John Chatzakis received his diploma in Electrical Engineering from the National Technical University of Athens. He received the M.S. degree and the PhD degree from the Dept. of Electronics and Computer Engineering of the Technical University of Crete, Chania, Crete, Greece. At present, he holds the Position of the Professor in the Department of Electronic Engineering of the Hellenic Mediterranean University.

WORKING EXPERIENCE:

From 2000 up to 2004 he was visiting professor in the Dept. of Electronics and Computer Engineering of the Technical University of Crete (TUC).

From 1992 until 2003 he worked as visiting professor in the Dept. of Electronics of the Technological Educational Institute of Crete.

In 2003 he was appointed in the Dept. of Electronics of the Technological Educational Institute of Crete.

He is currently Professor and Head of the Department of Electronic Engineering of the Hellenic Mediterranean University.

He was key researcher or scientific coordinator at numerous scientific projects and international collaborations.

SELECTED PUBLICATIONS:

1. J. Chatzakis, K. Kalaitzakis and N. C. Voulgaris, "A New Method for the Design of a Class-D DC to AC Inverter", Proceedings of the 31st Universities Power Engineering Conference 1996, Vol. 3, 18-20 Sep. 1996, p. 929-932.
2. E. Koutroulis, J. Chatzakis, K. Kalaitzakis and N. C. Voulgaris, "A Bidirectional, High-Frequency Inverter Design", IEE Proceedings on Electric Power Applications, Vol. 148, No. 4, July 2001, p. 315-321.
3. J. Chatzakis, K. Kalaitzakis, N. C. Voulgaris and S. Manias, "Designing a New Generalized Battery Management System", IEEE Trans. on Industrial Electronics, vol. 50, No. 5, Oct. 2003, p. 990-999.
4. J. Chatzakis, E. Antonidakis "A Novel N+k Fault-tolerant Hot-swap DC/AC Inverter Design", Proceedings of the 39th IEEE Annual Power Electronics Specialists Conference (PESC 2008), Jun 2008, pp. 3291-3294
5. J. Chatzakis, S. M. Hassan, E. L. Clark, C. Petridis, M. Tatarakis and P. Lee "High Repetition Rate Pseudospark Trigger Generator" , The Review of Scientific Instruments, 2008 Aug, 79(8):086103.
6. V.V. Vikhrev, G.C. Androulakis, E.O. Baronova, S.M. Hassan, E.L. Clark, A. Gopal, S. Minardi C. Petridis, J. Chatzakis, A. Skoulakis, E. Tzianaki, M. Bakarezos, N.A. Papadogiannis and M. Tatarakis "MHD Simulation of X-pinch plasma dynamics" 35th EPS Conference on Plasma Phys. Hersonissos, 9 - 13 June 2008 ECA Vol.32, P-2.154 (2008).
7. S.M. Hassan, E.L. Clark, G.C. Androulakis, C. Petridis, A. Gopal, S. Minardi, J. Chatzakis, E. Tzianaki, M. Bakarezos, N.A. Papadogiannis, E.O. Baronova, V.V. Vikherv, P. Lee and M. Tatarakis "Spectroscopic Investigation of Radiation from a Low Current X-Pinch" 35th EPS Conference on Plasma Phys. Hersonissos, 9 - 13 June 2008 ECA Vol.32, P-2.148 (2008).
8. S.M.Hassan, E.L. Clark, C. Petridis, G.C. Androulakis, J. Chatzakis, P. Lee, N.A. Papadogiannis, M. Tatarakis "Filamentary Structure of Current Sheath in Miniature Plasma Focus" IEEE Trans. on Plasma Science, Vol. 39 , Issue: 11 , Part: 1, 2011 , p. 2432 – 2433.
9. J. Chatzakis, S. M. Hassan, E. Clark, A. Talebitaher, P. Lee "Improved Detection of Fast Neutrons with Solid-State Electronics" International Conference on Applications of Nuclear Techniques Crete, Greece June 23-29, 2013.
10. A. Skoulakis, G. C. Androulakis, E.L. Clark, S. M. Hassan, P. Lee, J. Chatzakis, M. Bakarezos, V. Dimitriou, C. Petridis, N. A. Papadogiannis, and M. Tatarakis "A Portable Pulsed Neutron Generator" International Conference on Applications of Nuclear Techniques Crete, Greece June 23-29, 2013.
11. J. Chatzakis, S. M. Hassan, E. L. Clark, M. Tatarakis and P. Lee "A novel trigger generator for a pseudospark switch" , The Review of Scientific Instruments, 2015 Jan, 86(1):016108.
12. E. Kaselouris, V. Dimitriou, I. Fitilis, A. Skoulakis, G. Koundourakis, E. L. Clark, J. Chatzakis, M. Bakarezos, I. K. Nikolos, N. A. Papadogiannis and M. Tatarakis "Preliminary investigation on the use of low current pulsed power Z-pinch plasma devices for the study of early stage plasma instabilities" Plasma Phys. Control. Fusion 60 (2018) 014031(8pp).

13. E. Markoulakis, I. Rigakis, J. Chatzakis, A, Konstantaras, E, Antonidakis “Real time visualization of dynamic magnetic fields with a nanomagnetic ferrolens” Journal of Magnetism and Magnetic Materials, Volume 451, 1 April 2018, Pages 741-748.
14. J. Chatzakis, I. Rigakis, S. Hassan, E. L. Clark, P. Lee, M. Tatarakis “Design of a Pixelated Imaging System for Fast Neutron Sources” Designs 2019, 3, 25; doi:10.3390/designs3020025.
15. E. Kaselouris, I. Fitilis, A. Skoulakis, Y. Orphanos, G. Koundourakis, E. L. Clark, J. Chatzakis, M. Bakarezos, N. A. Papadogiannis, V. Dimitriou and M. Tatarakis “The importance of the laser pulse-ablator interaction dynamics prior to the ablation plasma phase in inertial confnement fusion studies”, https://doi.org/10.1098/rsta.2020.0030

SCIENTIFIC INTERESTS:

John Chatzakis expertise and research focus are on: High Voltage Circuits (Pulse Forming Lines and PFL support circuits), Power Electronics (DC/AC inverters, switching converters), Battery Management, Optoelectronics, and Analog and Programmable Electronic Circuits.