Seminar

Risk Assessment and Management of Pipeline Projects subjected to Geohazards

30 March 2020
Estrel Berlin
Berlin, Germany
**Course Content**

1. **Introduction (1 hour)**
   1.1 Types of Geohazards
   1.2 Case Histories of Geohazards

2. **Geohazards & Pipeline Design (2 hours)**
   2.1 Assessment of Geohazards
   2.2 Pipeline Vulnerability to Geohazards
   2.3 Risk Management

3. **Earthquake-related Geohazards & Seismic Pipeline Design (2 hours)**
   3.1 Assessment of Earthquake-related Geohazards
   3.2 Pipeline Vulnerability to Earthquake-related Geohazards
   3.3 Seismic Risk Management

4. **Monitoring Techniques (1 hour)**
   4.1 Ground Deformations
   4.2 Seismic Ground Motion
   4.3 Pipeline Distress

**Aim**

The course will provide an indepth introduction into the subject and importance of Natural Hazards during the stages of evaluation, design, construction and operation of a pipeline.

Delegates will learn about the need for qualitative and quantitative Assessment of the Risk associated with various Natural Hazards [such as Flooding, Landslides and Earthquakes] in relation to the route selection and the pipeline integrity.

Additionally, potential protection/mitigation measures and monitoring techniques, both related to Risk Management, will be presented.

The main disciplines that will be presented during the course are Hydrology, Hydraulics, Engineering Geology, Soil Mechanics, and Rock Mechanics, while special emphasis will be given on Slope Instabilities and Soil-Structure Interaction.

Finally, since many countries worldwide are characterized by moderate or high seismicity, the course will also introduce the topics of Geotechnical Earthquake Engineering, Pipeline Seismic Design, and Strain-Based Design.

**Target Group**

Managers, Pipeline Engineers, Technicians or other interested personnel from operators that are involved during the stages of evaluation, design, construction and operation of a pipeline. Engineering Consultants active in the field of geotechnical engineering. Personnel from the authorities or certification bodies involved with pipeline integrity and assessment and licensing.

**Language**

English

**Date**

30 March 2020, 9:00-17:00
Lecturer

**Dr. Andreas ANTONIOU**
Geotechnical Engineer

Dr. Antoniou is a Civil Engineer specializing in the field of Geotechnical Engineering for more than 20 years. His Ph.D. in the scientific area of geotechnical applications of Geographic Information Systems (GIS) was received from National Technical University of Athens, Greece, while currently he is a Research Associate in the School of Civil Engineering, Geotechnical Department at the same university. He is also an adjunct Professor of Geotechnical Engineering at the Greek Military Academy of Engineers.

He has executed numerous studies on: (a) the design of foundation of buildings, industrial facilities, bridges, wind turbines, solar plants, (b) slope stability and rockfall assessment, and (c) ground seismic response.

He has been involved as a member of the experts’ team in (a) the evaluation regarding engineering geological aspects of the behavior of tunnel boring machine (TBM) used at the Athens Metropolitan Railway, and (b) the quantitative geohazard assessment and design of Trans Adriatic Pipeline (TAP).

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Lecturer

**Dr. Prodromos PSARROPOULOS**
Structural & Geotechnical Engineer

Dr. Psarropoulos is a Structural and Geotechnical Engineer with a balanced scientific and professional experience in the analysis and design of various structures and geostructures during the last 20 years.

After his Ph.D. on Geotechnical Earthquake Engineering from National Technical University of Athens (NTUA), he conducted advance research in various institutes in Greece and Italy, while he has been an adjunct Associate Professor of Geophysics and Earthquake Engineering in the Department of Infrastructure Engineering of the Hellenic Air-Force Academy. In parallel, he has been involved (as a consultant engineer) in the design and construction of various challenging engineering projects in Greece and abroad.

His expertise is on Geotechnics, Soil Dynamics and Earthquake Engineering, including mainly: (a) problems of static and dynamic soil-structure interaction (such as foundations, retaining structures, pipelines, etc.), (b) static and seismic stability assessment of slopes and embankments, and (c) numerical simulation of dynamic soil response (i.e. local site effects and microzonation studies).

Currently, he is teaching Geotechnical Engineering in the School of Rural and Surveying Engineering of NTUA, while he has been a lead member of the team of experts for the quantitative geohazard assessment and the seismic design of two major high-pressure gas pipelines in south-east Europe (IGI-Poseidon and TAP).
Registration

Online Registration

www.pipeline-conference.com/registration

The registration fee is 800 Euro per person (600 Euro for already registered delegates of Pipeline Technology Conference 2020). All prices + 19% VAT. Group discounts are available upon request (3 and more participants).

Listing of Pipeline Operators attending ptc 2019

https://www.pipeline-conference.com/who-attends