



Europass Curriculum Vitae

Personal information

Name **Zoe S. Nivolianitou**
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Nationality Greek
Date of birth 15.05.1959

PROFESSIONAL EXPERTISE

Dr Nivolianitou is an expert with a consolidated knowledge of the assessment and management of risks from technological systems and natural phenomena. She has an over 25 year experience in the area of industrial safety (mainly chemical plants) acquired at the JRC-ISPRA (as a grantee of the Commission of EU), and at NCSR "Demokritos" in Greece, as a post-doctoral fellow in the beginning and as a researcher in the following years of the Institute of Nuclear & Radiological Sciences & Technology, Energy & Safety (I.N.R.A.S.T.E.S.), Laboratory for System Reliability and Industrial Safety. She has served as expert to the Greek government (Ministry of Development and Ministry of the Environment, Urban Management and Physical Planning) in the evaluation of the 'SEVESO' reports of hazardous industrial installations in Greece and in the elaboration of the Emergency Planning around them in the case of a Major Industrial Accident. She has been also invited as an expert by the Commission of the European Union and by the Italian and Romanian Research Agencies in the evaluation of projects related to technological development. She has been the project manager within NCSR "Demokritos" for five EU funded projects (SAFETYNET, PRISM, S2S, Pre-Emergencies and VIRTHUALIS)

EXPERTISE KEYWORDS

Risk and safety analysis of chemical plants, land use planning around hazardous installations, risk based emergency management and decision making, human factors, virtual reality, marine accidents assessment, risk communication.

ESIC – RELATED EXPERTISE

N/A

EDUCATION:

Dr Chemical Engineer

Dates 1989

Title of qualification awarded Ph.D., Dept. Chemical Engineering, NTUA

Principal subjects/occupational skills covered Risk and Safety Analysis of Chemical Plants

Name and type of organisation providing education and training National Technical University of Athens-JRC ISPRA

Level in national or international classification ISCED 6

Dates 1983

Title of qualification awarded Diploma in Chemical Engineering., Dept. Chemical Engineering, NTUA

Principal subjects/occupational skills covered 5 years curriculum for a Chemical Engineer's Degree

Name and type of organisation providing education and training National Technical University of Athens

Level in national or international classification ISCED 5A

PROFESSIONAL EXPERIENCE

Dates 1989 to present
 Name and Address of employee National Centre for Scientific Research DEMOKRITOS
 Type of Business or Sector Research Center, GOV
 Occupation or Position Held Senior Researcher, Research Associate
 Main Activities or Responsibilities Organising and leading scientific research in a variety of matters related to safety analysis

Dates 1989-1990
 Name and Address of employee Dept. Chemical Engineering, NTUA
 Type of Business or Sector University, GOV
 Occupation or Position Held Lecturer
 Main Activities or Responsibilities Risk and Safety Analysis of Chemical Plants

Dates 1993-1995
 Name and Address of employee Dept. of Manufacturing, TEI, Athens
 Type of Business or Sector Higher Education, GOV
 Occupation or Position Held Lecturer
 Main Activities or Responsibilities Safety and Hygiene at work

PERSONAL SKILLS AND COMPETENCES

Mother tongue(s) **Greek**

Other language(s) **English, Italian, French, German, Russian**

Self-assessment <i>European level (*)</i>	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Italian	C2	C2	C2	C2	B2
French	C2	C2	B2	B2	B2
German	B2	B2	B2	B2	B2
Russian	A1	A1	A1	A1	A1

(*) [Common European Framework of Reference for Languages](#)

SOCIAL SKILLS AND COMPETENCES

Organisational skills and competences She has been the responsible scientist for DEMOKRITOS for 6 EU funded projects and has acted as work package leader and Quality Manager in several of those, organising the work of a group of people, often at European level.

Technical skills and competences She has worked in the developing of methodologies for risk assessment, risk management and in human error estimation.

Computer skills and competences She can handle most of the current commercial applications plus specific software packages for risk assessment (FAST, @RISK), and write programmes herself

Artistic skills and competences She plays guitar and piano

Driving licence She holds a driving licence for light vehicles and motorbikes

ADDITIONAL INFORMATION

Membership of Professional Bodies: □ Society for Risk Analysis (international)

□ Licensed Chemical Engineer in Greece

□ Hellenic Association of Chemical Engineers (Full Member)

□ Technical Chamber of Greece

Honors: Grantee of the EC: 1983-1987

DAAD grantee : 1981, 1988

NATO fellow for the participation to the NATO/CCMS Pilot Study "Methodology, Focalisation and Scope of Environmental Impact Assessment": 1992

ANNEXES List of recent publications

Dr. Nivolianitou has more than 50 publications in scientific journals, Proceedings of Scientific Conferences and Refereed Technical Reports.

1. Liaropoulos A., Sapountzaki K., Nivolianitou Z.(2016), "Risk governance gap analysis in search and rescue operations at offshore facilities in the Greek territory" *Safety Science* published online: pp. 132-141 DOI 10.1016/j.ssci.2016.02.013
2. Nivolianitou Z., Synodinou, B., Manca D.(2015), "Flood disaster management with the use of AHP", *International Journal of Multicriteria Decision Making*, Volume 5, Issue 1-2, Pages 152-164
3. Nivolianitou Z, Papazoglou I.A. (2014) "Risk based Land use planning around Hazardous Chemical Installations", *Int. J. Risk Assessment and Management*, Volume 17, No. 3. Pages 246-264
4. Aneziris O.N., Papazoglou I.A., Konstantinidou M., Nivolianitou Z. (2013), "Integrated risk assessment for LNG terminals", *Journal of Loss Prevention in the Process Industries*, In Press, Vol. 28, pp. 23-35
5. Monferini A., Konstandinidou M., Nivolianitou Z., Leva C., Kontogiannis T., Kafka P. and McKay A., (2013), "How Human & Organizational Factors impact on risk level in an NG treatment and storage plant", *Reliability Engineering & System Safety*, Volume 119, Pages 280–289
6. Baraldi, P. A. Sogaro, M. Konstandinidou, Nivolianitou Z. (2013), "An Anchor Points-Based Interface for Performance Shaping Factors Assessment in Human Reliability Analysis", *International Journal of Performability Engineering*, Volume 9, Number 2, pp. 149-161
7. Kazaras, K., Konstandinidou, M., Nivolianitou, Z., Kirytopoulos, K., (2013), "Enhancing road tunnel risk assessment with a fuzzy system based on the CREAM methodology", *Chemical Engineering Transactions* 31, pp. 349-354
8. Argyropoulos C.D., Christolis, M., Nivolianitou, Z., Markatos N.C. (2012) "A hazards assessment methodology for large liquid hydrocarbon fuel tanks", *Journal of Loss Prevention in the Process Industries*, Volume 25, Issue 2 pp. 329-335
9. Konstandinidou M., Nivolianitou Z., Kefalogianni I., Caroni C. (2011), "In-depth analysis of the causal factors of incidents reported in the Greek petrochemical industry", *Reliability Engineering & System Safety*, Volume 96, Issue 11, November 2011, pp. 1448-1455
10. Nivolianitou, Z., Synodinou, B. "Towards emergency management of natural disasters and critical accidents: The Greek experience", *Journal of Environmental Management*, Volume 92, Issue 10, October 2011, Pages 2657-2665
11. Argyropoulos, C. D., Sideris, G. M., Christolis, M. N., Nivolianitou, Z and Markatos, N. C. (2010) «Modelling pollutants dispersion and plume rise from large hydrocarbon tank fires in neutrally stratified atmosphere.», *Atmospheric Environment*, 44(6) pp.801-822
12. Konstandinidou, M., Nivolianitou, Z., Kiranoudis, C. and Markatos, (2008) N. "Evaluation of significant transitions in the influencing factors of human reliability", *Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability*, Volume 222, Issue 1.
13. Konstandinidou M, Nivolianitou Z, Kiranoudis C, et al., (2006) "Development of a database for accidents and incidents in the Greek petrochemical industry", *Journal of Loss Prev* Volume 19, Issue 6, Pages 630-638
14. Nivolianitou Z, Konstandinidou M, Michalis C.(2006) "Statistical analysis of major accidents in petrochemical industry notified to the major accident reporting system (MARS)", *JOURNAL OF HAZARDOUS MATERIALS* 137 (1): 1-7
15. Konstandinidou M, Nivolianitou Z, Markatos N, et al. (2006) « Statistical analysis of incidents reported in the Greek Petrochemical Industry for the period 1997-2003" *JOURNAL OF HAZARDOUS MATERIALS* 135 (1-3): 1-9
16. Konstandinidou M, Nivolianitou Z, Kiranoudis C, et al. (2006) "A fuzzy modeling application of CREAM methodology for human reliability analysis", *RELIABILITY ENGINEERING & SYSTEM SAFETY* 91 (6): 706-716
17. D.A. Kefalas, M.N. Christolis, Z. Nivolianitou and N.C. Markatos, (2006) "Consequence analysis of an open fire incident in a pesticide storage plant", *Journal of Loss Prevention in the Process Industries*, Volume 19, Issue 1, Pages 78-88.
18. Nivolianitou, Z. Leopoulos V.N., Konstantinidou M. (2004) "Comparison of techniques for accident scenario analysis in hazardous systems", *J LOSS PREVENT PROC* 17 (6): 467-475
19. Nivolianitou, Z., Synodinou B.M., Aneziris O.N.(2004) "Important meteorological data for use in risk assessment", *J LOSS PREVENT PROC* 17 (6): 419-429
20. Nivolianitou, Z. (2002) "Risk Analysis and Risk Management: a European insight", *Law, Probability and Risk*, Vol.1, pp.161-174.
21. Nivolianitou, Z., Markert, F." SAFETYNET, a European network for process safety"(2001), *J Hazard. Mater.* 85, pp.1-10.
22. Papazoglou, I.A., Z. Nivolianitou, G.S. Bonanos, N.j. Duijn, B. Rasmussen (2000) "Supporting Decision Makers in Land Use Planning around Chemical Sites. Case Study: Expansion of an Oil Refinery". *Journal of Hazardous Materials* Vol 71, Nos 1-3, pp 343-373.
23. Papazoglou, I.A., G. Bonanos, Z. Nivolianitou. (2000) "Effect of stochastic variability in meteorological conditions on toxic gas dispersion", *PSAM 5 International conference on Probabilistic safety Assessment and Management*, Osaka, Japan, Kondo ed. Book of proceedings, pp.2767-2771.
24. Papazoglou, I.A, G. Bonanos, Z. Nivolianitou. (2000) "Use of environmental indices in Land Use Planning around hazardous chemical installations", *Proceedings ESREL*, Edinburgh, Books of papers pp. 531-536
25. Mandellos, N., Z. Nivolianitou & N.C. Markatos. (1998) "A newly developed algorithm describing the fog formation of Hydrogen fluoride (HF) in air", *Industrial & Engineering Chemistry Research*, 37, pp.4844-4853.

26. Papazoglou, I. A., Nivolianitou Z., Bonanos G. (1998) "Land Use Planning Policies Stemming from the Implementation of The SEVESO-II Directive in the EU, Journal of Hazardous Materials, Vol 61, pp345-353.
27. Nivolianitou Z. and Papazoglou I. (1998) "An auditing methodology for safety management of the Greek process industry", Reliability Engineering and System Safety, Vol 60, pp. 185-197.
28. Nivolianitou, Z (1998) "Hazard Review of a Pesticides Formulation Plant and Consequence Assessment of Accident Scenarios in it", Journal of Loss Prev. in the Process Industries, 11, pp.123-134.