

## Academic Curriculum Vitae

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### **PERSONAL DATA:**

Full Name: **Stelios M. POTIRAKIS** Nationality: Hellenic  
 Born : 02/04/1971 Athens, Greece Marital status: Married - 3 children  
 Gender : Male Profession: Physicist / Electronics and Telecom. Eng., MSc, PhD  
 Curr. Employent: Tenured Professor, Dept. of Electrical & Electronics Eng., University of West Attica /Greece  
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 Research Gate: [https://www.researchgate.net/profile/Stelios\\_Potirakis](https://www.researchgate.net/profile/Stelios_Potirakis)  
 ORCID : <https://orcid.org/0000-0001-5928-4587>  
 Scopus: <https://www.scopus.com/authid/detail.uri?authorId=6508301983>  
 Web of Science / Publons: <https://publons.com/researcher/462913/stelios-m-potirakis/>

### **STUDIES:**

2002 : PhD in Physics, Department of Electronics, Computers, Telecommunications and Control / Faculty of Physics / School of Science / National and Kapodistrian University of Athens (UOA), Greece.  
 1996 : M.Sc. degree in Electronics and Communications, School of Science / National and Kapodistrian University of Athens, Greece.  
 1993 : B.Sc. degree in Physics with First Class Honors, Faculty of Physics / School of Science / National and Kapodistrian University of Athens, Greece

### **POSTDOCTORAL RESEARCH FELLOWSHIPS:**

1.1.2005 – Post-Doctoral research as a member of the “Heavy Ions Group” of the Faculty of Physics (scientific leader: Prof. A. Petridis† and later Prof. M. Vassiliou) working for the CERN experiments NA49/SPS and ALICE/LHC  
 31.12.2006:  
 1.6.2017– 4-month Research Fellowship by the Matsumae International Foundation (Tokyo/Japan) on the subject “Improving the understanding of pre-earthquake electromagnetic phenomena and the associated earthquake preparation processes by means of complex-systems analysis methods” at the Hayakawa Institute of Seismo Electromagnetics /The University of Electro-Communications (Tokyo)  
 30.9.2017

### **JOBs / POSITIONS HELD:**

26/6/1997 – Test Engineer and Technical Columnist at the Hellenic version of the “Audio” Magazine, Motor Press Hellas s.a. Full time job, i.e. employment for  $\geq 40$ h/week. (from 09/1998 to 09/1999 absence due to military service)  
 17/10/1999  
 18/10/1999 – Telecommunications Software Development Engineer at the Software Center of Siemens Hellas s.a. Full time job, i.e., employment for  $\geq 40$ h/week.  
 24/5/2000  
 25/5/2000 – R&D Engineer at the “Power Supply and Analog Electronics Team” of Intracom Defense Electronics s.a. Full time job, i.e., employment for  $\geq 40$ h/week.  
 30/10/2002  
 01/09/2002 – R&D Team Leader of the “Analog Electronics and Electroacoustics Team” of Intracom Defense Electronics s.a. Full time job, i.e., employment for  $\geq 40$ h/week.  
 31/08/2009  
 01/10/2003 – Adjunct Assistant Professor, Dept. of Electronics Engineering, Piraeus University of Applied Sciences/Greece (In parallel to the main job in Intracom Defense Electronics s.a). Part-time job, teaching 6h/week.  
 25/11/2009  
 26/11/2009 – Tenured Assistant Professor, Dept. of Electronics Engineering, Piraeus University of Applied Sciences /Greece. Full time job, teaching 14h/week.  
 27/05/2014  
 28/05/2014 – Tenured Associate Professor, Dept. of Electronics Engineering, Piraeus University of Applied Sciences (from 02/03/2018 merged with Technological Educational Institute of Athens into University of West Attica) /Greece. Full time job, teaching 12h/week.  
 18/09/2018  
 19/09/2018 – Tenured Professor, Dept. of Electrical & Electronics Engineering, University of West Attica /Greece. Full time job, teaching 6h/week  
 ...  
 ...

### **RESEARCH INTERESTS / SPECIALIZATION AREAS / RESEARCH STATISTICS:**

Research Topics: DSP, complex systems time-series analysis (audio, geophysical, physiological, financial, material fracture experiments AE/EME etc.), electroacoustics, applied acoustics, acoustic ecology, acoustic noise control, electronic measurements, special measurement instrument's development (e.g., high energy physics, earthquake precursors acquisition, textiles), characterization of smart/ multi-function materials, and wireless sensor networks (including acoustic ones, WASN)

Publications: 7 book chapters, 109 journal papers, 109 international conf. papers, 15 national conf. papers, 2 patents, 18 brokerage events proposals,

h-index: 22 (Google Scholar), Citations 1525 (Google Scholar)

**REVIEWER OF:**

- Remote Sensing
- International Journal of Thermal Sciences
- Computers and Geosciences
- Journal of The Franklin Institute
- Natural Hazards and Earth Syst. Sci. (NHESS)
- IEEE J.of Select. Topics in App. Earth Observations and Remote Sensing
- Physica A
- Entropy
- Measurement
- Annales Geophysicae (ANGEO)
- Neural Computing and Applications
- European Physical Journal-Special Topics (EPJ-ST)
- Engineering Fracture Mechanics
- Advances in Space Research
- Applied Sciences
- Engineering Geology
- IEEE Transactions on Education
- Nonlinear Processes in Geophysics (NPG)
- Physics and Chemistry of the Earth
- Computer Standards & Interfaces
- Circuits, Systems & Signal Processing (CSSP)
- International Journal of Distributed Sensor Networks (IJDSN)
- Journal of the Audio Engineering Society
- Journal of Sensors
- IET Circuits, Devices & Systems
- J. Internet Technology
- International J. of Electronics (IJE)
- Wiley Encyclopedia of Electrical and Electronics Eng.
- Nature Scientific Reports
- Journal of Geophysical Research: Solid Earth
- Geotechnical and Geological Engineering
- Applied Acoustics

**PUBLICATIONS****Book Chapters**

- B1. **S.M. Potirakis**, 2012, Acoustics and Sound Absorption Issues Applied in Textile Problems, in Electronics and Computing in Textiles, S. Vassiliadis (Ed.), bookboon.com, ISBN: 978-87-403-082-0.  
(<http://bookboon.com/en/electronics-and-computing-in-textiles-ebook>)
- B2. **Σ. Μ. Ποτιράκης**, 2013, Κεφ. 2: Χρήση Λογισμικού για Ηχοπροστασία στο βιβλίο Λογισμικό και Μέθοδοι για Ακουστικό Σχεδιασμό / Βιβλίο του ΕΑΠ για το πρόγραμμα μεταπτυχιακών σπουδών Ακουστικός Σχεδιασμός και Πολυμέσα (ΑΣΠ), Κωδικός Έκδοσης: ΑΣΠ 61/1, ISBN: 978-960-538-815-7 (68 σελίδες).
- B3. K. Eftaxias and **S. M. Potirakis**, 2013, Contribution of the electromagnetic pre-seismic emissions in the comprehension of the earthquake preparation process, in Thales, in honor of Prof. Emeritus Michael E. Contadakis, ISBN 978-960-89704-1-0, 2013, p. 171-190  
([http://www.topo.auth.gr/greek/ORG\\_DOMI/EMERITUS/TOMOS\\_CONTADAKIS/Thales\\_pdf/2.05\\_Eftaxias.pdf](http://www.topo.auth.gr/greek/ORG_DOMI/EMERITUS/TOMOS_CONTADAKIS/Thales_pdf/2.05_Eftaxias.pdf)).
- B4. V. C. Güngör, G. Tuna, **S. M. Potirakis**, G. A. Vokas, 2015, Smart Grid, Wiley Encyclopedia of Electrical and Electronics Engineering, doi: <https://doi.org/10.1002/047134608X.W8269>.
- B5. D. Kogias, E.T. Michailidis, **S.M. Potirakis**, S. Vassiliadis, Communication protocols for vital signs sensors used for the monitoring of athletes, in Smart Textiles and their Applications, Vladan Koncar (Ed.), pp. 127–143, Woodhead Publishing is an imprint of Elsevier, Woodhead Publishing Series in Textiles: Number 178, 2016, doi: <https://doi.org/10.1016/B978-0-08-100574-3.00007-2>.
- B6. K. Eftaxias, **S. M. Potirakis**, Y. Contoyiannis, 2018. Four-stage model of earthquake generation in terms of fracture-induced electromagnetic emissions: A review. In: T. Chelidze, L. Telesca, F. Vallianatos (Eds.) Complexity of seismic time series; Measurement and Applications, Elsevier, Oxford UK, 2018, eBook ISBN: 9780128131398, Paperback ISBN: 9780128131381, doi: <https://doi.org/10.1016/B978-0-12-813138-1.00013-4>.
- B7. Y. Contoyiannis, P. Papadopoulos, M. Kampitakis, **S.M. Potirakis**, N.L. Matiadou (2021) φ4 Solitons in Kirchhoff Wave Equation. In: Rassias T.M. (eds) Nonlinear Analysis, Differential Equations, and Applications. Springer Optimization and Its Applications, vol 173. Springer, Cham. [https://doi.org/10.1007/978-3-030-72563-1\\_4](https://doi.org/10.1007/978-3-030-72563-1_4)

**Peer-Reviewed Journal Papers**

- P1. **S.M. Potirakis** and G.E. Alexakis, The Feedback Decomposition Theorem: The Evolution of Miller Theorem, International Journal of Electronics, 1998, vol. 85, no. 5, pp. 571-587, doi: <https://doi.org/10.1080/002072198133860>.
- P2. **S.M. Potirakis**, G.E. Alexakis, M.C. Tsilis and P.J. Xenitidis, Time-Domain Nonlinear Modeling of Practical Electroacoustic Transducers, Journal of the Audio Engineering Society, 1999, vol 47, no. 6, pp. 447-468 (<http://www.aes.org/e-lib/browse.cfm?elib=12101> ).
- P3. **S.M. Potirakis** and G.E. Alexakis, An Accurate Calculation of Miller Effect on the Frequency Response and on the Input and Output Impedances of Feedback Amplifiers, IEEE Transactions on Circuits and Systems II, Aug. 2005, vol. 52, no.8, pp. 491-495, doi: <https://doi.org/10.1109/TCSII.2005.848986>.
- P4. C. Adler, S. Altinpinar, A. Andronic, V. Angelov, H. Appelshäuser, R. Bailhache, A. Bercuci, P. Braun-Munzinger, C. Blume, V. Chepurnov, J. de Cuveland, T. Dietel, B. Dönigus, D. Emschermann, O. Fateev, C. Garabatos, D. Gottschalk, M. Hartig, N. Heine, N. Herrmann, M. Kessenbrock, V. Kiworra, M. Kliemant, T. Krawutschke, M.J. Kweon, V. Lindenstruth, C. Lippmann, A. Marin, S. Masciocchi, J. Mercado, D. Miskowiec, K. Oyama, A. Petridis† , M. Petrovici, **S. Potirakis**, F. Rettig, I. Rusanov, K. Schweda, R. Schicker, C.J. Schmidt, K. Schwarz, H.K. Soltveit, W. Sommer, J. Stachel, G. Tsiledakis, M. Tsilis, M. Vassiliou, W. Verhoeven, J.P. Wessels, B. Windelband, and Yu. Zanevsky, Construction of the First ALICE TRD Super Module, GSI Report 2007-1, June 2007, INSTRUMENTS-METHODS-39, pp.236,237, <http://www-alt.gsi.de/informationen/wti/library/scientificreport2006/PAPERS/INSTRUMENTS-METHODS-39.pdf>
- P5. P. Mantzaridis, A. Markouizos, P. Mitseas, A. Petridis†, **S. Potirakis**, M. Tsilis, M. Vassiliou, A High Voltage Distribution System for the ALICE Transition Radiation Detector, CERN/ALICE Experiment/Internal Note/Central Detector/TRD, Doc. No. ALICE-INT-2008-006, <https://edms.cern.ch/document/901555/1>.

- P6. Paraskevas, M. Rangoussi, **S.M. Potirakis**, S. Savvaidis, Phase spectral processing for improved time-domain soft microphone based noise estimation, ASA/POMA (Acoustical Society of America/Proceedings of Meetings on Acoustics), Vol. 4, 040001 (2008), pp. 1-9, doi: <https://doi.org/10.1121/1.2998762>.
- P7. ....| Athens, Greece, University of Athens, Physics Department: A. Belogianni, P. Christakoglou, M. Fragkiadakis, P. Ganoti, **S. Potirakis**, M. Spyropoulou-Stassinaki, C. Tagridis, E. Tsilis and M. Vassiliou ...., The ALICE Collaboration, J. of Physics G: Nuclear and Particle Physics, 2008, Vol. 35 109801 (8pp) doi: <https://doi.org/10.1088/0954-3899/35/10/109801>, and the 4 related papers on the same volume (35) of J. of Physics G: Nuclear and Particle Physics, doi: <https://doi.org/10.1088/0954-3899/35/10/104144>, doi: <https://doi.org/10.1088/0954-3899/35/10/104145>, doi: <https://doi.org/10.1088/0954-3899/35/10/104165>, doi: <https://doi.org/10.1088/0954-3899/35/10/104167>.
- P8. Aamodt, K. | Abel, N. ... | Petridis, A. | ... | **Potirakis, S.** | ... | Tsilis, E. | ... | Vassiliou, M. | ... | Zynovyyev, M., The ALICE Collaboration, Nuclear physics. A, Nuclear and hadronic physics, ISSN: 03759474, Vol: 830, Date: November 1, 2009, Pages: 919c-924c, doi: <https://doi.org/10.1088/0954-3899/35/10/109801>, and the 8 related papers on the same volume (830) of Nuclear physics. A, Issues 1-4, November 2009, pp. 81c-88c (doi: <https://doi.org/10.1016/j.nuclphysa.2009.10.011>), pp. 339c-342c (doi: <https://doi.org/10.1016/j.nuclphysa.2009.10.029>), pp. 495c-498c (doi: <https://doi.org/10.1016/j.nuclphysa.2009.09.039>), pp. 527c-530c (doi: <https://doi.org/10.1016/j.nuclphysa.2009.09.043>), pp. 531c-534c (doi: <https://doi.org/10.1016/j.nuclphysa.2009.10.046>), pp. 535c-538c (doi: <https://doi.org/10.1016/j.nuclphysa.2009.10.047>), pp. 539c-542c (doi: <https://doi.org/10.1016/j.nuclphysa.2009.10.048>), and pp. 769c-772c (doi: <https://doi.org/10.1016/j.nuclphysa.2009.10.002>).
- P9. **S. M. Potirakis**, G. Minadakis, C. Nomicos, K. Eftaxias, A multidisciplinary analysis for traces of the last state of earthquake generation in preseismic electromagnetic emissions, Natural Hazards and Earth System Sciences 11 (2011) 2859-2879. doi: <https://doi.org/10.5194/nhess-11-2859-2011>.
- P10. I. Paraskevas, **S. M. Potirakis**, I. Liaperdos, M. Rangoussi, Automatically Updated Soundmaps as a tool for environmental monitoring: Research in progress, Soundscape 2(1) (2011), 57-58, [http://wfae.proscenia.net/journal/scape\\_16.pdf](http://wfae.proscenia.net/journal/scape_16.pdf).
- P11. I. Paraskevas, **S. M. Potirakis**, I. Liaperdos, M. Rangoussi, Development of automatically updated soundmaps for the preservation of natural environment, Journal of Environmental Protection 2 (2011) 1388-1391, doi: <https://doi.org/10.4236/jep.2011.21016>.
- P12. **S. M. Potirakis**, G. Minadakis, K. Eftaxias, Analysis of electromagnetic pre-seismic emissions using Fisher information and Tsallis entropy, Physica A 391 (1-2) (2012) 300–306. doi: <https://doi.org/10.1016/j.physa.2011.08.003>.
- P13. G. Minadakis, **S. M. Potirakis**, C. Nomicos, K. Eftaxias, Linking electromagnetic precursors with earthquake dynamics: an approach based on nonextensive fragment and self-affine asperity models, Physica A 391 (6) (2012) 2232–2244. doi: <https://doi.org/10.1016/j.physa.2011.11.049>.
- P14. D. Nikolopoulos, E. Petraki, A. Marousaki, **S. M. Potirakis**, G. Koulouras, C. Nomicos, D. Panayiotaras, J. Stonham, and A. Louizi, Environmental monitoring of radon in soil during a very seismically active period occurred in South West Greece., Journal of Environmental Monitoring 14 (2012) 564-578. doi: <https://doi.org/10.1039/C1EM10387C>.
- P15. **S. M. Potirakis**, G. Minadakis, K. Eftaxias, Relation between seismicity and pre-earthquake electromagnetic emissions in terms of energy, information and entropy content, Natural Hazards and Earth System Sciences, 12, 1179–1183 (2012), doi: <https://doi.org/10.5194/nhess-12-1179-2012>.
- P16. G. Minadakis, **S. M. Potirakis**, J. Stonham, C. Nomicos and K. Eftaxias. The role of propagating stress waves in geophysical scale: Evidence in terms of nonextensivity, Physica A 391 (22) (2012) 5648–5657, doi: <https://doi.org/10.1016/j.physa.2012.04.030>.
- P17. **S. M. Potirakis**, G. Minadakis, and K. Eftaxias, Sudden drop of fractal dimension of electromagnetic emissions recorded prior to significant earthquake, Natural Hazards 64(1) (2012) 641-650, doi: <https://doi.org/10.1007/s11069-012-0262-x>.
- P18. K. Eftaxias, G. Minadakis, **S. M. Potirakis**, G. Balasis, Dynamical analogy between epileptic seizures and seismogenic electromagnetic emissions by means of nonextensive statistical mechanics, Physica A 392 (3) (2013) 497-509, doi: <https://doi.org/10.1016/j.physa.2012.09.015>.
- P19. I. Liaperdos, I. Paraskevas, **S. M. Potirakis**, On the Efficiency of the Shortened Error Correcting Codes, International Journal of Electrical Engineering Education, 50(2), 201-212, 2013, doi: <https://doi.org/10.7227/IJEEE.50.2.8>.
- P20. Y. F. Contoyiannis, **S. M. Potirakis**, and K. Eftaxias, “The Earth as a living planet: human-type diseases in the earthquake preparation process”, Nat. Hazards Earth Syst. Sci., 13, 125–139, 2013, doi: <https://doi.org/10.5194/nhess-13-125-2013>.
- P21. **S.M. Potirakis**, N.-A. Tatlas, N. Zafeiropoulos, T. Ganchev, M. Rangoussi, Assessment of military intercom headsets for maximum voice reproduction level in high noise conditions, Applied Acoustics 74 (2013) 870–881, doi: <https://doi.org/10.1016/j.apacoust.2012.12.009>.
- P22. **S. M. Potirakis**, P. I. Zitis, K. Eftaxias, Dynamical analogy between economical crisis and earthquake dynamics within the nonextensive statistical mechanics framework, Physica A 392 (2013) 2940–2954, doi: <https://doi.org/10.1016/j.physa.2013.03.006>.
- P23. **S. M. Potirakis**, A. Karadimitrakis, and K. Eftaxias, Natural time analysis of critical phenomena: The case of pre-fracture electromagnetic emissions, Chaos 23 (2) (2013) 023117(1-14), doi: <https://doi.org/10.1063/1.4807908>.
- P24. K. Eftaxias, **S. M. Potirakis**, and, T. Chelidze, On the puzzling feature of the silence of precursory electromagnetic emissions, Nat. Hazards Earth Syst. Sci., 13, 2381–2397, 2013, doi: <https://doi.org/10.5194/nhess-13-2381-2013>.
- P25. K. Eftaxias and **S. M. Potirakis**, Current challenges for pre-earthquake electromagnetic emissions: shedding light from micro-scale plastic flow, granular packings, phase transitions and self-affinity notion of fracture process, Nonlin. Processes Geophys., 20, 771–792, 2013, doi: <https://doi.org/10.5194/npg-20-771-2013>.

- P26. G. Tuna, O. Arkoc, G. Koulouras, **S. M. Potirakis**, Navigation system of an unmanned boat for autonomous analyses of water quality, Electronics and Electrical Engineering / Elektronika ir Elektrotechnika, 19(8), 3-7, 2013, doi: <https://doi.org/10.5755/j01.eee.19.8.5387>.
- P27. G. Tuna, **S. M. Potirakis**, G. Koulouras, Implementing a trust and reputation model for robotic sensor networks, Electronics and Electrical Engineering / Elektronika ir Elektrotechnika, 19(10), 3-8, 2013, doi: <https://doi.org/10.5755/j01.eee.19.10.5884>.
- P28. G. Balasis, R. V. Donner, **S. M. Potirakis**, J. Runge, C. Papadimitriou, I. A. Daglis, K. Eftaxias and J. Kurths, Statistical mechanics and information-theoretic perspectives on complexity in the Earth System, Entropy 2013, 15(11), 4844-4888; doi: <https://doi.org/10.3390/e15114844>.
- P29. T. Ganchev, **S. M. Potirakis**, G. Tuna, N.-A. Tatlas, R. Zogo, Design considerations of an interactive robotic agent for public libraries, Journal of Balkan Libraries Union 1(1), 1-6, 2013 (<http://bkdb.trakya.edu.tr/index.php/bluj/article/view/3>).
- P30. G. Tuna, V. Ç. Güngör, **S. M. Potirakis**, Wireless sensor network-based communication for cooperative simultaneous localization and mapping, Computers & Electrical Engineering, 2015, 407-425, 2015, doi: <https://doi.org/10.1016/j.compeleceng.2014.03.003>.
- P31. Y. Kılıçaslan, G. Tuna, G. Gezer, K. Gulez, O. Arkoc, and **S. M. Potirakis**, ANN-Based Estimation of Groundwater Quality Using a Wireless Water Quality Network, International Journal of Distributed Sensor Networks, 2014, 458329, 1-8, 2014, doi: <https://doi.org/10.1155/2014/458329>.
- P32. **S. M. Potirakis**, B. Nefzi, N.-A. Tatlas, G. Tuna, and M. Rangoussi, A Wireless Network of Acoustic Sensors for Environmental Monitoring, Key Engineering Materials 605, 43-46, 2014, doi: <https://doi.org/10.4028/www.scientific.net/KEM.605.43>.
- P33. G. Tuna, B. Nefzi, O. Arkoc, and **S. M. Potirakis**, Wireless Sensor Network-based Water Quality Monitoring System, Key Engineering Materials 605, 47-50, 2014, doi: <https://doi.org/10.4028/www.scientific.net/KEM.605.47>.
- P34. G. Tuna, O. Arkoc, **S. M. Potirakis**, and B. Nefzi, Analyzing the Water Budgets of Reservoirs by Using Autonomous Mini Boats, Key Engineering Materials 605, 51-54, 2014, doi: <https://doi.org/10.4028/www.scientific.net/KEM.605.51>.
- P35. G. Kiokes, C. Vossou, P. Chatzistamatis, **S. M. Potirakis**, S. Vassiliadis, K. Prekas, G. Tuna, and K. Gulez, Performance Evaluation of a Communication Protocol for Vital Signs Sensors Used for the Monitoring of Athletes, International Journal of Distributed Sensor Networks 2014, 453182, 1-13, 2014, doi: <https://doi.org/10.1155/2014/453182>.
- P36. E.T. Michailidis, G. Tuna, G. Gezer, **S. M. Potirakis**, and K. Gulez, "ANN-Based Control of a Multiboat Group for the Deployment of an Underwater Sensor Network", International Journal of Distributed Sensor Networks 2014, 786154, 1-12, 2014, doi: <https://doi.org/10.1155/2014/786154>.
- P37. N.-A. Tatlas, **S. M. Potirakis**, S. A. Mitilinos, M. Rangoussi, "On the effect of compression on the complexity characteristics of wireless acoustic sensor network signals", Signal Processing, 107, 153-163, 2015, doi: <https://doi.org/10.1016/j.sigpro.2014.08.012>.
- P38. G. Tuna, O. Arkoc, **S. M. Potirakis** and B. Nefzi, "Budget Analysis for Water Reservoirs Using an Autonomous Sensor-Equipped Mini Boat", Sensor Letters, 2014, doi: doi: <https://doi.org/10.1166/sl.2015.3326>.
- P39. G. Tuna, B. Nefzi, O. Arkoc and **S. M. Potirakis**, "A Real-Time Remote Monitoring of Water Quality by Means of a Wireless Sensor Network", Sensor Letters, 12(9), 1414-1421, 2014, doi: <https://doi.org/10.1166/sl.2014.3327>.
- P40. S. Konstantopoulos, **S. Potirakis**, A. Christopoulos, R. Schledjewski, and E. Hristoforou, "Glass Covered Magnetic Micro-Wires Operating in the Domain Wall Nucleation and Propagation Sensing Mode for Stress Detection in FRP Composite Structures", Sensor Letters, 12(10), 1481-1487, 2014, doi: <https://doi.org/10.1166/sl.2014.3331>.
- P41. **S. M. Potirakis**, B. Nefzi, N.-A. Tatlas, G. Tuna and M. Rangoussi, "Design Considerations for an Environmental Monitoring Wireless Acoustic Sensor Network", Sensor Letters, 13(7), 549-555, 2015, doi: <https://doi.org/10.1166/sl.2015.3333>.
- P42. **S. M. Potirakis**, Y. Contoyiannis, K. Eftaxias, G. Koulouras, and C. Nomicos, "Recent Field Observations Indicating an Earth System in Critical Condition Before the Occurrence of a Significant Earthquake", IEEE Geoscience and Remote Sensing Letters, 12(3), 631-635, 2015, doi: <https://doi.org/10.1109/LGRS.2014.2354374>.
- P43. Y. Contoyiannis, **S.M. Potirakis**, K. Eftaxias, L. Contoyianni, "Tricritical crossover in earthquake preparation by analyzing preseismic electromagnetic emissions", Journal of Geodynamics, 84, 40-54, 2015, doi: <https://doi.org/10.1016/j.jog.2014.09.015>.
- P44. M. Hayakawa, A. Schekotov, **S. Potirakis**, K. Eftaxias, "Criticality features in ULF magnetic fields prior to the 2011 Tohoku earthquake", Proc. Jpn. Acad., Ser. B, vol. 91, no. 1, pp. 25-30, 2015, doi: <https://doi.org/10.2183/pjab.91.25>.
- P45. R. V. Donner, **S. M. Potirakis**, G. Balasis, K. Eftaxias, J. Kurths, "Temporal correlation patterns in pre-seismic electromagnetic emissions reveal distinct complexity profiles prior to major earthquakes", Phys. Chem. Earth, 85–86, 44–55, 2015, doi: <https://doi.org/10.1016/j.pce.2015.03.008>.
- P46. C. G. Vossou, **S. M. Potirakis**, S. Simeonidis, S. Vassiliadis, "Characterization of thermochromic fibers' response to temperature change", Key Engineering Materials, Vol 644, pp. 74-77, May. 2015, doi: <https://doi.org/10.4028/www.scientific.net/KEM.644.74>.
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- C96. D. Mastrogianis, S.I. Andreopoulos, **S.M. Potirakis**, I. Stavrakas, D. Triantis, S. Kourkoulis, Investigating acoustic emissions and pressure stimulated currents detected during the bending of restored marble epistles within the frame of log-periodic power-law models, 1st International Conference of the GREEK SOCIETY OF EXPERIMENTAL MECHANICS OF MATERIALS, Athens, Greece, May 10-12, 2018
- C97. **S.M. Potirakis**, P. Kasnesis, C.Z. Patrikakis, Y. Contoyiannis, N.-A. Tatlas, S.A. Mitilineos, T. Asano, M. Hayakawa, A decision making system using Deep Learning for earthquake prediction by means of electromagnetic precursors, EMSEV-2018, Potenza Italy, 17-21 September 2018.
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- C100. E. T. Michailidis, **S. M. Potirakis**, A. G. Kanatas, Realizing Challenging Internet of Things Applications Via Aerospace Infrastructure, The Tenth International Conference on Advances in Satellite and Space Communications, SPACOMM 2018, April 22, 2018 to April 26, 2018 - Athens, Greece
- C101. V. Frid, **S.M. Potirakis**, S. Shulov, Effect of Soil Loading and Unloading on Its Acoustic Behavior. Presented at 1st International Electronic Conference on Applied Sciences, 10–30 November 2020. Proceedings 2020, 67, 20. doi: <https://doi.org/10.3390/ASEC2020-07516>.
- C102. G. Korompili, L. Kokkalas, N.-A. Tatlas, S. Mitilineos, M. Kouvaras, **S.M. Potirakis**, Breathing sound detector as a means to identify possible apneic periods from tracheal sound recordings, Presented at 1st International Electronic Conference on Applied Sciences, 10–30 November 2020. doi: <https://dx.doi.org/10.3390/ASEC2020-07603>
- C103. G. Korompili, M. Kouvaras, L. Kokkalas, N.A. Tatlas, S. Mitilineos, **S.M. Potirakis**, "Tracheal Sounds, Deep Neural Network, Classification to Distinguish Obstructed from Normal Breathing During Sleep", Forum Acusticum December 2020, 3209-3215, doi: <https://dx.doi.org/10.48465/fa.2020.0465>.
- C104. D. Politis, **S. Potirakis**, S. Biswas, S. Sasmal, and M. Hayakawa, A new VLF radio receiver in Greece for the detection of lower ionosphere anomalies before strong seismic events and the preliminary results for a strong (6.7 Mw) earthquake that occurred in Samos (Greece) on 30/10/2020. EGU General Assembly 2021, doi: <https://doi.org/10.5194/egusphere-egu21-12516>.
- C105. G. Balasis, C. Papadimitriou, **S. M. Potirakis**, A. Z. Boutsi, I. A. Daglis, O. Giannakis, P De Michelis, and G. Consolini, A preliminary investigation of dynamical complexity in Swarm Dst-like time series using information theory techniques, EGU General Assembly 2021, doi: <https://doi.org/10.5194/egusphere-egu21-8931>.
- C106. S. A. Mitilineos, N.-A. Tatlas, G. Korompili, L. Kokkalas, **S. M. Potirakis**, A Real-Time Snore Detector Using Neural Networks and Selected Sound Features, 2nd International Electronic Conference on Applied Sciences session Applied Biosciences and Bioengineering, doi: <https://doi.org/10.3390/ASEC2021-11176>.
- C107. L. Kokkalas, G. Korompili, N.-A. Tatlas, S. A. Mitilineos, **S. M. Potirakis**, Severe obstructive sleep apnea event detection from EEG recordings, doi: <https://doi.org/10.3390/ASEC2021-11184>.
- C108. D. Goustouridis, A. Sideris, I. Sdrolias, G. Loizos, N.-Alexander Tatlas, **S. M. Potirakis**, IntelligentLogger: A Heavy-Duty Vehicles Fleet Management System Based on IoT and Smart Prediction Techniques, Open Science Index, Mechanical and Industrial Engineering Vol:15, No:8, 2021 <https://publications.waset.org/10012185/pdf>.

C109. G. Charkoftakis, P. Liosatos, N.-A. Tatlas, D. Goustouridis, **S. M. Potirakis**, An E-Maintenance IoT Sensor Node Designed for Fleets of Diverse Heavy-Duty Vehicles, Open Science Index, Mechanical and Industrial Engineering Vol:15, No:9, 2021  
<https://publications.waset.org/10012264/pdf>.

## **RESEARCH GRANTS**

Project Title	Funding source	Period	Role of the PI
APNOIA: Automatic Pre-Hospital, In-Home, Sleep Apnea Examination	EYΔE-ETAK / GSRT Action "RESEARCH-CREATE-INNOVATE"	17/10/2018 – 16/10/2021	Coordinator / PI for University of West Attica (UniWA)
IntelligentLogger: Automated management system of fleet heavy-duty vehicles based on data collection and smart prediction techniques.	EYΔE-ETAK / GSRT Action "RESEARCH-CREATE-INNOVATE"	31/7/2018 – 30/1/2021	PI of the partner UniWA
A novel smart trap station as an Internet of Things surveillance solution to remotely count and identify the species of disease-carrying mosquitoes — REMOSIS	E.C. HORIZON 2020	22/12/2017 – 31/1/2018	Researcher
STORM - Safeguarding Cultural Heritage through Technical and Organisational Re-sources Management	E.C. HORIZON 2020	01/05/2016 – 30/4/2019	Researcher
CT-AudioLink: Improving aural cultural links between different lingual communities in Thrace	Financial Mechanism of the European Economic Area 2009-2014 / GSRT	25/8/2015 - 24/8/2016	PI of the partner UniWA
"ETexWeld: Welding of E-Textiles for Interactive Clothing"	E.C. HORIZON 2020, Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE)-2014	01/01/2015 – 31/6/2019	Researcher
Smart and energy autonomous greenhouse - Brite Greenhouse	GSRT Action Collaboration 2011	10/2013 – 10/2015	Researcher
Enabling Technologies for Distributed Control Applications	Yildiz Technical University (Turkey)	7/2013 – 7/2015	Researcher
Multi-satellite, multi-instrument, and ground based observations analysis and study of ULF wave phenomena and products- ULFwave,	European Space Agency (E.S.A.) / European Space Research and Technology Centre.	01/07/2011 – 01/02/2014	Researcher
Transdisciplinary assessment of dynamical complexity in magnetosphere and climate: A unified description of the nonlinear dynamics across extreme events	IKY / IKYDA	01/01/2013 – 31/12/2015	Researcher
Multidisciplinary study of pre-earthquake disorders with emphasis on electromagnetic radiation (Pre-SEME)	Greek Ministry of Education Action Archimedes III	11/2012 – 12/2015	Researcher
Textile products applications using smart materials for the measurement, indication and control of physiological parameters (PIMACTex)	GSRT Action Collaboration 2009	10/2012 – 4/2015	PI of the partner UniWA
A distributed microelectronic system for environmental monitoring with emphasis on sound mapping (ESOUNDMAPS)	Greek Ministry of Education Action Archimedes III	07/2012 – 12/2015	Researcher
Safe control of non-cooperative vehicles through electromagnetic means (SAVELEC)	EU Seventh Framework Program, SEC-2011.1.4-2	01/2012 – 06/2016	Researcher, Member of the Security Board
Confronting noise pollution in the workplace / public areas through a digital active noise control system	Greek Ministry of Education Action Archimedes II	01/2005 – 08/2008	Researcher
Data analysis of the NA49 / SPS experiment and development of electronic devices of the TPC / TRD detectors of the ALICE / LHC experiment	Greek Ministry of Education Pythagoras II	01/2005 – 12/2006	Key Post-Doc Researcher