

Dr Vassilios Saltas



Associate Professor, Technological Educational Institute of Crete
Department of Environmental and Natural Resources Engineering

Curriculum Vitae, January 2018

Contact details	Department of Natural Resources & Environmental Engineering, School of Applied Sciences, Technological Educational Institute of Crete, Romanou 3, 73133 Chania, HELLAS (GREECE). Tel.: +30 28210 23061, e-mail: vsaltas@chania.teicrete.gr
Education	1988-1993: Bachelor Degree in Physics University of Ioannina, Faculty of Sciences 1994-2000: PhD degree in surface and interface science. University of Ioannina, Faculty of Sciences, Division of Solid State Physics. Thesis title: " <i>The effect of Li to the C₆₀/Ni(110) surface system and to the interaction of CO₂ with MgO/W(110)</i> "
Research activities	<ul style="list-style-type: none">• 1995 – 2000: University of Ioannina, Physics Department. Participation in research projects carried out in collaboration with research groups from European laboratories (BESSY, DESY, TU- Clausthal, LISE) in the field of surface and interface science.• 2002: National Technical University of Athens. School of Mining Engineering and Metallurgy. Tribological studies of alloys.• 2002 – today: Laboratory of Geophysics & Seismology, School of Applied Sciences, TEI of Crete. Installation and operation of seismological stations, participation in field experiments (microtremors measurements, geophysical surveys), experimental physics of materials (broadband dielectric spectroscopy, acoustic emissions, pressure stimulated currents in rocks). <p>The overall scientific activity is reflected in:</p> <ul style="list-style-type: none">• 67 publications in scientific journals and international conferences with more than 200 citations (ResearchGate: https://www.researchgate.net/ profile/Vassilis_Saltas).• the participation in 24 European and National scientific projects.• the role of reviewer in 18 peer-reviewed scientific journals.
Professional experience	<ul style="list-style-type: none">• 2002 - 2005: contracted Assistant Professor, TEI of Crete• 2005 - 2016: Assistant Professor in "<i>Physics of geomaterials with environmental applications</i>", Department of Natural Resources and Environmental Engineering, TEI of Crete• 2007 - 2008: contracted lecturer, Technical University of Crete• 2016 - ... : Associate Professor, TEI of Crete• 2016 (March - June): on sabbatical in Technical University of Crete
Scientific interests and skills	<ul style="list-style-type: none">• Analytical techniques in the field of material science (AES, LEED, WF, TDS, XPS, UPS, MIES, SEM, XRD, BDS, AE).• Electrical-dielectric properties of minerals and rocks at high temperatures

or pressures.

- Acoustic emissions from rocks under mechanical stress.
- Thermodynamic properties of point defects in materials.
- Data acquisition and monitoring techniques.
- Data analysis by dedicated software (OriginPro, WinFit, Noesis, AEWIn).

Academic activities

Teaching

- 2002 - ... : Department of Natural Resources and Environmental Engineering (TEI of Crete)
Physics (theory - 14 semesters, laboratories - 9 semesters)
Metrology (theory - 19 semesters, laboratories - 11 semesters)
Engineering Thermodynamics (theory - 17 semesters, laboratories - 4 semesters)
- 2015 - ... : MSc in "Geoenvironmental Resources and Risks"
Environmental Physics & Continuum Mechanics (1 semester)
Geomaterials (1 semester)
Environmental Physics and Geomaterials (2 semesters)
- 2005 - 2013: Department of Electronics Engineering (TEI of Crete)
Physics-theory (12 semesters)
Physics-Laboratories (3 semesters)
- 2007 - 2008: School of Mineral Resources Engineering (Technical University of Crete)
Engineering Thermodynamics (2 semesters)

Writing

- "Laboratory Physics Guide" (e-book), V. Saltas (2015), Hellenic Academic Libraries, available in <http://hdl.handle.net/11419/4611>
- Laboratory notes for "Metrology" and "Engineering Thermodynamics".

Supervision

Ten (10) undergraduate dissertations, one (1) MSc thesis.

Referring

Reviewer in the following scientific journals

Journal of Environmental Management (Elsevier), Journal of Applied Geophysics (Elsevier), Ionics (Springer), Journal of Hazardous Materials (Elsevier), Acta Geophysica (Springer), Measurement Science and Technology (IOP), Bulletin of Engineering Geology and the Environment (Springer), Journal of Applied Physics (AIP), Physics and Chemistry of Minerals (Springer), International Journal of Geophysics (Hindawi), Fracture and Structural Integrity (IGF), Physica Status Solidi C: Current Topics in Solid State Physics (Wiley-VCH), Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (Elsevier), Innovations in Corrosion and Materials Science (Bentham Science), Metals (MDPI), Shock and Vibration (Hindawi), Solid Earth (EGU, Copernicus), Journal of Geophysics and Engineering (IOP).

**Publications
in peer-reviewed
scientific journals**

1. Interaction of Na and Cl₂ on WSe₂(0001) surfaces: Chlorine-induced Na deintercalation.
M. Kamaratos, V. Saltas, C. A. Papageorgopoulos, W. Jaegermann, C. Pettenkofer, D. Tonti.
Surface Science 402-404 (1998) 37-41.
2. Na and Cl₂ interaction on 1T and 2H-TaSe₂(0001) surfaces.
C. A. Papageorgopoulos, M. Kamaratos, V. Saltas, W. Jaegermann, C. Pettenkofer, D. Tonti.
Surface Review and Letters 5 (1998) 997-1005.
3. Synchrotron radiation studies on the growth of TSe₂ (T=Ta, Ti) thin films on Ta substrates: intercalation and deintercalation of Na.
D. C. Papageorgopoulos, V. Saltas, C. A. Papageorgopoulos, D. Tonti, C. Pettenkofer, W. Jaegermann.
Applied Surface Science 161 (2000) 347-354.
4. Adsorption of Li on Ni(110) surfaces at low and room temperature.
V. Saltas, C. A. Papageorgopoulos.
Surface Science 461 (2000) 219-230.
5. A Synchrotron radiation study of the formation of Cu_xSe_y and Na_xCu_ySe_z thin films on Cu substrates; Cl₂ induced out-diffusion of Na.
V. Saltas, C. A. Papageorgopoulos, D. C. Papageorgopoulos, D. Tonti, C. Pettenkofer, W. Jaegermann.
Surface Review and Letters 7 (2000) 235-242.
6. Synchrotron radiation studies of transition metal selenide thin films formation on Ti, Mo and Cu substrates: in and out diffusion of Li.
V. Saltas, C. A. Papageorgopoulos, D. C. Papageorgopoulos, D. Tonti, C. Pettenkofer, W. Jaegermann.
Thin Solid Films 389 (2001) 307-314.
7. Adsorption and decomposition of C₆₀ on Ni(110) surfaces.
V. Saltas, C. A. Papageorgopoulos.
Surface Science 488 (2001) 23-31.
8. Adsorption of Li on C₆₀-covered Ni(110) surfaces.
V. Saltas, C. A. Papageorgopoulos.
Surface Science 497 (2002) 70-80.
9. C₆₀ deposition on Li-covered Ni(110) surfaces.
V. Saltas, C. A. Papageorgopoulos.
Surface Review and Letters, Vol. 10, No. 1 (2003) 73-79.
10. Wear behavior of nickel superalloy, CMSX-186.
C. N. Panagopoulos, K. I. Giannakopoulos. V. Saltas.
Materials Letters 57 (2003) 4611 - 4616.
11. Multifractal features in short-term time dynamics of ULF geomagnetic field measured in Crete, Greece.
L. Telesca, V. Lapenna, F. Vallianatos, J. Makris, V. Saltas.
Chaos, Solitons and Fractals 21 (2004) 273 – 282.
12. Pressure Stimulated Currents in rocks: Cross-correlation with mechanical properties.
I. Stavrakas, D. Triantis, Z. Agioutantis, S. Maurigiannakis, V. Saltas, F. Vallianatos and M. Clarke.
Natural Hazards and Earth System Sciences 4 (2004) 563 – 567.
13. Identification of contamination in sandstone by means of dielectric and conductivity measurements.
G. Hloupis, I. Stavrakas, V. Saltas, D. Triantis, F. Vallianatos, J. Stonham.
WSEAS transactions on Circuits and Systems, Issue 3, vol. 4 (2005) 148

14. Investigating the $1/f^\alpha$ long-range fluctuations in short-term time variability of ULF geomagnetic data.
F. Vallianatos, J. Makris, V. Saltas, L. Telesca, V. Lapenna.
Communications in Nonlinear Science and Numerical Simulation 11 (2006) 745 – 758.
15. Dielectric and conductivity measurements as proxy method to monitor contamination in sandstone.
V. Saltas, F. Vallianatos, P. Soupios, J. P. Makris, D. Triantis.
Journal of Hazardous Materials, 142 (2007) 520 – 525.
16. Biomonitoring of environmental pollution using dielectric properties of tree leaves.
V. Saltas, D. Triantis, T. Manios, F. Vallianatos.
Environmental Monitoring and Assessment 133 (2007) 69 – 78.
17. Use of engineering geophysics to investigate a site for a building foundation.
P. M. Soupios, P Georgakopoulos, N Papadopoulos, V. Saltas, A. Andreadakis, F. Vallianatos, A. Sarris, J. P. Makris.
Journal of Geophysics and Engineering 4 (2007) 94 – 103.
18. Dielectric properties of non-swelling bentonite: the effect of temperature and water content.
V. Saltas, F. Vallianatos and D. Triantis.
Journal of Non-Crystalline Solids 354 (2008) 5533 – 5541.
19. Complex electrical conductivity measurements of a KTB amphibolite sample at elevated temperatures.
V. Saltas, V. Chatzistamou, D. Pentari, E. Paris, D. Triantis, I. Fitis, F. Vallianatos.
Materials Chemistry and Physics 139 (2013) 169 – 175.
20. Charge transport in diatomaceous earth studied by broadband dielectric spectroscopy.
V. Saltas, F. Vallianatos, E. Gidaracos.
Applied Clay Science 80 - 81 (2013) 226 – 235.
21. Application of the $cB\Omega$ model to the calculation of diffusion parameters of He in olivine.
F. Vallianatos and V. Saltas.
Physics and Chemistry of Minerals 41 (2014) 181 – 188.
22. A combined complex electrical impedance and acoustic emission study in limestone samples under uniaxial loading.
V. Saltas, I. Fitis, F. Vallianatos.
Tectonophysics 637 (2014) 198 – 206.
23. Thermodynamic calculations of self- and hetero-diffusion parameters in germanium.
V. Saltas and F. Vallianatos.
Materials Chemistry and Physics 163 (2015) 507-511.
24. Potential of acoustic emissions from three point bending tests as rock failure precursors.
Z. Agioutantis, K. Kaklis, S. Mavrigiannakis, M. Verigakis, F. Vallianatos, V. Saltas.
International Journal of Mining Science and Technology 26 (2016) 155-160.
25. A thermodynamic approach of self- and hetero-diffusion in GaAs: Connecting point defect parameters with bulk properties.

V. Saltas, A. Chroneos, F. Vallianatos.
RSC Advances 6 (2016) 53324-53330.

26. A thermodynamic approach to self-diffusion in silicon: Evidence of a single diffusion mechanism?

V. Saltas, A. Chroneos, F. Vallianatos.
Materials Chemistry and Physics 181(2016) 204-208.

27. Determination of the DC conductivity of thin film ionic conductors from dielectric spectroscopy in time and frequency domain.

E. Kapetanakis, P. Goupidenis, V. Saltas, A. M. Douvas, P. Dimitrakis, P. Argitis, K. Beltsios, S. Kennou, C. Pandis, A. Kyritsis, P. Pissis, P. Normand.
Journal of Physical Chemistry C 120 (2016) 21254–21262.

28. Investigation of oxygen self-diffusion in PuO₂ by combining molecular dynamics and thermodynamic calculations.

V. Saltas, A. Chroneos, M.W.D. Cooper, M.E. Fitzpatrick, F. Vallianatos.
RSC Advances 6 (2016) 103641-103649.

29. Using Acoustic Emissions to enhance Fracture Toughness Calculations for CCNBD Marble Specimens.

K. Kaklis, V. Saltas, S. Mavrigiannakis, F. Vallianatos, Z. Agioutantis.
Fracture and Structural Integrity 40 (2017) 1-17.

30. Tin diffusion in germanium: A thermodynamic approach.

Y. Panayiotatos, V. Saltas, A. Chroneos and F. Vallianatos,
Journal of Materials Science: Materials in Electronics 28 (2017) 9936 – 9940.

31. Composition and temperature dependence of self-diffusion in Si_{1-x}Ge_x alloys.

V. Saltas, A. Chroneos, F. Vallianatos.
Scientific Reports 7:1374 (2017).

32. Modelling solid solutions with cluster expansion, special quasirandom structures and thermodynamic approaches.

V. Saltas, D. Horlait, E. N. Sgourou, F. Vallianatos, and A. Chroneos.
Applied Physics Reviews 4 (2017) 041301.

33. Thermodynamic modelling of fast dopant diffusion in silicon.

V. Saltas, A. Chroneos and F. Vallianatos.
Journal of Applied Physics 123, (2018) 161527.

34. Complexity in Laboratory Seismology. From Electrical and Acoustic Emissions to fracture.

V. Saltas, D. Triantis, I. Stavrakas, and F. Vallianatos.
Book chapter, "Complexity of seismic time series; Measurement and Applications", Elsevier, (2018).

Selected Publications in European and International Conferences

1. Angle-resolved photoemission study of the K-covered C₆₀ monolayer on Au(110), A. Müller, R. Manzke, P. Rudolf, V. Saltas, Proceedings of the International Winterschool on Electronic Properties of Novel Materials, Fullerenes and Fullerene Nanostructures, eds. H. Kuzmany, J. Fink, M. Mehring, S. Roth, World Scientific Publishing Co. Ltd., Singapore (1996), 298-301.

2. Studying and calibrating thermocouples: a laboratory exercise at the Technological Educational Institute of Crete, J. P. Makris, I. O. Vardiambasis, V. Saltas, N. Petrakis, Proceedings of the 2nd Balkan Region Conference on Engineering Education, 16-19/ 9/2003, Sibiu,

Romania.

3. Monofractal and multifractal analysis in short-term time dynamics of ULF geomagnetic field measured in Crete, Greece, F. Vallianatos, J. P. Makris, V. Saltas, L. Telesca, V. Lapenna, Proceedings of the 10th International Congress of the Geological Society of Greece, Thessaloniki, 15-17 April 2004 Bulletin vol. XXXVI, 2004.
4. The binding of CO₂ on pure and Li-doped MgO thin films, V. Saltas, Proceedings of the 1st International Conference "Advances in Mineral Resources Management and Environmental Geotechnology", 7–9 June 2004, Chania, Greece.
5. Pressure stimulated currents along with mechanical properties in rocks, I. Stavrakas, D. Triantis, Z. Agioutantis, S. Maurigiannakis, V. Saltas, F. Vallianatos, Proceedings of the 1st International Conference "Advances in Mineral Resources Management and Environmental Geotechnology", 7–9 June 2004, Chania, Greece.
6. Educational Software Bundle for Studying Magnetotelluric Theory and Specific Geoelectric Structure Models, D. Kalisperi, G. Hloupis, J. P. Makris, D. Rust, F. Vallianatos, V. Saltas, P. Soupios, I. Vardiampasis, Proceedings of WSEAS 2005, Engineering Education, 12-14 July, Vouliagmeni, Athens, ISBN 960-8457-28-9, pp. 477-486.
7. Coupling Geo-Environmental Research & Education: Examples from the Technological Educational Institute of Crete, F. Vallianatos, J. P. Makris, P. Soupios, V. Saltas, I. Papadopoulos, G. Hloupis, M. Kouli, D. Alexakis, E. Kokkinou, I. Nikolintaga, D. Kalisperi, M. Moisidi, Proceedings of WSEAS 2005, Engineering Education, 12-14 July, Vouliagmeni, Athens, ISBN 960-8457-28-9, pp. 503-510.
8. Application of dielectric spectroscopy to the detection of contamination in sandstone, V. Saltas, F. Vallianatos, P. Soupios, J. P. Makris, D. Triantis, , Proceedings of the International Workshop in Geoenvironment and Geotechnics, 12-14 September 2005, Milos Island, Greece.
9. Intergrated Environmental Investigation of a Municipal landfill using modern techniques, P. Soupios, T. Manios, F. Vallianatos, K. Maniadakis, J. P. Makris, M. Kouli, V. Saltas, A. Sarris, N. Papadopoulos, E. Gidaracos, N. Kourgialas, Proceedings of the International Workshop in Geoenvironment and Geotechnics, 12-14 September 2005, Milos Island, Greece.
10. Construed Geotechnical Characteristics of Foundation Beds by Geophysical Measurements, F. Vallianatos, P. Soupios, J. P. Makris, V. Saltas, I. Papadopoulos, G. Hloupis, Proceedings of the 2nd International Conference "Advances in Mineral Resources Management and Environmental Geotechnology", 25 – 29 September 2006, Chania, Greece.
11. Dielectric Spectroscopy of Bentonite Samples Originated from Milos Island, V. Saltas, F. Vallianatos, C. Anastasiadis, D. Triantis, P. Kyriazis, Proceedings of the 2nd International Conference "Advances in Mineral Resources Management and Environmental Geotechnology", 25 – 29

September 2006, Chania, Greece.

12. Magnetic susceptibility mapping of the municipal park in Chania (Crete, Greece), E. Kokkinou, V. Saltas, M. Kavousanakis, E-M. Egglezou, F. Vallianatos, Proceedings of the 2nd International Conference in "Geoenvironment and Geotechnics", September 2008, Milos Island, Greece.
13. Dielectric spectroscopy as a diagnostic test method for the determination of mechanical damage in marble samples, V. Saltas, D. Triantis, I. Stavrakas, C. Anastasiadis, F. Vallianatos, 10th International Conference of the Slovenian Society for Non-Destructive Testing »Application of Contemporary Non-Destructive Testing in Engineering« Sept. 1-3, 2009, Ljubljana, Slovenia, pp. 415-421.
14. The use of the Dielectric Response to investigate heavy metal contamination in tree leaves, D. Triantis, I. Stavrakas, C. Anastasiadis, G. T. Malliaros, V. Saltas, AMIREG 2009, 3rd International Conference, 7 - 9 September 2009, Athens, Greece.
15. Complex dielectric permittivity and electrical conductivity measurements as a diagnostic tool for the detection of heavy metals adsorbed in bentonite samples, V. Saltas, N. Lydakiss-Simantiris, P. Soupios and F. Vallianatos, 3rd International Conference on Industrial and Hazardous Waste Management, 12-14 September 2012, Chania, Greece, pp. 1-8.
16. The Potential of Acoustic Emissions from Three Point Bending Tests as Rock Failure Precursors, Z. Agioutantis, K. Kaklis, S. Mavrigiannakis, M. Verigakis, F. Vallianatos, V. Saltas, 34th International Conference on Ground Control in Mining, Morgantown WV, July 28 – 30, 2015.
17. Acoustic and electrical emissions from sandstone under uniaxial compression, V. Saltas, I. Fitolis, J. P. Makris and F. Vallianatos, 1st International Conference in Science and Technology, 5-7 November, Athens, Greece, 2015.
18. The contribution of acoustic emission signals on the determination of the mode I fracture toughness using CCNBD marble specimens, K. Kaklis, S. Mavrigiannakis, V. Saltas, A. Daskalaki, F. Vallianatos, Z. Agioutantis, 1st International Conference in Science and Technology, 5-7 November, Athens, Greece, 2015.

**Presentations
in European and
International
Conferences**

1. Synchrotron Radiation studies of C₆₀ adsorption on metallic surfaces, P. Rudolf, A. J. Maxwell, P.A. Bruhwiler, A. Nilson, S. Andersson, N. Martensson, R. Manzke, A. Muller, V. Saltas, P. Dumas, G.P. Williams, Y.J. Chabal, M. Pedio, R. Felici, M. Capozzi, S. Ferrer, European Research Conference on Fundamental Aspects of Surface Science, 6-11/6/1997, Castelvecchio Pascoli-Italy.
2. Adsorption of Cl₂ on Na-intercalated layered compounds: Cl-induced deintercalation, V. Saltas, M. Kamaratos, C. A. Papageorgopoulos, D. Tonti, H. J. Crawack, C. Pettenkofer and W. Jaegermann, European Research Conference on Fundamental Aspects of Surface Science, 6-11/6/1997, Castelvecchio Pascoli-Italy.

3. Advanced seismological telemetric network and VLF-ULF geoelectromagnetic observatories on the southern part of Hellenic arc, J. P. Makris, F. Vallianatos, P. Soupios, V. Saltas, A. Mavromatidis and I. Vardiambasis, SAAVA International Conference, 17-20 September 2003, Milos Island, Greece.
4. Studying the seismic electric and magnetic phenomena in the southern Hellenic arc, V. Saltas, F. Vallianatos, P. Soupios, J. P. Makris, I. O. Vardiambasis, N. Fragiadakis, 10th International Congress of the Geological Society of Greece, Thessaloniki, 15 – 17 April 2004.
5. Pressure Stimulated Currents in rocks. Cross-correlation with mechanical properties, D. Triantis, I. Stavrakas, V. Saltas, Z. Agioutantis, F. Vallianatos, EGU, 1st general assembly, 25 – 30 April 2004, Nice, France.
6. Studying seismic electric and magnetic phenomena in southern hellenic arc, J. P. Makris, F. Vallianatos, V. Saltas, E. Kopytenko, P. Soupios, I. Vardiambasis, N. Fragiadakis, EGU, 1st general assembly, 25 – 30 April 2004, Nice, France.
7. Study of the tectono-karstic voids using electrical tomography and microtremor measurements, F. Vallianatos, P. Soupios, J. P. Makris, V. Saltas, G. Hloupis, IV International Workshop on Magnetic, Electric and Electromagnetic Methods in Seismology and Volcanology (MEEMSV-2004), 5 – 9 September 2004, La Londe les Maures, France.
8. Local and regional principal directions of the geoelectric structure compared to seismotectonics. The case study of NW Epirus, Greece, J. P. Makris, A. S. Savvaidis, V. Saltas, P. Soupios, F. Vallianatos, IV International Workshop on Magnetic, Electric and Electromagnetic Methods in Seismology and Volcanology (MEEMSV-2004), 5–9 September 2004, La Londe les Maures, France.
9. Wavelet analysis of time-series dielectric measurements as a tool for the identification of soil contamination, G. Hloupis, V. Saltas, F. Vallianatos, J. Stonham, D. Triantis, 2nd International Conference on Applied Geophysics for Engineering (AGE 2005), 13–16 October 2005, Messina, Italy.
10. Marmara earthquake rehabilitation program (MERP): a detailed geophysical study for disaster risk management and mitigation. F. Vallianatos, J. P. Makris, P. Soupios, V. Saltas and I. Papadopoulos, EGU general assembly, 2 – 7 April 2006, Vienna, Austria.
11. A new telemetry seismological network in the front part of the Hellenic arc: its contribution to the study and understanding of the seismic behavior of the area, F. Vallianatos, J. P. Makris, P. Soupios, V. Saltas, G. Hloupis, I. Nikolintaga, E. Kokinou, I. Papadopoulos, M. Moisidi, D. Kalisperi., EGU general assembly, 2 – 7 April 2006, Vienna, Austria.
12. Innovative Seismoelectromagnetic Research at the front of the Hellenic Arc, J. P. Makris, M. Chiappini, A.Nardi, R.Carluccio, H. Rigakis, G.Hloupis, K.Fragkiadakis, F. Pentaris, V.Saltas, and F.Vallianatos, Geophysical Research Abstracts, Vol. 15, EGU2013-12299, 2013, EGU general assembly.

13. Preliminary results from the seismoelectromagnetic research at the front of the Hellenic arc, J. P. Makris, H. Rigakis, D. Kalisperi, F. Pentaris, F. Vallianatos, V. Saltas, I. S. Barbounakis, I. Papadopoulos, P. Soupios, E. Kokinou and G. Hloupis, Geophysical Research Abstracts Vol. 17, EGU2015-13640, 2015, EGU general assembly.
14. Radiation microdosimeters based on the generation of protons in polymer dielectrics, E. Kapetanakis, C. Katsogridakis, A. M. Douvas, S. Koliopoulou, V. Psycharis, V. Saltas, J. Kaliakatsos, D. Dimotikali, P. Argitis, P. Normand, 8th International Symposium on Flexible Organic Electronics (ISFOE15) Thessaloniki, 6 - 9 July 2015.

Oral or Poster Presentations in Greek Conferences

1. Deposition of (Li, K) and C₆₀ on metallic surfaces (Ni(110), Au(110)), V. Saltas, C. Papageorgopoulos, XII Panhellenic Conference on Solid-State Physics, Heraklion, 15-18 Sept. 1996 (in greek).
2. Halogen-induced deintercalation of alkali in layered compounds, V. Saltas, M. Kamaratos, C. A. Papageorgopoulos, D. Tonti, H. J. Crawack, C. Pettenkofer, W. Jaegermann, XIII Panhellenic Conference on Solid-State Physics, Thessaloniki, 21-24 Sept. 1997 (in greek).
3. Interaction of Na and Cl₂ on 1T and 2H-TaSe₂(0001) surfaces, V. Saltas, C. A. Papageorgopoulos, M. Kamaratos, W. Jaegermann, C. Pettenkofer, D. Tonti, XIV Panhellenic Conference on Solid-State Physics, Ioannina, 15-18 Sept. 1998 (in greek).
4. Lithium adsorption on Ni(110) surfaces at low and room temperature, V. Saltas, C. A. Papageorgopoulos, XV Panhellenic Conference on Solid-State Physics, Patras, 27-29 Sept. 1999 (in greek).
5. Interaction of CO₂ with thin films of MgO and MgO:Li grown on W(110) surfaces, V. Saltas, C. A. Papageorgopoulos, P. Stracke, V. Kempter, XV Panhellenic Conference on Solid-State Physics Patras, 27-29 Sept. 1999 (in greek).
6. Proton Transport in Acid Doped Polymer Matrices by Time Domain Dielectric Spectroscopy using Metal/Electrolyte/Oxide/Semiconductor Device Structures, P. Goupidenis, A. M. Douvas, P. Dimitrakis, P. Argitis, K. Beltsios, E. Kapetanakis, V. Saltas, C. Pandis, A. Kyritsis, P. Pissis, P. Normand, XXIX Panhellenic Conference on Solid-State Physics and Materials Science, 22-25 September 2013, Athens, Greece.
7. Broadband dielectric spectroscopy of muscovite and biotite micas at elevated temperatures, V. Saltas, I. Fitis, F. Vallianatos, D. Penrari, 30th Pan-Hellenic Conference on Solid-State Physics and Materials Science, 21-24 September 2014, Heraklion, Greece.
8. Correlation of complex electrical conductivity and acoustic emissions time-series during uniaxial compression of limestone samples, V. Saltas, I. Fitis, F. Vallianatos, 30th Pan-Hellenic Conference on Solid-State Physics and Materials Science, 21-24 September 2014, Heraklion, Greece.
9. Radiation sensors based on the generation of protons in polymeric gate

dielectrics, E. Kapetanakis, J. Kaliakatsos, C. Katsogridakis, A. Douvas, V. Psycharis, P. Argitis, P. Normand, V. Saltas, D. Dimotikali, 30th Pan-Hellenic Conference on Solid-State Physics and Materials Science, 21-24 September 2014, Heraklion, Greece.

Participation in Scientific and Research Projects

- List of selected projects:
1. "Intercalation of alkali metals into layer compounds (TX₂) and influence of gases". (funded by EC, contract No: TMR ERBFMGE 950031)
Coordinator: C. A. Papageorgopoulos (University of Ioannina).
 2. "Alkali adsorption on graphite, interaction with coadsorbed molecules and alkali interaction with C₆₀".
(funded by EC, contract No: CHRX-CT94-0580, 1994 - 96)
Coordinator: Petra Rudolf (L.I.S.E., Brussels).
 3. "Thin films of alkali-metal layered-compounds as energy converters in energy storage systems".
(funded by GSRT, Greece, 1994 – 1996)
Coordinator: C. A. Papageorgopoulos (University of Ioannina).
 4. "X-rays spectral analysis of A_xC₆₀ compounds (A=alkali)".
(funded by EAKE, University of Ioannina)
Coordinator: I. Gerothanasis (University of Ioannina).
 5. "Development of an Expert System for the Monitoring, Management & Protection of the Natural Landscape & Environmental Resources of the Island of Crete (EMERIC)", Innovative actions ΕΤΠΑ 2000-2006, Crete Innovative Region (CRINNO).
Coordinator: A. Sarris (IMS, FORTH)
 6. "Seismic Hazard in the frontal part of the Hellenic Arc. A contribution to Seismic protection of the old Venecian city in Chania-Crete", project ARCHIMEDES: "Support of Research Teams of Technological Educational Institute of Crete", sub-project 2.2.15 – MIS86384 in the framework of the Operational Programme for Education and Initial Vocational Training.
Coordinator: F. Vallianatos (TEI of Crete)
 7. "Development of Innovative Integrated Methodologies for Monitoring the Environmental Pollution in controlled landfills (XYTA)" – Program: ΕΠΕΑΕΚ-2/ARCHIMEDES.
Coordinator: P. Soupios (TEI of Crete)
 8. "Marmara Earthquake Rehabilitation Programme - MERP", CRT of Crete
Coordinator: F. Vallianatos (TEI of Crete)
 9. "Methodology integration of EO techniques as operative tool for land degradation management and planning in Mediterranean areas, (MILDMAP – MEDIA). EU Community Initiative Programme, INTERREG III B – ARCHIMED.
 10. "Advanced techniques for SEismic RISK reduction in Mediterranean Archipelago Regions – SE RISK", EU Community Initiative Programme, INTERREG III B – ARCHIMED.

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11. "CYCLOPS: Cyber-Infrastructure for Civil protection Operative Procedures" in the frame of FP6–Research Infrastructure-Communication Network Development.
Coordinator: F. Vallianatos (TEI of Crete)
 12. "Interdisciplinary Multi-Scale Research of Earthquake Physics and Seismotectonics at the front of the Hellenic ARC (IMPACT-ARC)" ARCHIMEDES III. [1/9/2012 – 31/12/2014]
Coordinator: F. Vallianatos (TEI of Crete)
 13. "ORGANIC ELECTRONIC DEVICE FOR DETERMINING IONIZING RADIATION USING SENSORS BASED ON POLYMER LAYERS INCORPORATING PHOTOACID GENERATOR". ARCHIMEDES III. [1/9/2012 – 31/03/2015]
Coordinator: E. Kapetanakis (TEI of Crete)
 14. "Technologies Coalescence for Holistic SeismoElectroMagnetic Research (Lithosphere-Atmosphere-Ionosphere Coupling)". ARCHIMEDES III. [1/9/2012 – 31/03/2015]
Coordinator: J. P. Makris (TEI of Crete)
 15. "Integrated Geoinformatics Technologies for Time-Lapse Monitoring of Land Pollution from the Disposal of Olive-Oil Mills Waste (GEODIAMETRIS)". THALIS [1/9/2012 – 30/09/2015]
Coordinator: P. Soupios (TEI of Crete)
 16. "Integrated understanding of Seismicity, using innovative Methodologies of Fracture mechanics along with Earthquake and non extensive statistical physics - Application to the geodynamic system of the Hellenic Arc (SEISMO FEAR HELLARC)" THALIS [1/9/2012 – 30/09/2015]
Coordinator: F. Vallianatos (TEI of Crete)
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