

### **ΤΑΚΤΙΚΑ ΜΕΛΗ**

1. **Βες Σωτήριος**, Καθηγητής του Τμήματος Φυσικής της Σ.Θ.Ε. του Α.Π.Θ.  
<http://www.physics.auth.gr/system/cvs/56/original/Ves-cv-gr.pdf?1276753946>
2. **Λογοθετίδης Στέργιος**, Καθηγητής του Τμήματος Φυσικής της Σ.Θ.Ε. του Α.Π.Θ.  
[http://www.ltfn.gr/images/stories/food/logo\\_cv.html](http://www.ltfn.gr/images/stories/food/logo_cv.html)
3. **Παρασκευόπουλος Κωνσταντίνος**, Καθηγητής του Τμήματος Φυσικής της Σ.Θ.Ε. του Α.Π.Θ.  
[http://www.physics.auth.gr/system/cvs/70/original/kpar\\_cv\\_gr.pdf?1276855845](http://www.physics.auth.gr/system/cvs/70/original/kpar_cv_gr.pdf?1276855845)
4. **Ράπτης Ιωάννης**, Αναπληρωτής Καθηγητής του Τμήματος Εφαρμοσμένων Μαθηματικών και Φυσικών Επιστημών του Ε.Μ.Π.  
[http://users.ntua.gr/yraptis/curriculum\\_vitae](http://users.ntua.gr/yraptis/curriculum_vitae)
5. **Ζουμπούλης Ηλίας**, Αναπληρωτής Καθηγητής Της Σχολής Ε.Μ.Φ.Ε. του Ε.Μ.Π. (βλέπε σελ. 2-6)
6. **Σαραντοπούλου Ευαγγελία**, Ερευνήτρια Α', Ινστιτούτο Θεωρητικής και Φυσικής Χημείας, Εθνικό Ίδρυμα Ερευνών  
<http://www.eie.gr/nhrf/institutes/tpci/cvs/cv-sarantopoulou-gr.pdf>
7. **Prassides Kosmas**, Καθηγητής του Advance Institute for Materials Research, Tohoku University, Japan  
[http://www.jst.go.jp/erato/isobe/pdf/CV\\_B\\_Prassides.pdf](http://www.jst.go.jp/erato/isobe/pdf/CV_B_Prassides.pdf)

### **ΑΝΑΠΛΗΡΩΜΑΤΙΚΑ ΜΕΛΗ**

1. **Παλούρα Ελένη**, Καθηγήτρια του Τμήματος Φυσικής της Σ.Θ.Ε. του Α.Π.Θ.  
<http://www.physics.auth.gr/system/cvs/68/original/Paloura-cv-gr.pdf?1275466930>
2. **Χριστόφλος Δημήτριος**, αναπληρωτής καθηγητής του Τμήματος Χημικών Μηχανικών της Πολυτεχνικής Σχολής του Α.Π.Θ.  
<http://www.cheng.auth.gr/en/personnel/dep/93?dep=chris>
3. **Πολάτογλου Χαρίτων**, καθηγητής του Τμήματος Φυσικής της Σ.Θ.Ε. του Α.Π.Θ.  
<http://www.physics.auth.gr/system/cvs/71/original/polatoglou-cv-gr.pdf?1296295370>
4. **Γαλιώτης Κωνσταντίνος**, καθηγητής του Τμήματος Χημικών Μηχανικών της Πολυτεχνικής Σχολής του Πανεπιστημίου Πατρών  
<http://www.chemeng.upatras.gr/el/personel/faculty/el/galiotis>
5. **Γιαννόπουλος Σπυρίδων**, Ερευνητής Α', Ινστιτούτο Επιστημών Χημικής Μηχανικής, Ίδρυμα Τεχνολογίας & Έρευνας  
<http://www.iceht.forth.gr/staff/yannopoulos.html>
6. **Βάινος Νικόλαος**, καθηγητής του Τμήματος Επιστήμης των Υλικών, Σχολή Θετικών Επιστημών, Πανεπιστήμιο Πατρών  
<http://www.matersci.upatras.gr/el/dep-cv/246-vainos>
7. **Papakonstantinou Pagona**, καθηγήτρια, School of Engineering, University of Ulster, UK  
<http://ulster.academia.edu/PagonaPapakonstantinou>

## CURRICULUM VITAE

Surname: Zouboulis

First Name: Ilias

Affiliation and official address :

National Technical University

Physics Department

Zografou Campus, Athens

157 80 , GREECE

tel. x30 210 7723041

mobile : x30 6977252688

fax x30 210 7722928

email : zoubisig@central.ntua.gr

Date and place of birth : Feb. 26, 1951.

Marital status : Married, three children.

Foreign Languages : English, French, German

Nationality: Greek

### *Education*

|                            |      |                                              |
|----------------------------|------|----------------------------------------------|
| " Ptychion " in Physics,   | 1974 | University of Athens                         |
| M.A., M. Phil. in Physics, | 1977 | Columbia University, N.Y.C.,<br>N.Y., U.S.A. |
| Ph. D. in Physics,         | 1979 | Columbia University, N.Y.C.,<br>N.Y., U.S.A. |

### *Positions Held*

|              |                                                                                                                               |
|--------------|-------------------------------------------------------------------------------------------------------------------------------|
| 1976 - 1980: | Graduate Research Assistant, Physics<br>Department, Columbia University                                                       |
| 1981 - 1992: | Lecturer, Physics Dept., School of Applied Sciences,<br>National Technical University of Athens (NTUA),<br>Greece             |
| 1992 - 1999: | Assistant Professor, Physics Dept., School of Applied<br>Sciences, National Technical University of Athens,<br>(NTUA), Greece |
| 1999-        | Associate Professor, Physics Dept, School of Applied<br>Sciences, National Technical University of Athens,<br>(NTUA), Greece  |

### ***Periods spent abroad***

|                                                                          |                                                                                                                           |
|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Jul. - Aug.1981:                                                         | Visiting Scientist, University of Ulm, Germany                                                                            |
| Feb. - Apr. 1982 :                                                       | Visiting Scientist, Phys. Institut of the RWTH Aachen, Germany                                                            |
| Apr.- Jul.1988,<br>Jun.- Jul.1989 :                                      | Visiting Scientist, Institut des Milieux Condensés, Université P. et M. Curie, Paris, France.                             |
| Dec. 1989 - Mar. 1991,<br>Mar. 1997 – May 1997:                          | Visiting Scholar in the Materials Science Division of Argonne National Laboratory, Argonne, Ill.,U.S.A.                   |
| Oct.1995,<br>Jun. - Aug.1996:                                            | Visiting Scientist in the A.F.Ioffe Physicotechnical Institute of the Russian Academy of Sciences, St. Petersburg, Russia |
| Sept. 12, 2012-<br>Apr. 24, 2013 and<br>July 25, 2013-<br>Aug. 24, 2014: | Visiting Research Scholar in the Department Of Geosciences, Princeton University, Princeton, NJ, U.S.A.                   |

### ***Specialization***

- (i) main field : Inelastic Scattering of Light. Brillouin and Raman Spectroscopy, Optical and Elastic Properties of Materials.
- (ii) other fields : Absorption Spectroscopy of Molecular Systems, Photorefractive Materials. Infrared Spectroscopy.
- (iii) current research interests : Optical and Elastic Properties of Materials at very High Temperatures and Pressures.

### ***Membership in Professional Societies***

Member of : Hellenic Physical Society, Hellenic Society of Lasers and Electrooptics, Hellenic Society of the Science and Technology of the Condensed Matter.  
Member of the American Physical Society  
Member of the American Geophysical Union.

### ***Administrative Responsibilities***

1. Member of the Board of the Hellenic Society of the Science and Technology of Condensed Matter (HSSTCM).
2. Head of the Physics Department, School of Applied Sciences, National Technical University of Athens (NTUA), September 1, 2010 - August 31, 2012.

### ***PUBLICATIONS***

#### ***A. Textbooks***

1. Editorship and translation of the textbook: "Quantum Generations – History of Physics in the 20<sup>th</sup> Century" by Helge Kragh [ Princeton University Press, 1999 ] in Greek ( 2 coauthors ). Katoptron Press, Athens, 2004.
2. Editorship and translation of the textbook: "Optics and Lasers" by Matt Young[ 5<sup>th</sup> edition, Springer Verlag, 2000 ] in Greek ( 8 coauthors ). NTUA Press, Athens, 2008.
3. Editorship and translation of the textbook: "University Physics" by H.D.Young and R.A.Freedman [ 11<sup>th</sup> edition, Pearson/Addison Wesley, 2004 ] in Greek ( 8 coauthors ). Papazissis, Press, Athens, 2009 - 2011.

#### ***B. Scientific Articles***

1. « New Infrared Absorption Bands of Alkali Vapors»  
N.D. Bhaskar, E. Zouboulis, T. McClelland and W. Happer, Phys. Rev. Lett. **42**, 640 (1979).
2. «New Infrared Absorption Bands of Cesium Vapor»  
E. Zouboulis, N.D. Bhaskar, A. Vasilakis and W. Happer, J. Chem. Phys. **72** (4), 2356 (1980).
3. «Laser Excited Cross Fluorescent Emission from Cesium Molecules»  
N.D. Bhaskar, E. Zouboulis, R. Novack and W. Happer, Chem. Phys. Lett. **63**, 55 (1979).
4. «Raman Spectroscopic Study of the Effects of Opiates on Dipalmitoylphosphatidylcholine (DPPC) Dispersions»  
D. Yova, E. Zouboulis, E. Liarakis and S. Loukas, J. Raman Spectroscopy **21**, 251 (1990).
5. «Refractive Index and Elastic Properties of MgO up to 1900 K»  
E. Zouboulis and M. Grimsditch, J. Geophys. Res. **96** (B3), 4167 (1991).

6. «Refractive Index and Elastic Properties of Single Crystal Corundum  $\alpha$ - $\text{Al}_2\text{O}_3$  up to 2100 K»  
E. Zouboulis and M. Grimsditch, J. Appl. Phys. **70** (2), 772 (1991).
7. «Raman Scattering in Diamond up to 1900 K»  
E. Zouboulis and M. Grimsditch, Phys. Rev. B **43**(15), 12490 (1991).
8. «The Temperature Dependence of the Elastic Moduli of Monoclinic Zirconia»  
S.-K. Chan, Y. Fang, M. Grimsditch, Z. Li, M.V. Nevitt, V.M. Robertson and E. Zouboulis, J. Am. Cer. Soc. **74** (7), 1742 (1991).
9. «The Elastic and Electromechanical Properties of Tetragonal  $\text{BaTiO}_3$  Single Crystal»  
Z. Li, S.-K. Chan, M. Grimsditch and E. Zouboulis, J. Appl. Phys. **70** (12), 7327 (1991).
10. «Surface Waves on the a,b and c Faces of Untwinned Single Crystals of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ »  
E. Zouboulis, S. Kumar, U. Welp, C.H. Chen, S.-K. Chan, M. Grimsditch, J. Downey and L. McNeil, Physica C **190**, 329 (1992).
11. «Elastic Constants of Diamond up to 1600 K»  
E. Zouboulis and M. Grimsditch, High Pressure Research **9**, 218 (1992).
12. «Elastic Constants of Boron Nitride»  
M. Grimsditch, E. Zouboulis and A. Polian, J. Appl. Phys. **76** (2), 832 (1994).
13. «Two-Wave and Induced Three-Wave Mixing on a Thin  $\text{Bi}_{12}\text{TiO}_{20}$  Hologram»  
M. P. Petrov, V.M. Petrov, E. Zouboulis and L.P.Xu, Optics Comm. **134**, 569 (1997).
14. « Temperature Dependence of the Elastic Moduli of Diamond – A Brillouin Scattering Study»  
E. Zouboulis, M. Grimsditch, A. K. Ramdas, and S. Rodriguez, Phys. Rev. B **57** (5), 2889 (1998).
15. «Grating Oscillations in Photorefractive Crystals»  
M. P. Petrov, V. M. Petrov, V.V. Bryskin, I. Zouboulis, A. Gerwens, and E.Kratzig, «Optics Letters», **22** (14), 1083 (1997).
16. «Polization Effects Associated with Two-Wave Interaction in Bismuth Titanate and Bismuth Silicate Crystals»  
M. P. Petrov, A.V. Shamrai, V. M. Petrov, and I. Zouboulis, Phys. Solid State **39**, (11), 1779 (1997).
17. «Advantages of Ultraviolet Raman Scattering for High Temperature Investigations»  
E. Zouboulis, D. Renusch, and M. Grimsditch, Appl. Phys. Lett. **77** (1),1

(1998).

**18.** «Pressure and Temperature Raman Study of  $\text{YLiF}_4$  »

E. Sarantopoulou, Y.S. Raptis, E. Zouboulis, and C. Raptis, Phys. Rev. B **59** (6), 4154 (1999).

**19.** «Trapping Properties of Sputtered Hafnium Oxide Films: Bulk Traps vs. Interface Traps »

E. Verrelli, G. Galanopoulos, I. Zouboulis, and D. Tsoukalas, Thin Solid Films **518**, 5579 (2010).

**20.** «Single-crystal Elastic Constants of Magnesium Difluoride ( $\text{MgF}_2$ ) to 7.4 GPa »

I. Zouboulis, F. Jiang, J. Wang and T.S. Duffy, Journal of the Physics and Chemistry of Solids **75** (1), 136-141 (2014).

### ***COMMUNICATIONS TO SCIENTIFIC MEETINGS OR CONFERENCES***

**1.** «Raman and Infrared Study of  $\text{TlSbS}_2$ »

W. Richter, E. Zouboulis, E. Anastassakis and J. Horak, in «Raman Spectroscopy», Eds. J. Lacombe and P. Huong, 1982, p. 453. [Proceedings of the 8th International Conference of Raman Spectroscopy, Bordeaux, 1982].

**2.** «Resonant Raman Scattering and Infrared Study of  $\alpha\text{-TeI}$ »

E. Anastassakis, E. Zouboulis and W. Richter, in «Raman Spectroscopy», Eds. J. Lacombe and P. Huong, 1982, p. 519 [Proceedings of the 8th International Conference of Raman Spectroscopy, Bordeaux, 1982].

**3.** «Elastic Constants of Diamond up to 1600 K»

E. Zouboulis and M. Grimsditch, presented in the APS March 1991 meeting in Cincinnati, Ohio, USA. Bulletin of the American Physical Society **36** (3), p. 993 (1991).

**4.** «The Elastic and Electromechanical Properties of Tetragonal  $\text{BaTiO}_3$  Single Crystal» Z. Li, S.K. Chan, M.H. Grimsditch and E.S. Zouboulis, presented in the 93rd meeting of the American Ceramical Society, Cincinnati, Ohio, USA.

**5.** «Elastic Constants of Diamond up to 1600 K»

E. S. Zouboulis and M. Grimsditch. XXIX Annual Meeting of the European High Pressure Research Group, Thessaloniki, 1991.

**6.** «Multiwave Mixing and Nonlinear Phenomena in  $\text{Bi}_{12}\text{TiO}_{20}$ »

M. P. Petrov, V.M. Petrov, E. Zouboulis and L.P. Xu, presented in the Second International Conference on Optical Information Processing, St. Petersburg, Russia, 1996.