

FILOTHEI K PAPPA, MSc Curriculum Vitae January 2015

PERSONAL INFORMATION

Surname : Pappa Name : Filothei

Date of Birth May 22, 1987
Place of Birth : Agrinio, Greece

Nationality : Hellenic

Academic Status : PhD Candidate

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Greek (native), English (level C2, very good)

ACADEMIC DEGREES

- ❖ Bachelor in Applied Mathematics and Physical Sciences, National Technical University of Athens, Athens (July 2011). Bachelor thesis: Dispersion of ¹³⁷Cs concentration in the deep basins of the Aegean Sea (Bachelor Degree Thesis in cooperation with the Hellenic Centre for Marine Research) (Degree: *Very good*, 7.74/10.00)
- Master of Science at the Interdepartmental Postgraduate Studies Program "Physics and Technology Applications", Physics Department, National Technical University of Athens, Athens (September 2011- 2014). Master thesis: Study and dispersion of Radio-toxic metals, due to anthropogenic activities, in a coastal zone of Chalkidiki (Master Thesis in cooperation with the Hellenic Centre for Marine Research) (Degree: Very good, 8.92/10.00)
- Ph.D. Candidate in Nuclear Physics/Environmental Radioactivity, National Technical University of Athens, Physics Department. PhD thesis subject: Study and dispersion of radio-toxic metals in marine environment (extension of master thesis).

❖ A.G. Leventis foundation (PhD Scholarship in the field of Oceanography-Environmental protection) (2013-today)

SCIENTIFIC INTERESTS

- ❖ Environmental radioactivity − Radioprotection in the marine environment (mapping, diffusion, dispersion)
- * Radio-tracing techniques in Physical Oceanography studies (water masses identification and movements, deep basins' water movements etc)
- * Radio-tracing techniques in marine geology studies (radio-chronology, radionuclides diffusion processes, sediment accumulation processes)
- ❖ Software packages for oceanographic purposes (e.g. mapping, statistics)

SPECIFIC SKILLS AND COMPETENCES

I. Detection Systems

- 1. Gamma-ray spectroscopy: HPGe, NaI(Tl) detectors
- 2. X-Ray Diffraction Analysis spectroscopy
- 3. Radon measurements in water (RAD7)

II. Analytical Methods

- 1.137Cs pre-concentration and measurements in sea
- 2. NORM/TENORM measurements in sediment

III. Other skills

1. Sample preparation for gamma-ray and trace metals measurements in sediments (according to International Atomic Agency Commission guide)

PUBLICATIONS

I. National Conferences and Workshops

- **1 Radiotoxic metals concentration measurement in sediments due to gold mining activities**, Chalkidiki, <u>F.K. Pappa</u>, C. Tsabaris, H. Kabei, C. Zeri, I. Pashalidis, A. Ioannidou, E.G. Androulakaki, G. Eleftheriou, D.L. Patiris, M. Kokkoris, R. Vlastou, <u>Proceedings of 23rd Symposium of the Hellenic Nuclear Physics Society, Aristotle University of Thessaloniki, Thessaloniki 2014 (in press).</u>
- **2. Sediment pollution by radionuclides and toxic metals in the Ierissos Gulf, North Aegean Sea, Greece**, <u>F.K. Pappa</u>, C. Tsabaris, H. Kaberi, C.Zeri, E. Androulakaki, I.

- Pashalidis, A. Ioannidou, M. Kokkoris, G. Eleftheriou, D.L. Patiris, R. Vlastou, Proceedings of 22nd Symposium of the Hellenic Nuclear Physics Society, University of Athens, Athens 2013.
- **3. Localization of a submarine groundwater source of eastern coast of Back Sea-Georgia, using radiotracing techniques**, D.L. Patiris, M. Schübert, G. Eleftheriou, E.G. Androulakaki, <u>F.K. Pappa</u>, G., Melikadze and C. Tsabaris, Proceedings of 22nd Symposium of the Hellenic Nuclear Physics Society, University of Athens, Athens 2013.
- **4.** Radionuclide characterisation in the marine sediment using an underwater gamma-ray spectrometer in 2π geometry, E.G. Androulakaki, C. Tsabaris, M. Kokkoris, G. Elaftheriou, D.L. Patiris, D. Papageorgiou, <u>F.K. Pappa</u>, R. Vlastou, Proceedings of 22^{nd} Symposium of the Hellenic Nuclear Physics Society, University of Athens, Athens 2013.
- **5.** A theoretical study for the development of a deep sub-sea radioactivity system, C. Tsabaris, E.G. Androulakaki, M. Kokkoris, G. Eleftheriou, D.L. Patiris, <u>F.K. Pappa</u>, S. Alexakis, R. Vlastou, Proceedings of 22nd Symposium of the Hellenic Nuclear Physics Society, University of Athens, Athens 2013.
- **6.** Sediment measurements of samples from Tigris and Euphrates estuary by means of gamma-ray spectroscopy, D.L. Patiris, C. Tsabaris, E. Androulakaki, G. Eleftheriou, D. Papageorgiou, <u>F. Pappa</u>, G. Sgouros, C. Anagnostou, <u>Proceedings of 21st Symposium of the Hellenic Nuclear Physics Society, National Centre for Scientific Research "Demokritos", Athens 2012.</u>
- **7. Dispersion of** ¹³⁷Cs **concentration in the basins of the Aegean Sea**, <u>F.K. Pappa</u>, D.L. Patiris, G. Eleftheriou, C. Tsabaris, M. Kokkoris, R. Vlastou, H., Kaberi, Proceedings of 20th Symposium of the Hellenic Nuclear Physics Society, National Technical University of Athens, Athens 2011
- II. Peer-reviewed international journals (under review)
- **1. Vertical distribution of** ¹³⁷**Cs activity concentration in marine sediments at the Amvrakikos Gulf, Western of Greece**, C.Tsabaris, D.L. Patiris, E. Fillis-Tsirakis, V. Kapsimalis, M. Pilakouta, <u>F.K. Pappa</u>, R. Vlastou (accepted).

PARTICIPATION IN RESEARCH PROJECTS

I. As postgraduate research assistant

❖ April 2013-November 2013: "BlackSeaHazNet − Complex research of earthquake's prediction possibilities, Seismicity and Climate change", HCMR. Funding: E.U. (FP7 PIRSES-GA-2009-246874), HCMR Scientific coordinator Dr. Tsabaris Christos.

In the framework of this project two surveys to Black Sea (at the coastal part of Georgia) accomplished, where radioactivity measurements took place for seismicity research. For this reason, additional measurements and sampling were held in the aquatic system of west and east Georgia (rivers, lakes, boreholes).

❖ September 2014-today: "Bilateral R & D Cooperation between Hellas-China-Research and development of an in-situ underwater gamma-ray spectrometer for low-level radioactivity measurements (212CHN2012)". Principal investigator Dr. Tsabaris Christos.

In the framework of this project training in simulations (Monte Carlo N-Particle code) for detectors of gamma-ray spectrometry is being held. Additionally to this training, the development of the experimental set-up for the in-situ system, is occurring (system's calibration, sediment sampling, gamma-ray radioactivity measurements).

TEACHING EXPERIENCE

Teaching assistant in laboratory exercises (Mechanics, Electromagnetism) in National Technical University of Athens, Physics Department (October 2013- June 2014, October 2014- today)

MEMBERSHIPS

Member of the Hellenic Nuclear Physics Society (2011-today: candidate)

ADDITIONAL SKILLS

- **♦ Computer** Skills: Microsoft[™] Windows, Microsoft[™] Office, OriginLab Origin[™], radiation spectra analysis software (SPECTRW, Ortec Maestro[™]).
- Driving skills: European car licence

OTHER INTERESTS

Hagiography, Byzantine music

REFERENCES/CONTACT PERSONS

1 Dr. <u>Tsabaris Christos</u>, Senior Researcher in Hellenic Centre for Marine Research, Institute of Oceanography, 46.7 km Athens-Sounio Ave., Anavyssos-Attica, P.O. Box 712, Gr-19013, tel. +30 2291076410, email: <u>tsabaris@hcmr.gr</u>

2 Professor <u>Zanni-Vlastou Rosa</u>, National Technical University of Athens, Department of Physics, Zografou Campus, Athens, Greece, GR-15780, tel. +30 2107723008, email: <u>vlastou@central.ntua.gr</u>