



HELLENIC REPUBLIC

## National and Kapodistrian University of Athens

Department of Physics

Section of Solid State Physics



### Emmanuel Syskakis

**Title:** Assistant Professor

**Date and Place of Birth:** 5/7/1957, Ag. Nikolaos, Crete

**Military service:** Sept. 1987/ March 1988

**Marital Status:** one child

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#### Academic Qualifications:

- Degree in Physics: National and Kapodistrian University of Athens (1981).
- Postgraduate studies in Physics: NCSR Demokritos, Athens, Greece (1980-1981).
- Doctorate in Physics: Technical University of Aachen, GERMANY, (1985).

#### Appointments:

- PhD student at the Department of Solid State Physics of the Research Center Juelich Juelich, GERMANY (9/1981-12/1984).
- Scientific personnel at the Department of Physics of the University of Bayreuth, GERMANY (1/1985-9/1987).
- Visiting scientist at the Department of Physics of the University of Bayreuth GERMANY (9/1989-12/1989 )
- Group Leader at the Institute for Energy Materials of the Research Center Juelich, Juelich, GERMANY (1/1990-12/1994). Also, teaching personnel at the Technical University of Crete (1994-1995), spring semester periods (1-2 months/year).
- Assistant Professor at the Department of Physics of the National and Kapodistrian University of Athens (1/1997- ). Also, Visiting Researcher at the institute of Physics, University of Bayreuth, GERMANY, for short periods (1-2 months/year).

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#### Teaching Activities/Responsibilities: (current)

- Physics and Technology of Materials (postgraduate classroom course).
- Advanced laboratory (postgraduate classroom course).
- Physics (undergraduate classroom course and Laboratory course, Dptmt of Biology, NKUA).
- Fundamental Physics Laboratory III: Heat and Waves (Y0333, undergraduate, teaching and responsibility).
- Laboratory of Solid state Physics : (Y0333, undergraduate)
- Supervising one PhD thesis and three MSc theses.

#### Research Interests/Activities:

- Synthesis and processing of Inorganic nonmetallic materials.
- Electrical and magnetic properties of bulk Oxides and thin films.
- Calorimetry and thermal analysis.
- Phase transitions.
- Properties of materials for energy applications

## Scientific Publications/Citations:

- 1 Doctoral Dissertation.
- 22 papers in regular issues of international
- 32 papers in peer-reviewed international conference proceedings.
- 50 communications to conferences.
- About 500 citations (excluding self-citations).
- h-index: 10 (calculated from the heterocitations only).

## Selected publications

1. E. Syskakis, F. Pobell and H. Ullmaier: "Superfluidity of He-4 in Microscopic Bubbles in Cu." *Phys. Rev. Lett.* 55, (1985), 2964.
2. E. Syskakis, Y. Fujii, F. Pobell, and H. Schroeder: "Heat Capacity of Microscopic Liquid He-3 Bubbles in Ag". *J. of Low Temp. Phys.* 79, (1990), 341
3. S. Bilger, E. Syskakis, A. Naoumidis and H. Nickel: "Sol-Gel Processing and Characterization of Strontium-doped Lanthanum Manganite Powder for the SOFC Cathode". *J. Am. Ceramic. Soc.* 75, (1992), 964
4. G. Stochniol, E. Syskakis, A. Naoumidis: "Chemical Compatibility between Strontium-doped Lanthanum Manganite and Ytria-stabilized Zirconia", *J. Am. Ceram. Soc.* 78, (1995), 929
5. P. Kountouros, R. Förthmann, A. Naoumidis, G. Stochniol, and E. Syskakis "Synthesis, Forming and Characterization of Ceramic Materials for the Planar Solid Oxide Fuel Cell (SOFC)". *Ionics* 1, (1995), 40
6. L. Zimmermann, H.G. Bohn, W. Schilling and E. Syskakis. "Mechanical Relaxation Measurements in the Protonic Conductors SrCeO<sub>3</sub> and SrZrO<sub>3</sub>". *J. Solid State Ionics* 77, (1995), 163
7. A. Michalopoulou, E. Syskakis, and C. Papastaikoudis. "Low Temperature transport properties of non-stoichiometric La<sub>0.95-x</sub>Sr<sub>x</sub>MnO<sub>3</sub>". *J. Phys: Condens. Matter* 13, 11165, (2001)
8. E. Syskakis, G. Choudalakis and C. Papastaikoudis. "Crossover between Kondo and electron-electron interaction effects in La<sub>0.75</sub>Sr<sub>0.20</sub>MnO<sub>3</sub> doped with Co impurities", *J. Phys: Condens. Matter* 15, 7735, (2003)
9. Giapintzakis, J., Androulakis, J., Syskakis, E., Papageorgiou, Th., Apostolopoulos, G., Thanos, S., Papastaikoudis, C. "Influence of the nonmagnetic impurities on the spin-1 Heisenberg chain SrNi<sub>2</sub>V<sub>2</sub>O<sub>8</sub> system". *Physica Status Solidi (B)* 243 (2006), pp. 1366-1374.
10. Logakis, E., Pollatos, E., Pandis, Ch., Peoglos, V., Zuburtikudis, I., Delides, C.G., Vatalis, A., Gjoka, M., Syskakis, E., Viras, K., Pissis, P. "Structure-property relationships in isotactic polypropylene/multi-walled carbon nanotubes nanocomposites" *Composites Science and Technology*, 70 (2010), pp. 328-335.

## Other Activities:

- Reviewer in several international scientific journals.
- Participation in one international, 1 national and 5 university research programs.