



**CASE HISTORIES  
IN GEOTECHNICAL ENGINEERING  
NEW YORK, NY APRIL 13-17, 2004**

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William B. Wright  
(USA)

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H.V.K. Chaitanya  
S. S. Nimbalkar  
(India)

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Walid Aboumoussa  
Magued Iskander  
(USA)

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J. Matos e Silva  
(Portugal)

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Kumars Zand-Parsa  
(USA)

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Mahmood  
Momenzadeh  
Grant Wilcox  
Hooshmand Nikoui  
Tim Pokrywka  
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Arturo Ressi di Cervia  
(USA)

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P. Mestat  
Y. Riou  
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A.G. Athanasopoulos  
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(USA)

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S. Taghipoor H. Abbasi (Iran)	Hydro-Mechanical Numerical Analysis of Grouting Galleries in Azadi Rockfill Dam 6.04



Hubert Quick Joachim Michael Helmut Prinz Ulvi Arslan (Germany)	Tunnelling for German High Speed Railway Lines – A General Report 6.05
S. Saarelainen L. Korkiala-Tanttu J. Viitala (Finland)	Railway Tunnelling in Frozen Ground on Bothniabana 6.06
D. Azizmohammadi H. Abbasi (Iran)	Estimation of Maximum Advance in Kaka-Reza Water Conveyance Tunnel at 700 Meter Depth 6.07
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Wulf Schubert (Austria)	Tunneling in Alpine Fault Zones Excavation and Support Strategies 6.09
Thomas P. Hart Giuliana Zelada- Tumialan (USA)	Site Development in Deep Karst Terrain 6.10
Edward A. Button Wulf Schubert Gunter Riedmueller (Austria)	The Use of Monitoring Data and Geologic Documentation as a Basis for Defining Rock Mass Behavior Types for Tunnelling 6.11
A. Boominathan S. R. Gandhi J. Elango P. C. Sivathanu (India)	Evaluation of Rock Characteristics for a Power Plant Site in India 6.13
N. S. Bulychev N. N. Fotieva A. S. Sammal I. Siavoshi (Russia)	Lining Design for Alborz Tunnel in Iran 6.17
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Syed Faiz Ahmad (Saudi Arabia)	Managing Sinkholes at Project Site, A Saudi Arabian Case History 6.28
M. Asad uz Zaman (Bangladesh)	Groundwater Abstraction from Aquitard, Aquiclude and thin Aquifer in Barind 6.29
Marta Dolezalova Ivo Hladik Vlasta Zemanova (Czech Republic)	Case History of an Open-pit Coalmine Loaded by Artesian Water Pressure 6.30
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(China)  
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(USA)

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#### **Case Histories of Forensic Engineering, Where Things Went Wrong**

David Cummings  
Frank J. Kenton  
(USA)

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Shad E. Hoover  
Mian C. Wang  
Brian Dempsey  
(USA)

Structural Damage Induced by Pyritic Shale 7.02

Salah Sadek  
Philippe Fayyad  
Walid Choucair  
(Lebanon)

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Rolf Katzenbach  
Alexandra Weidle  
Helmut Hoffmann  
(Germany)

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A. N. Hussein  
A. H. Mustapha  
(Malaysia)

Failure Investigation of a Fill Slope in Putrajaya, Malaysia 7.05

E. A. J. George  
L. Thomas  
C. Oko  
(Nigeria)

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Dennis R. Hiltunen  
R. Nolen-Hoeksema  
Richard D. Woods  
(USA)

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Jim Johnson  
David Gwede  
Andrew Smith  
Ian Webber  
Mike Murphy  
(UK)

The Construction of the A650 Bingley Relief Road Adjacent to an Unstable Tied Sheet Pile Retaining Structure 7.12



V. V. S. Rao  
N. Santosh Rao  
(India)

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#### **Case Histories of Soil Property Improvement, Use of Lightweight Materials, and Geotechnical and Hydrological Management and Remediation of Solid, Hazardous and Low-Level Radioactive Wastes, including Liner Cover Systems and Landfill Closure for Brownfield Development**

Mary Perlea  
(USA)

Non-Homogeneous Reinforced Earth Fill for Riverbank Stabilization 8.02

Costas  
Anagnostopoulos  
Evangelos  
Stavridakis  
Ioannis  
Grammatikopoulos  
(Greece)

Improvement of Fine Sand Properties with Water Soluble Epoxy Resin Grouts 8.03

Omar M. Alsamman  
George P. Kelley  
(USA)

Soil Improvement Using Deep Dynamic Compaction 8.04

Dimitris Dermatas  
Mike Dadachov  
Paul Dutko  
(USA)

Geoenvironmental Site Characterization to Treatment: Lead Contaminated Firing Range Case Study 8.06

Hany L. Riad  
Anthony L. Ricci  
Peter W. Osborn  
David A. D'Angelo  
John S. Horvath  
(USA)

Design of Lightweight Fills for Road Embankments on Boston's Central Artery/Tunnel Project 8.07

Erik O. Andersen  
L.A."Lorne" Balanko  
Joyce M. Lem  
Dave H. Davis  
(USA)

Field Monitoring of the Compressibility of Municipal Solid Waste and Soft Alluvium 8.08

C. H. Hettiarachchi  
J. N. Meegoda  
(USA)  
J.P. Hettiaratchi  
(Canada)

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C. Dano  
H. Vergnaux  
(France)

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Anirban De R. Jeffrey Dunn Neven Matasovic (USA)	Site Characterization, Design, and Construction for Closure of Four Hazardous Waste Landfills at a Superfund Site 8.13
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S. S. Yasrobi E. Asghari (Iran)	Dynamic Compaction in Assalouyeh, Iran 8.26
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Gregory Biesiadecki Diane Porciello (USA)	Erskine Street Interchange 8.32
Jiwei Duan Issa Oweis (USA)	Load Transfer of Cement-Soil Column by Full Scale Load Test in Soft Clay 8.33
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Kul Bhushan Ashok Dhingra Curt Scheyhing Endi Zhai (USA)	Ground Improvement by Stone Columns and Surcharge at a Tank Site 8.36



Katia.V. Bicalho Reno. R. Castello Renata d'Andrea (Brazil)	The Densification of Loose Sand Using Compaction Piles 8.38
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Armin W. Stuedlein Dawit Negussey Michael Mathioudakis (USA)	A Case History of the Use of Geofoam for Bridge Approach Fills 8.40
Yu Bagdasarov A. Saurin (Russia)	Reinforcement of Earth Structures with Cast-in-Place Piles in the Expanded Boreholes 8.41
David S. Yang Christopher J. Coutu Larry L. Scheibel (USA)	Quality Control of Cement Deep Soil Mixing Work for Port of Oakland Projects 8.42
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#### **Case Histories of Non-Destructive Evaluation and Load Testing of Drilled Shafts, Auger Cast Piles and Driven Piles**

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Nasser Massoudi Wondem Teferra (USA)	Non-Destructive Testing on Piles Using the Low Strain Integrity Method 9.03



Jesus Gomez  
Allen Cadden  
O. Christopher  
Webster  
(USA)

Micropile Foundations in Karst: Static and Dynamic Testing Variability 9.05

V. T. Ganpule  
S. M. Gupte  
(India)

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Emad Farouz  
Paul Landers  
Scott Webster  
(USA)

Case History: Foundation Evaluation for the Virginia Highway 288 Project 9.08

Roderic A. Ellman, Jr.  
Sissy Nikolaou  
Mishac K. Yegian  
(USA)

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Sanjeev Kumar  
Cesar Alarcon  
Alyass Hosin  
(USA)

O-Cell Testing of Reinforced Concrete Driven Piles 9.12

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#### Case Histories of Health Monitoring and Retrofit of Bridges, Tunnels, and other Transportation and Geotechnical Structures

Holger Netzel  
(Netherlands)

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Prapa Haran  
N. Vaikunthan  
Steven Brokken  
(USA)

Seismic Foundation Retrofit of West Stands of Michie Stadium 10.05

William H. Hansmire  
Victor S. Romero  
Michael T. McRae  
(USA)

Multiple Tunnels in Soil with Shotcrete Linings on Tren Urbano, San Juan, Puerto Rico 10.06

Mario Volante  
Elisabetta Scattolini  
Enrico Maria  
Pizzarotti  
(Italy)

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Nenad Gucunski  
Parisa Shokouhi  
(USA)

Application of Wavelets in Detection of Cavities under Pavements by Surface Waves 10.09



Nenad Gucunski  
Rambod Hadidi  
Ali Maher  
Nick Vitillo  
(USA)

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Shi Minglei  
Songyu Liu  
Yisheng Zhu  
Guangyin Du  
Peng Ji  
Lei Fang  
(China)

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Jay N. Meegoda  
Thomas M. Juliano  
Mutiu G. Ayoola  
Sunil Dhar  
(USA)

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#### **Case Histories of World Trade Center Foundation Damage and Repairs, JFK Light Rail Foundations, Second Avenue Subway, Path/Subway Restoration, LIRR East Side Access Project and other NY/NJ local projects**

Maral Papazian  
Bedian  
(USA)

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John S. Horvath  
Thomas Trochalides  
Andrew Burns  
Stanley Merjan  
(USA)

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Kennedy International Airport 11.02

Subal Sarkar  
Amitabha Mukherjee  
Aomar Benslimane  
Caroll Stewart  
(USA)

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John S. Horvath  
Thomas Trochalides  
(USA)

A Half Century of Tapered-Pile Usage at the John F. Kennedy International Airport  
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Aomar Benslimane  
Raymond J. Castelli  
Louis G. Silano  
(USA)

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Tony D. Canale  
James L. Kaufman  
George J. Tamaro  
(USA)

Times Square Redevelopment: A Below Grade View 11.07



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Hiren J. Shah            Treatment 11.08  
Hugh S. Lacy  
(USA)

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Lanmin Wang            The Geotechnical Hazard Induced by 8.1 Earthquake in West Pass of Kunlun  
Zhongxia Yuan         Mountatin in China in 2001 12.02  
Xu Liu  
Yongming Chen  
Weifeng Wang  
(China)

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Anthony S. Crincoli    on Route 139 in Jersey City, New Jersey 12.03  
(USA)

Jennifer L. Williams    Site Effects on Structure Damage and Surface Ground Motion Characteriscits in  
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(USA)

Kyle M. Rollins        Liquefaction Hazard Mitigation by Prefabricated Vertical Drains 12.05  
R. Robert Goughnour  
J. K. S. Anderson  
Stacey F. Wade  
(USA)

A. R. Katti              Estimate the Magnitude and Nature of Distress the Various Structures have Undergone  
(India)                    due to Recent Bhuj Earthquake 12.07

Saripalli                Effect of Earthquakes in Marshy Lands and Alluvial Soils: Case Histories 12.09  
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(India)

R. K. Katti              Nature and Properties of Earthquake Energy and Waves and their Contribution to  
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A. Shapira              Microzonation 12A-4  
M. Gorstein  
M. Kalmanovich  
(Israel)



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B. Ghosh S.P.G. Madabhushi (UK)	Centrifuge Modelling of Dynamic Soil Structure Interaction in Layered and Inhomogeneous Liquefiable Soil 12A-13
Christos Vrettos Stavros Savidis (Germany)	Stone Column Ground Improvement Against Liquefaction for the Preveza-Aktio Immersed Tunnel 12A-14
S. Suresh Babu (India)	Magneto Rheological Dampers – A New Paradigm in Base Isolation Techniques in Earthquake Engineering 12A-15
Satish Pullammanappallil William Honjas John N. Louie (USA)	One-Dimensional Shear Wave Profiling for V30 and NEHRP Soil Classification using the Refraction Microtremor (REMI) Method 12A-16
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Robert Kayen  
Brian Collins  
Gary Carver  
Eric Thompson  
Eric R.S. Moss  
Diane Minasian  
Nicholas Sitar  
(USA)

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