Curriculum Vitae

Name	**Sotirios Ves**
Current Position ***Date and place of birth*** ***Nationality***	• Emeritus Prof. Dr. in Physics Department, Aristotle University of Thessaloniki Greece. • 1 January 1951 (Platystomo Fthiotidos) • Greek
Degrees	• PhD in Physics, Technische Universität Stuttgart, Deutschland (1982) • MSc Master in Electronic Physics University of Thessaloniki / Greece (1978) • Physics Degree University of Patras / Greece (1973)
Teaching Experience.	• Professor, Physics Department, University of Thessaloniki / Greece, 2004-today • Associated Professor, Physics Department, University of Thessaloniki / Greece, 1995-2004 • Assistant Professor, Physics Department, University of Thessaloniki / Greece, 1984-1995 • Invited researcher at Max-Planck-Institut für Festkörperforschung, Stuttgart, Deutschland for several periods (1984 – 185, 1988, 1990, 1995, 2010-11). • Head of Lifelong Learning Structure at Aristotles University of Thessaloniki 2016-2018
Research	• 125 publications in peer reviewed international journals (h-index 30) • > 100 publications in refereed conference proceedings • Supervision of three doctoral theses • Supervision of more than 20 theses at graduate - /Master level • Project leader in 3 research projects as project • 16 participations in research projects • Invited speaker in 8 international conferences • Organization of 2 international conferences (Chairman) • 23 participations in the Program Committee / Advisory of international conferences. • Reviewer in 12 international scientific journals • Supervision of 3 doctoral dissertations • Supervision> 20 student dissertations • Invited speaker at 8 international conferences **Research Topics:** **<u>Optical spectroscopy (</u>***Electronic and vibrational Optical properties of Solid State Materials*) Study and characterization of IV, III-V, II-VI, I-VII- class of semiconductors in the visible and near IR and UV-region with variable Temperature (4K-700K) and pressure (0 – 30GPa) by using DAC (Diamond anvil cell) within the hydrostatic or uniaxial con-figuration.

	Study of optical properties and crystallinity degree, remain strain/stress of thin semi-conductor films by using Raman spectroscopy. **Band structure** Study of absorption- luminescence spectra and their interpretation via electronic band structure. **Lattice dynamics** Study of Raman spectra and the lattice dynamics of various material classes (ABO_4 A = Ca, Sr, Ba, etc and B = W, Mo), C_{60}, $(CsC_{60})_n$, $(C_{59}N)_2$, hydrofullerenes, Garnets $RE_3Al_5O_{12}$, RE rare earth, e.g. Tb, Dy, Lu, Er, Yb, etc., mixed III-V semiconductors, etc., GaN, **Pressure/temperature induced phase transitions)** Study of pressure induced and their optical properties of a pleid of materials (semiconductors, Sheelites, fullerene/fullerides . **Optics – Non –Linear Optics** Applications of speckle, elecrooptical- and gyroscopic effect in materials with 42m symmetry. **Optical Properties under High Pressure.** I have successfully transferred to Greece the technique of high pressures in optical measurements, decisively contributing to the inclusion of Greece in the map of this re-search field.
Teaching Material:	1. I participated in the writing of the book "**Exercises in Optics**" (Issue A) (1984) 2. I participated in the writing of the book "**Solid State Physics**". Giachoudi Yiapouli Publications, (1993). 3. Publication of **Proceedings of the XXIX European High Pressure Conference** at Gordon & Breach Publishing House (1993). 4. **Optical Properties of Materials** (28 pages). Notes for post-graduate Interdepartmental Program Processes and Processing of Advanced Materials. (1999). 5. **Publication of Proceedings of the VIII High Pressure Semiconductor Physics (HPSP)** at the publishing house WILEY-VCH (Physica status solidi) (1999). 6. **"Introduction in Quantum Optics -Laser "** (440 pages). Giaxoudis – Giapoulis editions Thessaloniki, (2000). 7. **"Atmospheric Optics"** (62 pages). Notes for the course Atmospheric Optics of the Postgraduate Program "Environmental Physics" of the Department of Physics, AUTH. (2003) 8. **Absorption – Raman, fluorescence spectroscopy** " Notes on the course "Optical Techniques and Crystal Structure" of the Interdepartmental Postgraduate Program of AUTH "Nanoscience & Nanotechnologies" (2003). 9. **"Optical characterization of materials**"(65 pages) Notes for the course "Characterization of Materials of the Postgraduate Program" Materials Physics" of the Department of Physics of AUTH. (2004).

	10. **"Optical Properties of Solids"** (125 pages) Detailed notes for the elective course of the 8th semester of the Department of Physics, AUTH, (2007). 11. **Development and Creation of educational material (Webcast)** 36 hours for the "Postgraduate Specialization of Professors of Natural Sciences" of Hellenic Open University, (KFE51), (2008). 12. **Solid-State Physics: An Introduction to Principles of Materials Science "**, S. Ves, E. Paloura, A. Anagnostopoulos, X. Polatoglou, E , translation from the book "Solid State Physics : An Introduction to Principles of Materials Science, by Harald Ibach and Hans Lüth, Springer Verlag, 2010. (2012). 13. **Laboratory Optics Exercises.** S. Ves, M. Aggelakeris, I. Arvanitidis, E. Vanidhis, N. Vouroutzis,M. Gioti, M. Katsikini, Editing-Coordination, Published by ZHTH. Thessaloniki (2013) 14. **"Physical properties of materials: Optical properties and spectroscopy", post-graduate course.** (65 pages) Σημειώσεις για το μάθημα Χαρακτηρισμός Υλικών του Μεταπτυχιακού Προγράμματος Σπουδών " Φυσική Υλικών" του Τμήματος Φυσικής του ΑΠΘ. (2014). 15. **Lifelong Learning Programs of A.E.I.** for Updating Knowledge of Graduates of Hellenic Universities, Big Blue Button Teleconferencing System, (2015) 16. **"Optics"**, Editing-Translation of the book E. Hecht 5th Edition, Pearson education, 2017. Gutenberg Publications. (September 2018). 17. "Laboratory Exercises in Physical Solid State". S. Ves, I. Arvanitidis, M. Gioti, K. Efthymiadis, M. Katsikini, I. Kioseoglou, K. Paraskevopoulos, D. Tassis, Editing, Coordination, S. VES. CRITIKI PUBLICATIONS. ATHENS (2018). 18. **"Optical properties of Solids: The fundamentals"** (332 pages) in print by Kritiki Publications, (2020).
Five most important papers	1. W. Henkel, H. D. Hochheimer, C. Carlone, A. Werner, S. Ves and H. G.v. Schnering, High- pressure Raman study of the ternary chalcogenides $TlGaS_2$, $TlGaSe_2$, $TlInS_2$ and $TlInSe_2$. Phys. Rev. **B26**, 3211 –3221, (1982). Cited: 223 2. S. Ves, U. Schwarz, N. E. Christensen, K. Syassen and M. Cardona., Cubic ZnS under pressure: Optical Absorption Edge, Phase Transition and Calculated Equation of State.Phys. Rev. **B42**, 9113 - 9118, (1990) Cited: 201. 3. S. Ves, K. Strößner, N. E. Christensen, C. K. Kim and M. Cardona, Pressure dependence of the lowest direct absorption edge of ZnSe, *Solid State Commun.* ***56****, 563 - 565, (1985)* Cited: 109 4. M. Katsikini, K. Papagelis, EC. Paloura, and S. Ves. Raman study of Mg, Si, O, and N implanted GaN. JAP 94, 4389-4394 (2003) Cited: 85 5. J. Arvanitidis, D. Christofilos, K. Papagelis, K. S. Andrikopoulos, T. Takenobu, Y. Iwasa, H. Kataura, S. Ves, and G. A. Kourouklis., Pressure screening in the interior of primary shells in double-wall carbon nanotubes *Physical Phys. Rev* ***B71****, 125404 (2005).* Cited: 55