CV of Carlos Delgado

Summary

Professor Carlos Delgado received his Doctorate from Civil Engineering Madrid Polytechnic University and earned MBA from I.E.S.E. Barcelona. He progressed ranks and now is Professor of Geotechnics at the Madrid Polytechnic University, Director of the Public Works Engineering School and a member of the Board of Directors (Madrid Polytechnic University).

He has directed many in-the-field and laboratory researches of grouting mixes and procedures for the treatment of rock, soils, and hydraulic fracturing grouting in dams and other structures.

He is the President of IAEG for term 2010-2014,

the President of AEGAIN and a member of the Jury for Doctorate Theses of ANCI.



CURRICULUM VITAE

Carlos Delgado Alonso-Martirena

Dr. Civil Engineering – Madrid Polytechnic University

Geotechnics specialisation course – Hydraulic Engineering School Delft (Holland) MBA I.E.S.E. Barcelona

Spanish representative of the European Foundation Association

Present post: Director of the Engineering School for Public Works -Madrid

Polytechnic University - Professor of Geology - Geotechnics - Madrid Polytechnic University

President of the International Association for Engineering Geology and the Environment (IAEG)

Director of Master Course in Tunneling Madrid Polytechnical University

Main Projects and Work

A large number of foundation, grouting treatment and diaphragm walls works which include:

| 1970's | Astronomy | Observator | y in Canar | y Islands, F | Piles for | Thermoelectric |
|--------|-----------|------------|------------|--------------|-----------|----------------|
|--------|-----------|------------|------------|--------------|-----------|----------------|

Plant in Canary Islands.

1980's Central America – Aguacapa and Chixoy (Guatemala) Project for

tunnel and Hydroelectricity Plant – grouting treatment

1990's Sefi-Rud Dam (Iran) Project for rehabilitation work for earthquake damage by resin grouting.

Madrid Line V Metro – consolidation grouting

Puerto Peña Tunnel in Burgos and bypass. Grouting

M-40 motorway ring road – Monte El Pardo Tunnel

Project for 16 Km Tunnel for sewage system in Leganés (Madrid)

Uzquiza Dam

Grouting projects for Barcelona Metro – Barón de Vivér Station

Grouting project – La Bugaña Tunnel (Santander, Spain)

Grouting project Monistrol (Barcelona, Spain) Project for dock (Gijon Port, Spain) – grouting

2000's Grouting project for Talaván Tunnel Project (Spain)

Underground parking lot in Madrid (Plaza Ramales)

Dock in Seville fluvial port for Carbon-Puerto y Maquinaria, S.A.

Underground parking lot in Jardines Murillo (Seville)

Study for landfill stability in Minas de Portman (Cartagena – Spain)

A Selection of Publications

- Regeneration and water proofing of concrete in San Sebastian Dam by resin grouting
- Design problem for national roadway through an unstable valley
- Underground river freezing at Valencia subway
- Membranes d'etancheite realisées "in situ"
- Saline intrusion in Almuñecar aquifer (Granada)
- Reinforcement soil treatment in tunneling works
- Considerations about grouting with epoxy polymers.

Congresses and Conferences:

- Geology and linear infrastructures. Lyon (France) 2005 "The burial of motorways in densely populated areas"
- Latest natural disasters. New challenges for engineering geology, geotechnics and civil protection in Sofia (Bulgary) 2005
 - "Correction of potential risk of subsidence of a public building in Southern Spain due to a landslide affecting its foundations"
- Engineering geology for tomorrow's cities in Nottingham (United Kingdom) 2006
 - "Treatment for underwater parking inside quay in Gijón harbor (Spain)"
 - "The biggest TBM in the world, Madrid M-30 (Spain)"
- IAEG Council Meeting 2007 in Vail, Colorado (USA)
 - "Correction of landslide in Arcos de la Frontera, Cádiz (Spain)"
- Geological engineering problems in major construction projects (Chengdu, Chine) 2009
 - "Cases of quay failure in major harbors"
- Environmental Geosciences and Engineering Survey for Territory Protection

and Population Safety (EngeoPro 2011) in Moscow (Russia) "The use of fracture-controlled grouting to allow urban development on creep-affected slopes"