

## SHORT CV

**FIRST NAME** : EVANGELOS  
**LAST NAME** : HINIS  
**DATE OF BIRTH** : December 31, 1961  
**BIRTH PLACE** : ATHENS, GREECE  
**FAMILY STATUS** : MARRIED, 2 children  
**PRESENT POSITION** : Associate Professor  
Nuclear Engineering Department  
School of Mechanical Engineering  
National Technical University of Athens - NTUA

### Research Areas

- Thermalhydraulic analysis of nuclear reactors
- Measuring techniques of mechanical, nuclear and thermalhydraulic magnitudes and methodology of their statistical elaboration.
- Geostatistical mapping of radioecological magnitudes.
- Measuring techniques of Radon concentration in the environment.
- Radiochemical analysis of environmental samples.
- Epidemiological Studies of consequences due to radionuclide concentration in the environment

### TEACHING (UNDEGRADUATE LEVEL)

1. Computer Operating Systems and Programming Languages (1999-2014)
2. Engineering measurements
3. Nuclear Power Reactor set-up and Operation (Nuclear Engineering – II)
4. Thermal-Hydraulic Analysis of Nuclear Power Plants
5. Radioenvironmental analysis and protection

### TEACHING (MASTER LEVEL)

1. Control and Measurements.
2. Mechanical and Naval measurements.
3. Nuclear Power Plants
4. Nuclear Fusion Reactors
5. Radioenvironmental Analysis (2000-2014)
6. Lectures delivered in IAEA Postgraduate Educational Course "*Radiation Protection and the Safe Use of Radiation Sources*"
  - I) *Interaction of Radiation with Matter*
  - II) *Sources of Radiation*
  - III) *Principles of Radiation Detection & Measurement*
  - IV) *Intervention in situations of chronic and emergency exposure*

**DIPLOMA THESIS SUPERVISION: 38**

**MASTER THESIS SUPERVISION: 15**

**PhD THESIS SUPERVISION: 3**

**WORK PRESENTED IN INTERNATIONAL CONFERENCES AND/OR  
PUBLISHED IN INTERNATIONAL ACADEMIC JOURNALS: 55**

**CITATIONS:** 215

**NUMBER AND BUDGET OF SUPERVISED PROJECTS:** 6 Projects / 1M USD

**Administration Experience:**

Head, Nuclear Engineering Dept. (2006-2010, 2013- 2014)

Head, Nuclear Engineering Lab. (2011- )

Head, Engineering Measurements Lab. (2003-2010)

Member of the NTUA's Senate (3 years)

Member of Mech. Eng. School General Assembly since 1999

**Member of:**

Technical Chamber of Greece

**Member in the Board of Directors of:**

- Global Society of Scientific Research and Researchers (GSSRR)

**Member of the Editorial Board:**

- American Journal of Energy Engineering
- American Journal of Energy and Power Engineering
- American Journal of Energy Research
- American Journal of Environmental Engineering and Science
- American Journal of Science and Technology
- American Scientific Research Journal for Engineering, Technology and Sciences
- Austin Journal of Robotics & Automation
- Global Journal of Computer Engineering
- Global Journal of Mechanical Engineering
- Global Journal of Petroleum Engineering
- International Journal of Computer
- International Journal of Energy Science and Engineering
- International Journal of Mechanical Systems Engineering
- International Journal of Sciences: Basic and Applied Research (IJSBAR)
- Trends Journal of Sciences Research

**Reviewer:**

- American Journal of Energy Engineering

- American Journal of Energy and Power Engineering
- American Journal of Engineering and Applied Sciences
- American Journal of Environmental Engineering
- American Journal of Environmental Engineering and Science
- American Journal of Science and Technology
- Asian Journal of Engineering and Technology
- Asian Journal of Applied Sciences
- Energy and Power
- International Journal of Energy Engineering
- International Journal of Environmental Monitoring and Analysis
- Journal of Mechanical Engineering and Technology
- Journal of Nuclear and Particle Physics
- Journal of Systemics, Cybernetics, and Informatics
- Journals of Global Journals Inc. (US) Publisher
- Universal Journal of Mechanical Engineering

**Reviewer in International Conferences:**

- ICONE22 - 22nd ASME International Conference on Nuclear Engineering (area: Thermal Hydraulics)
- KCST-2014, Knowledge and Cognitive Science and Technologies, July 15-18, 2014, Orlando, Florida, USA
- KCST-2015, Knowledge and Cognitive Science and Technologies, July 12-15, 2015, Orlando, Florida, USA

<b>A. WORK PUBLISHED IN INTERNATIONAL ACADEMIC JOURNALS</b>	
<b>1</b>	<b>Natural radioactivity mapping of Greek surface soils</b> , M.J. Anagnostakis, E.P.Hinis, S.E. Simopoulos and M.G. Angelopoulos, <i>Environment International</i> 22 (1996) 3-8.
<b>2</b>	<b>Natural Radioactivity Content of Greek Cigarettes</b> , S. Katsanevakis, N.P. Petropoulos, E.P. Hinis, S.E. Simopoulos, A. Louizi and C. Proukakis, <i>Environment International</i> , 22(S1):S375 –S377, 1996.
<b>3</b>	<b><sup>137</sup>Cs Chernobyl Fallout in Greece and its Associated Radiological Impact</b> , N.P. Petropoulos, E.P. Hinis and S.E. Simopoulos, <i>Environment International</i> , 22(S1):S369 - S373, 1996.
<b>4</b>	<b>Geographical mapping and associated fractal analysis of the long-lived Chernobyl fallout radionuclides in Greece</b> , N. Petropoulos, M.

	Anagnostakis, E. Hinis and S.E. Simopoulos, <i>Journal of Environmental Radioactivity</i> 53 (2001) 59-66.
<b>5</b>	<b>Experimental investigation of the rewetting process at pressures of 1-7 bar.</b> Hinis E.P., Simopoulos S.E., <i>Kerrntechnik</i> , 68 (2001) 1-2
<b>6</b>	<b>Radioenvironmental survey of the Megalopolis lignite field basin,</b> P.K.Rouni, N.P. Petropoulos, M. Anagnostakis, E. Hinis and S. Simopoulos, <i>The Science of the Total Environment</i> 272 (2001) 261-272.
<b>7</b>	<b>Determination of depleted uranium in environmental samples by gamma-spectroscopic techniques,</b> Anagnostakis M.J., Hinis E.P., Karangelos D.J., Petropoulos N.P., Rouni P.K., Simopoulos S.E. and Zunic Z., <i>Archive of Oncology</i> 9 (4), 2001, 231-236.
<b>8</b>	<b>Radiological characteristics and investigation of the radioactive equilibrium in the ashes produced in lignite-fired power plants,</b> Karangelos D.J., Petropoulos N.P., Anagnostakis M.J., Hinis E.P. and Simopoulos S.E., <i>J. Environ. Radioactivity</i> 77:233-246 (2004).
<b>9</b>	<b>Determination of depleted uranium in environmental samples by gamma-spectroscopic Techniques,</b> Karangelos D.J., Anagnostakis M.J., Hinis E.P., Simopoulos S.E. and Zunic Z., <i>J. Environ. Radioactivity</i> , 76:295-310 (2004).
<b>10</b>	<b><sup>238</sup>U and its daughter products in Greek surface soils,</b> Anagnostakis M.J., Hinis E.P., and Simopoulos S.E., <i>Radioactivity in the Environment – Journal of Environmental Radioactivity Series</i> , 7:1025-1029 (2005).
<b>11</b>	<b>Radioenvironmental survey of the Megalopolis power plants fly-ash deposits,</b> Karangelos D.J., Rouni P.K., Petropoulos N.P., Anagnostakis M.J., Hinis E.P. and Simopoulos S.E., <i>Radioactivity in the Environment –Journal of Environmental Radioactivity Series</i> , 7:175-186 (2005).
<b>12</b>	<b>Data leading to the investigation of a relation between seismic activity and airborne radon decay products concentration outdoors.</b> Karangelos D.J., Petropoulos N.P., Anagnostakis M.J., Hinis E.P. and Simopoulos S.E., <i>Radioactivity in the Environment – Journal of Environmental Radioactivity Series</i> , 7:187-197 (2005).
<b>13</b>	<b>Effects of biomass co-firing with coal on ash properties: Part II: Leaching toxicity and radiological behavior,</b> Grammelis P., Skodras G., Kakaras E., Karangelos D., Petropoulos N., Anagnostakis M., Hinis E. and Simopoulos S., <i>FUEL</i> , 85:2316-2322, (2006).
<b>14</b>	<b>Quality characteristics of Greek fly ashes and potential uses,</b> Skodras G., Grammelis P., Kakaras E., Karangelos D., Anagnostakis M., Hinis E., <i>Fuel Processing Technology</i> 88: 77–85 (2007).
<b>15</b>	<b>Sectional Modeling of Aerosol Dynamics in Multi-Dimensional Flows.</b> D. Mitrakos, E. Hinis, and C. Housiadas, <i>Aerosol Science and Technology</i> , 41[12]

	(2007):1076-1088, (2007).
<b>16</b>	<b>A simple mechanistic model for particle penetration and plugging in tubes and cracks.</b> D. Mitrakos, S. Chatzidakis, E.P. Hinis, L.E. Herranz, F. Parozzi, and C. Housiadas <i>Nuclear Engineering and Design</i> 238(2008):3370-3378, (2008).
<b>17</b>	<b>Phosphoric Acid as Uranium Complexant in Kinetic Phosphorimetry,</b> A.V. Efstathopoulos, K.L. Karfopoulos, D.J. Karangelos, M.P. Petropoulos, E.P.Hinis, S.E. Simopoulos, <i>submitted in Journal of Radioanalytical and Nuclear Chemistry (in review), 2011.</i>
<b>18</b>	<b>Study of the supporting system for the CLIC two-beam module,</b> N Gazis, G Riddone, H Mainaud, D Gudkov, A Samoshkin, S Simopoulos, E Hinis, T Alexopoulos, <i>Journal of Engineering Science and Technology Review.</i> 01/2011; 4:201-206.
<b>B. WORK PRESENTED IN INTERNATIONAL CONFERENCES</b>	
<b>1</b>	<b>Mini Radon house: A prototype container for the measurement of radon exhalation from building materials and structural modules.</b> Louizi A., Proukakakis C., Petropoulos N.P., Hinis E.P., Simopoulos S.E., Leonidou D.J. <i>1st Mediterranean Congress on radiation Protection, Greece, April 5-7, 1994, Vol. 1</i>
<b>2</b>	<b>Natural Radioactivity Mapping of Greek Surface Soils.</b> Anagnostakis M.J., Hinis E.P., Simopoulos S.E. and Angelopoulos M.G., <i>1st Mediterranean Congress on Radiation Protection, Athens, Greece, April 5-7, 1994, Vol. 1</i>
<b>3</b>	<b><sup>137</sup>Cs Chernobyl fallout in Greece and its associated radiological impact.</b> Gerontidou M.V., Hinis E.P., Simopoulos S.E., <i>1st Mediterranean Congress on Radiation Protection, Athens, Greece, April 5-7, 1994, Vol. 1</i>
<b>4</b>	<b>Natural radioactivity mapping of Greek surface soils,</b> Anagnostakis M.J., Hinis E.P., Simopoulos S.E. and Angelopoulos M.G., <i>International Symposium on the Natural Radiation Environment, NRE-VI, Montreal, 5-9 June 1995.</i>
<b>5</b>	<b>Hepirus Surface Soils Natural Radioactivity Mapping,</b> N.P. Petropoulos, E.P. Hinis, S.E. Simopoulos, <i>NTUA's 1st Interdisciplinary Inter-university Conference on the "The National Technical University of Athens for for Metsovo: Paying back a part of the debt" Series, Metsovo, Greece, 1995.</i>
<b>6</b>	<b>Geographical mapping and associated fractal analysis of the long-lived Chernobyl fallout isotopes in Greece,</b> Petropoulos N.P., Anagnostakis M.J., Hinis E.P. and Simopoulos S.E., <i>Yugoslav Nuclear Society Conference, Belgrade, Yugoslavia, October 7-9, 1996, p. 625.</i>
<b>7</b>	<b>Experimental investigation of the rewetting process at low steam pressures.</b> Hinis E.P., Simopoulos S.E., <i>Yugoslav Nuclear Society Conference, Belgrade, Yugoslavia, October 7-9, 1996.</i>

<b>8</b>	<b>Radiological impact of the long-lived Chernobyl fallout isotopes in Greece</b> , M.J. Anagnostakis, N.P. Petropoulos, E.P. Hinis and S.E. Simopoulos, <i>Yugoslav Nuclear Society Conference, Belgrade, Yugoslavia, October 7-9, 1996, p. 543.</i>
<b>9</b>	<b>Results and Discussion on Laboratory Intercomparison II “Radon level measurements in an air-tight container”</b> . E.P. Hinis, <i>Proceedings of “1<sup>st</sup> Southeastern-European Regional Radon Workshop”, Greek Atomic Energy Commission, April 3-5, 1997.</i>
<b>10</b>	<b>Radon chamber facility of the National Technical University of Athens</b> , Rouni P.K., Petropoulos N.P., Anagnostakis M.J., Hinis E.P., and Simopoulos S.E., <i>Workshop on Measurements and Metrology of Radon and its Decay Products, Pribram, Czech Republik, June 6-7, 1997.</i>
<b>11</b>	<b>Radioenvironmental Survey of the Megalopolis Lignite Field Basin</b> , Rouni P.K., Petropoulos N.P., Anagnostakis M.J., Hinis E.P. and Simopoulos S.E., <i>Workshop “Radon in the Living Environment”, Athens, 19-23 April 1999.</i>
<b>12</b>	<b>The Effect of Humidity on the Radon Counting Efficiency of Integrated Instruments</b> . N. Petropoulos, E. Hinis and S. Simopoulos, <i>RADON in the Living Environment, Athens, Greece, April 19-23, 1999, Vol. 1, p.1055.</i>
<b>13</b>	<b>Technologically Enhanced Natural Radioactivity of fly-ash produced in lignite-fired power plants and the associated radiological impact</b> , Karangelos D.J., Rouni P.K., Petropoulos N.P., Anagnostakis M.J., Hinis E.P. and Simopoulos S.E., <i>NORM III, Brussels, Belgium, September 17-21, 2001.</i>
<b>14</b>	<b>Προσδιορισμός Απεμπλουτισμένου Ουρανίου σε Περιβαλλοντικά Δείγματα με την Τεχνική της γ-Φασματοσκοπίας</b> , (in Greek) Δ. Καραγγελοσ, Π. Ρούνη, Ν. Πετρόπουλοσ, Μ. Αναγνωστάκησ, Ε. Χίνησ και Σ. Σιμόπουλοσ, <i>1<sup>ο</sup> Πανελλήνιο Συνέδριο “Ραδιενέργεια Περιβάλλοντοσ”, Αθήνα, 23-24 Νοεμβρίου, 2001.</i>
<b>15</b>	<b>Radon-in-Water Secondary Standard Preparation in a Wide Activity Concentration Range</b> . D. Karangelos, N. Petropoulos, E. Hinis and S. Simopoulos, <i>1st Workshop on Natural Radionuclides in Hydrology and Hydrogeology “NURAHYD-1”, Luxembourg, September 04-07, 2002.</i>
<b>16</b>	<b><sup>238</sup>U and its Daughter Products in Greek Surface Soils</b> , Anagnostakis M.J., Hinis E.P. and Simopoulos S.E. <i>Natural Radiation Environment (NRE-VII), Rhodes, Greece, May 20-24, 2002, Book of Abstracts, p.29.</i>
<b>17</b>	<b>Association of the Chernobyl fallout isotopes patterns with those of rainfall in Greece</b> , Michelaraki M., Vrantzas P.F., Petropoulos N.P., Hinis E.P., Simopoulos S.E., <i>7th International Symposium Natural Radiation Environment (NRE - VII), Rhodes, Greece, BoA, 207, 2002</i>
<b>18</b>	<b>Radon-in-water secondary standard preparation</b> . D. Karangelos, N. Petropoulos, E. Hinis and S. Simopoulos, <i>Natural Radiation Environment</i>

	<i>(NRE-VII), Rhodes, Greece, May 20-24, 2002, Book of Abstracts, p.842</i>
<b>19</b>	<b>Survey of Depleted Uranium contamination in soil and vegetation using <math>\gamma</math>-spectroscopy</b> , Karangelos D.J., Anagnostakis M.J., Hinis E.P., Simopoulos S.E. and Zunic Z.S. <i>Natural Radiation Environment (NRE-VII), Rhodes, Greece, May 20-24, 2002, Book of Abstracts, p.294-295.</i>
<b>20</b>	<b>Radioenvironmental survey of the Megalopolis power plants fly-ash deposits.</b> Karangelos D.J., P.K.Rouni, Petropoulos N.P., Anagnostakis M.J., Hinis E.P. and Simopoulos S.E. <i>Natural Radiation Environment (NRE-VII), Rhodes, Greece, May 20-24, 2002, Book of Abstracts, p.296.</i>
<b>21</b>	<b>Data leading to the investigation of a relation between seismic activity and airborne radon daughters concentration outdoors.</b> D. Karangelos, N. Petropoulos, M. Anagnostakis, E. Hinis and S. Simopoulos, <i>Natural Radiation Environment (NRE-VII), Rhodes, Greece, May 20-24, 2002, Book of Abstracts, p.297.</i>
<b>22</b>	<b>Disturbance of radioactive equilibrium in the ashes produced in lignite fired power plants.</b> Karangelos D.J., Petropoulos N.P., Anagnostakis M.J., Hinis E.P. and Simopoulos S.E., <i>Presented in Natural Radiation Environment (NRE-VII), Rhodes, Greece, May 20-24, 2002, Book of Abstracts, p.298.</i>
<b>23</b>	<b>Reducing the natural radioactivity background in Ge detector shields.</b> Nikoglou A., Karangelos D.J., Rouni P.K., Anagnostakis M.J., Hinis E.P. and Simopoulos S.E., <i>Natural Radiation Environment (NRE-VII), Rhodes, Greece, May 20-24, 2002, Book of Abstracts, p.299-300.</i>
<b>24</b>	<b>Radioactive Pollution due to an Am-241 Lightning Rod Failure,</b> K.L. Karfopoulos, G. Papadakos, D.J. Karangelos, P.K. Rouni, N.P. Petropoulos, M.J. Anagnostakis, E.P. Hinis, S.E. Simopoulos, <i>14th Panhellenic Symposium of Nuclear Physics, NTUA, Athens, Greece, 2004.</i>
<b>25</b>	<b>Coal fly-ash utilisation in Greece,</b> D. Karangelos, M. Anagnostakis, E. Hinis, G. Skodras, P. Grammelis and E. Kakaras, <i>2005 World of Coal Ash, Lexington, Kentucky, USA, 11-15 April, 2005.</i>
<b>26</b>	<b>Investigations on Aerosol Transport in Containment Cracks,</b> F. Parozzi, S. Chatzidakis, T. Gelain, G. Nahas, W. Plumecocq, J. Vendel, L. Herranz, E. Hinis, C. Housiadas, C. Journeau, P. Piluso and E. Malgarida, <i>International Conference "Nuclear Energy for New Europe 2005", Bled, Slovenia, 5-8 September, BoA, 2005.</i>
<b>27</b>	<b>Utilisation of Biomass Co-combustion Residues form Pulverized Coal Boilers,</b> Grammelis P., Skodras G., Kakaras E., Karangelos D., Anagnostakis M. and Hinis E.P., <i>2005 World of Coal Ash, Lexington, Kentucky, USA, 11-15 April, 2005.</i>
<b>28</b>	<b>Radon-in-water Secondary Standard Preparation,</b> D.J. Karangelos, N.P. Petropoulos, E.P. Hinis and S.E. Simopoulos, <i>, Proceedings of the Seventh</i>

	<i>International Symposium Natural Radiation Environment (NRE – VII), Rhodes, Greece, 20-24 May 2002 in Radioactivity in the Environment Book Series Vol. 7 (ed. M. Baxter): 842 – 847, Elsevier, 2005</i>
<b>29</b>	<b>Radioenvironmental Survey of the Megalopolis Power Plants Fly Ash Deposits,</b> D.J. Karangelos, N.P. Petropoulos, E.P. Hinis and S.E. Simopoulos, <i>Proceedings of the Seventh International Symposium Natural Radiation Environment (NRE – VII), Rhodes, Greece, 20-24 May 2002 in Radioactivity in the Environment Book Series Vol. 7 (ed. M. Baxter): 1025 – 1029, Elsevier, 2005.</i>
<b>30</b>	<b>Experimental investigation of free falling water film characteristics,</b> Nikoglou A.A., Hinis E.P., Simopoulos S.E., <i>5th International Symposium on Multiphase flow. Heat Mass Transfer and Energy Conversion Xi'an, China, BoA, 29, 2005.</i>
<b>31</b>	<b>Radioactive contamination due to <sup>241</sup>Am lightning rod failure.</b> Karfopoulos K.L., Papadakos G.N., Karangelos D.J., Rouni P.K., Petropoulos N.P., Anagnostakis M.J., Hinis E.P., Simopoulos S.E., <i>Proceedings of the 14th Symposium of the Hellenic Nuclear Physics Society, Athens, Greece, 2006.</i>
<b>32</b>	<b>CFD-based sectional modelling of aerosol dynamics: particle formation in an aerosol reactor.</b> D. Mitrakos, E. Hinis and C. Housiadas <i>International Conference on Multiphase Flow (ICMF 2007), Leipzig, Germany, 9-13 July 2007.</i>
<b>33</b>	<b>Study of the supporting system for the CLIC two-beam module.</b> N. Gazis, G. Riddone, H. Mainaud-Durand, D. Gudkov, A. Samoshkin, S. Simopoulos, E. Hinis, T. Alexopoulos, <i>CLIC – Note – 857, DURACOSYS Conference, Greece, 12-15 September 2010</i>
<b>34</b>	<b>A study on the rewetting of a hot surface, using low pressure, subcooled liquid.</b> S. Chatzidakis, A. Nikoglou, E. Hinis and S. Simopoulos, <i>The 15<sup>th</sup> International Topical Meeting on Nuclear Reactor Thermalhydraulics, NURETH-15 Pisa, Italy, May 12-15, 2013</i>
<b>35</b>	<b>An experimental study of the rewetting of a hot surface at atmospheric conditions using sub cooled liquid at various flowrates.</b> P. Kastanidis, A. Nikoglou, E. Hinis and S. Simopoulos, <i>The 15<sup>th</sup> International Topical Meeting on Nuclear Reactor Thermalhydraulics, NURETH-15 Pisa, Italy, May 12-15, 2013</i>
<b>36</b>	<b>Statistical Characteristics of Free Falling Water Film.</b> A.A Nikoglou, E.P. Hinis, and S.E. Simopoulos, <i>NURETH-16, International Topical Meeting on Nuclear Reactor Thermal Hydraulics, Chicago, IL, USA, August 30 – September 4, 2015</i>
<b>37</b>	<b>An experimental study on the quench front velocity and temperature during rewetting of a hot vertical rod.</b> N. Lymperea, A. Nikoglou and E.P. Hinis, <i>NURETH-16, International Topical Meeting on Nuclear Reactor Thermal Hydraulics, Chicago, IL, USA, August 30 – September 4, 2015</i>