS₂(0001)"
 - C. A. Papageorgopoulos, M. Kamaratos, S. Kennou and <u>D. Vlachos</u> 6th Panhellenic Conference on Solid State Physics, Heraklion, Hellas, 26-29th September 1990
- "Adsorption of K and its coadsorption with O₂ on MoS₂(0001)"
 C. A. Papageorgopoulos, M. Kamaratos, S. Kennou and <u>D. Vlachos</u>
 11th European Conference on Surface Science (ECOSS-11)
 Spain, 1990
- "Coadsorption of K and O₂ on MoS₂(0001)"
 <u>D. Vlachos</u>, M. Kamaratos, C. A. Papageorgopoulos,
 "Coadsorption of alkali metals and oxygen on layered compound surfaces"
 C. A. Papageorgopoulos, M. Kamaratos and <u>D. Vlachos</u>
 7th Hellenic Conference on Solid State Physics,
 Thessaloniki, Hellas, 22-25th September 1991
- "Deposition of Ba on Si(100)2×1"
 <u>D. Vlachos</u>, M. Kamaratos, C. A. Papageorgopoulos, 8th Panhellenic Conference on Solid State Physics, Ioannina, Hellas, 22-25th September, 1992
- 5. "Adsorption of Ba on clean and H-covered Si(100)2×1"

 <u>D. Vlachos</u>, M. Kamaratos and C. A. Papageorgopoulos

 12th International Vacuum Congress and 8th International Conference on Surfaces, The Netherlands, 1992
- 6. "Negative ion formation in proton Ba/Ag(111) collisions: effects of the surface structure"
 W. R. Koppers, B. Berenbak, D. Vlachos, U. Van Slooten and A. W. Kleyn
 - Proceedings of the Fifth European Workshop on the Production and Application of Light Negative Ions, Dublin, Ireland, 23-25th March 1994

7. "Coadsorption of Ba and hydrogen on Si(100)2×1"

D. Vlachos and C. A. Papageorgopoulos

"Study of negative hydrogen ions by low energy proton scattering on barium covered Ag(111)"

<u>D. Vlachos</u>, W. R. Koppers, B. Berenbak, U. Van Slooten and A. W. Kleyn 10th 10th Panhellenic Conference on Solid State Physics,

Delphi, Hellas, 18-21th September 1994

8. "Ba deposition on Ni(110)"

<u>D. Vlachos</u>, S. D. Foulias, S. Kennou, C. Pappas, C. A. Papageorgopoulos 14th European Conference on Surface Science (ECOSS-14) Leipzig, Germany, 19-23th September 1994

9. "A synchrotron radiation study of the interaction of Na with WSe₂ and TaSe₂: oxygen-induced deintercalation"

S. D. Foulias, <u>D. Vlachos</u>, C. A. Papageorgopoulos, R. Yavor, C.Pettenkofer and W. Jaegermann

15th European Conference on Surface Science (ECOSS-15)

Lille, France, 4-8th September 1995

10. "Hydrogen effect on the barium growth on $Si(100)2\times1$ surface"

D. Vlachos and C. A. Papageorgopoulos

11th Panhellenic Conference on Solid State Physics,

Xanthi, Hellas, 17-20th September 1995

11. "Coadsorption of Ba and hydrogen on Ni(110)"

D. Vlachos and C. A. Papageorgopoulos

12th Panhellenic Conference on Solid State Physics,

Heraklion, Hellas, 15-28th September 1996

12. "Fundamental Aspects of Surface Science- Synchrotron Radiation and Surfaces" (no announcement)

Castelvecchio Pascoli, Italy, 6-11th June 1997

13. "The O K-edge in yttria stabilised zirconia"

A. J. Craven, D. Vlachos, D. W. McComb, S. Ostanin, A. T. Paxton,

A. Alavi and M. W. Finnis

Condensed Matter and Materials Physics (CMMP)

Leicester, England, 19-22th December 1999

14. "Oxygen adsorption on barium covered Ni(110) surfaces: An AES and WF study"

D. Vlachos, N. Panagiotides and S. D. Foulias

"Electronic structure of solids and surfaces"

Giens, France, 7-12th September 2001

15. The use of XANES and ELNES for the characterisation of stabilised zirconia"

D. W. McComb, S. Ostanin, <u>D. Vlachos</u>, A. J. Craven, M. W. Finnis, A. T. Paxton, and A. Alavi

MRS Fall Meeting

Boston, USA, 26-30th November 2001

16. "Theory of the phases and atomistic structure of yttria-doped zirconia"

S. Ostanin, E. Salamatov, A. J. Craven, D. W. McComb and D. Vlachos

EMRS, European Materials Research Society,

Spring Meeting

Strasbourg, France, 18-21th June 2002

17. "The development and characterization of ultrathin barium oxide film on the Ni(110) surface"

D. Vlachos, M. Kamaratos and S.D. Foulias

"The electronic properties of Ni ultrathin films on the SrTiO₃(100) surface with oxygen adsorption"

M. Kamaratos, D. Vlachos and S.D. Foulias

20th Panhellenic Conference on Solid State Physics,

Ioannina, Hellas, 26-29th September, 2004

18. "Barium adsorption on the SrTiO₃(100) surface"

D. Vlachos, M. Kamaratos and S.D. Foulias

21th Panhellenic Conference on Solid State Physics & Materials Science

Cyprus, Lefcosia, 28-31th August 2005

19. "Ultrathin barium oxide layers on nickel surface"

D. Vlachos, S.D. Foulias and M. Kamaratos.

ICMAT 2007, 4th International Conference on Materials for Advanced Technologies Singapore, 1-6th July, 2007.

20. "Barium adsorption on an oxygen chemisorbed O(2×1)/Ni(110) surface"

D. Vlachos, S.D. Foulias and M. Kamaratos

23th Panhellenic Conference on Solid State Physics & Materials Science

Athens, Hellas, 23-26th September 2007

21. "Development and characterization of Fe ultrathin films on the SrTiO₃(100) surface"

D. Vlachos, M. Kamaratos and S.D. Foulias

"Nanotechnology for Sustainable Energy",

Obergurgl, Austria, 14-19th June 2008

22. "Indium adsorption on the reconstructed Si(111) $\sqrt{3} \times \sqrt{3}$ and 4×1 -In surfaces"

D. Vlachos, M. Kamaratos and S.D. Foulias

25th Panhellenic Conference on Solid State Physics & Materials Science

Thessaloniki, Hellas, 20-23th September 2009

23. "Lead nanostructures on reconstructed by indium Si(111) surfaces"

D. Vlachos, M. Kamaratos, S.D. Foulias, S. Binz and M.C. Tringides

7th International Conference on Nanosciences & Nanotechnologies - NN10

Ouranoupolis, Halkidiki, Hellas, 11-14 July 2010

24. "Indium growth on the reconstructed Si(111) $\sqrt{3}\times\sqrt{3}$ and 4×1 -In surfaces"

D. Vlachos, M. Kamaratos, S.D. Foulias, F. Bondino, E. Magnano and M. Malvtestuto

27th European Conference on Surface Science – ECOSS 27

Groningen, Holland, 29 August - 3 September 2010

25. "Lead growth on reconstructed by indium $Si(111)\sqrt{3}\times\sqrt{3}$ and 4×1 —In surfaces"

D. Vlachos, M. Kamaratos, S.D. Foulias, S. Binz and M.C. Tringides

26th Panhellenic Conference on Solid State & Materials Science

Ioannina, Greece, 26-29 September 2010

26. 18th Interdisciplinary Surface Science Conference (ISSC-18)

(no announcement)

Warwick, UK, 4-7 April 2011

27. "Nanocomposited anatase TiO₂ on LaAlO₃(100) surfaces by PLD"

- <u>D. Vlachos</u>, M. Misra, N. Fereshteh Saniee, D.P. Woodruff and C.F. McConville 9th International Conference on Nanosciences & Nanotechnologies NN12 Thessaloniki, Hellas, 3-6 July 2012
- 28. "Development of nanostructured anatase TiO₂ by means of pulsed layer deposition"

 <u>D. Vlachos</u>, M. Misra, N. Fereshteh Saniee, D.P. Woodruff and C.F. McConville
 28th PanHellinic Conference on Solid State Physics and Materials Science
 Patras, Hellas, 23-26 September 2012.
- 29. "The L adsorption edges as index for the doped zirconia stabilization process"
 <u>D. Vlachos</u>, S. Ostanin, A. J. Craven and D. W. McComb
 29th PanHellinic Conference on Solid State Physics and Materials Science Atehns, Hellas, 22-25 September 2013.
- 30. "Adsorption of water on a cesium covered SrTiO₃ (100) surface"
 <u>D. Vlachos</u>, E. Giotopoulou, M. Kamaratos and S.D. Foulias
 31th PanHellinic Conference on Solid State Physics and Materials Science Thessaloniki, Hellas, 20-23th September 2015.

ORAL PRESENTATIONS IN ABROAD

- 1. "Ba adsorption on Si(100)2×1" FOM-Institute for Atomic and Molecular Physics Amsterdam, Netherlands, July 1993
- 2. "Ba and hydrogen coadsorption on Si(100)2×1" Queen University Physics Department, Belfast, May 1998
- 3. "A TEM and X-ray absorption study of several oxides doped zirconia polymorphs" Physics and Astronomy Department, University of Glasgow, March 1999
- "Characterisation of the electronic and structural properties of doped zirconia by several oxides"
 Queen University, Physics Department, Belfast, September 1999
- 5. "A TEM and X-ray absorption study of doped zirconia polymorphs"
 Techniche Universität Clausthal, Institut für Metallurgie, Clausthal-Zellerfeld,
 Germany, July 2002
- 6. "Ultrathin barium oxide layers on nickel surface" ICMAT 2007, 4th International Conference on Materials for Advanced Technologies Singapore, 1-6th July, 2007.
- 7. "Indium growth on the reconstructed Si(111) $\sqrt{3} \times \sqrt{3}$ and 4×1 -In surfaces" 27th European Conference on Surface Science ECOSS 27 Groningen, Holland, 29 Aug.-3 Sept 2010
- 8. "Nanostructures on surfaces: Pb on Si(111)-In" University of Warwick, Department of Physics, Coventry, UK, July 2011.

INTERNATIONAL SCHOOLS

 European Summerschool in Surface Science "Surface Crystallography" Physikzentrum, Bad Honnef, Germany 23-27th March 1992

- "European Workshop on Research with Synchrotron Radiation" Hotel Xenia, Ioannina, Hellas 3-5th May 1993
- 3. Daresbury Laboratory
 "Introduction to EXAFS (Extended X-ray Absorption Fine Structure)"
 Warrington, WA4 4AD, England, UK
 16-17th November 1998

RESEARCH COLLABORATIONS WITH OTHER INSTITUTIONS

- 1. Hahn-Meitner Institute / BESSY, Berlin, GERMANY November 1992, March 1994
- FOM-Institute for Atomic and Molecular Physics Kruislaan 407, 1098 SJ Amsterdam, NETHERLANDS July - September 1993, December 1993, August 1994
- 3. Physics and Astronomy Department University of Glasgow Kelvinbuilding G12 8QQ Glasgow, Scotland, UK 1998-2000
- 4. Queen University Physics Department, Department of Pure and Applied Physics Belfast, North Ireland, UK often visits in 1998-2000
- 5. Daresbury Laboratory
 Warrington, WA4 4AD
 England, UK
 23-25th August 1998, 26-30th May and 1-8th July 1999, 3-5th February 2000
- Techniche Universität Clausthal
 Institut für Metallurgie
 Robert-Koch-Str.42, D-38678
 Clausthal-Zellerfeld, GERMANY
 15-25th July 2002, 24th November-2nd December 2002, 25th June-4th July 2004, 6th-11th
 December 2004
- 7. MAX-lab, Swedish National Laboratory Box 118, S-221 00 Lund, SWEDEN

16th February – 5th March 2003, 1-14th September 2003, 27th April-3th May 2009, 19th October-2nd November 2009.

- ELETTRA, Synchrotrone Trieste Strada Statale14 – km 163.5 in Area Science Park 34012 Basovizza, Trieste, ITALY 9-21th September 2008
- 9. University of Warwick
 Department of Physics
 Coventry CV4 7AL, UK
 February 2011-August 2011
 Visiting Fellow

FUNDED PROJECTS

- 1. IKYDA 2001 PROGRAMM, Bilateral German-Greek research project financed by the DAAD and IKY State Scholarships Foundation.
- 2. "Oxidation of alkaline earth metals on surfaces". Access to Research Infrastructure Action of the Improving Human Potential Programme (ARI), financed by the European Union.
- 3. "Engineering nanostructures on surfaces" financed by the European Union under the contract RII3-CT-2004-506008 (IA-SFS).
- 4. "Engineering nanostructures on surfaces". Research Infrastructure Action under the FP6 "Structuring the European Research Area" Programme (through the Integrated Infrastructure Initiative "Integrating Activity on Synchrotron and Free Electron Laser Science"). Granted by the European Union.

TUITION

I have taught the following undergraduate courses

- 1. Mechanics
- 2. Electromagnetism
- 3. Laboratories of General Physics (Mechanics, Thermodynamics, Waves, Optics, Physical Chemistry)
- 4. Computing
- 5. Thermodynamics

I have supervised several students in their diploma and master thesis.

PROFESSIONAL SERVICE

-Referee in the following international Journals

Surface Science.

Physical Chemistry Chemical Physics (PCCP), and

Catalysts

-Czech Science Foundation (reviewer for evaluation of project proposals)

- -Official connoisseur for XPS systems in the Greek National Accreditation System.
- -Member of the committees responsible for 1) the timetable of the undergraduate courses and 2) the supply of technical equipment in the Department of Physics in the university of Ioannina.

FELLOWSHIPS

- Departmental Scholarship
 Department of Physics, University of Ioannina
 1989-1994
- Postdoctoral Scholarship
 Engineering and Physical Science Research Council
 Department of Physics and Astronomy, University of Glasgow
 1998-2000
- 3. Postdoctoral Scholarship
 National Institute of Scholarships of Greece (IKY)
 2001-2002
- 4. Royal Society Fellowship
 International Travel Grand Scheme
 February April 2011 (3 months)

CITATIONS

My publications have been cited more than 300 times.