

**C .V.**



**MARC BALLOUZ**

**[www.mballouz.com](http://www.mballouz.com)**

# MARC Y. BALLOUZ

## LEBANON

Int'l Institute for Geotechnics & Materials  
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## USA

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**BEST WAY TO REACH ME**

**OBJECTIVE** Lead & Excel.

**TITLES** ISSMGE Board Member  
Owner & Director, International I.G.M.  
*USA / Lebanon / Nigeria / France / China*  
Professor, Lebanese University

**EDUCATION** Ph.D. in Civil Engineering (Geotech), May 1994, Texas A&M University,  
M.Sc. in Civil Engineering (Geotech), May 1991, Texas A&M University,  
College Station, Texas, U.S.A. GPA : 4.0/4.0  
B.E. in Civil Engineering, July 1987, American University of Beirut, Lebanon.  
Lebanese Baccalaureate Part I (Sc.) 1982 & Part II (Math Elem.) 1983,  
College Notre Dame de Jamhour, Lebanon.

**LANGUAGES** English, French, & Arabic. All well spoken and mastered in reading and writing.

## **FIELD OF EXPERTISE**

Geotechnical Site Investigations	Tunneling & Rock Mechanics
Foundation Design	Seepage & Consolidation
Special Foundation systems	On & Offshore Drilling
Deep Foundations (Piles & Micropiles)	Structure Reliability & Evaluations
Foundations on Expansive Soils	Structural Dynamics/Design
Shoring Systems (Anchoring & Nailing)	Materials & Pavement design
Retaining Systems & Wall Structures	Infrastructures (Roads & Utilities)
Soil Dynamics	Forensics in Civil Eng'g

<b>ENG'G EXPERIENCE</b>	<b>20 Sept, 13</b>	- Invited Lecturer at University of Texas, UT Austin, presenting "From Here to Real" 3 Case Histories & Lessons Learned, Geotech faculty & students
<b>Teaching</b>	<b>2 Dec , 09</b>	- Invited Lecturer at Texas A&M University, presenting "Retaining Wall Failures & Lessons Learned" for Engineering graduate students.
	<b>Sept 08- present</b>	- Professor, Notre Dame University, Loueize, Lebanon. Teaching Deep Foundations & Slope Stability, senior year in Civil Eng'g
	<b>Oct 01-present</b>	- Professor, LU-Lebanese University (BII), Roumieh, Lebanon. Teaching the "Rock Mechanics", "Advanced Foundations" & the " Soil/Structure Interaction" courses, senior year in Civil Eng'g.
	<b>Jan 96-Jan 06</b>	- Ass. Professor, LAU-Lebanese American University, Byblos, Lebanon. Teaching "Soil Mechanics" & "Foundation Engineering". senior year in Civil Eng'g
	<b>Jan 92-May 92</b>	- Lecturer, Texas A&M Univ. Teaching "Soils in Construction" (CVEN 366). Principles of Soils Mechanics and its applications in construction. 4 <sup>th</sup> year students in Construction Science major.
	<b>Sep 91-Dec 91</b>	- Assistant Lecturer, Texas A&M University. Teaching "Introduction to Geotechnical Engineering" (CVEN 365). Geotechnical theories of soils including foundations, soil retention, slope stability, water seepage... 4 <sup>th</sup> year in Civil Engineering major
	<b>Sep 89-May 90</b>	- Teaching Assistant, Texas A&M University. Teaching the Lab of "Introduction to Geotechnical Engineering" (CVEN 365). Laboratory and In-situ testing of soils. 4 <sup>th</sup> year in Civil Engineering major
	<b>Sep 87-Dec 87</b>	- Teaching Assistant, American Univ. of Beirut. Teaching the Lab of "Soil Mechanics" (CE 088). Basic laboratory testing of soils. 3 <sup>rd</sup> year in Civil Engineering major

Mar 97-present

- Owner, and General Manager- International Institute for Geotechnics & Materials (International IGM). A leading company based in LEBANON, with branches in Texas USA, and Lagos NIGERIA. Company has more than 200 employees operating with 5 divisions: *Investigation, Design, Contracting, Research & Computing*. The company has a fully equipped Lab and a sizable fleet of specialized equipment for Piling, Micropiling, Anchoring, Shotcreting, HP Injections, etc... Its reputation was acquired by innovative Design/Built solutions

Ref. Projects in Lebanon – About 80 Design/Build Contracts:

GOODIES (Underpinning an 8 story concrete bldg. to create 4 new basements); TRABAUD (Shoring in tight environment 24m deep), AUST (Bldg underpinning & CFRP strengthning), CREDCO J Towers (Shoring 24m deep); Fouquet tower (Shoring 25m deep), Saifi Attics (Shoring 22m), Zeino II tower (Shoring 16m deep), LABAKI Residences (remediation of 14m high retaining wall failure), Alta Vista tower (Uplifting 1200T 22 stories tower after terrorist bomb) , Dennieh Cable-Stay Bridge & Rock Cliff (Geotech Expertise), Chambre of Commerce-Tripoli (Shoring 14m deep), Justice Palace- Tripoli (Shoring 14m deep), Akkar Tunnels (Piling with Top/Down Technique), Sanita Factory (Innovative Micropiling Foundation Solution + Complete Concrete Construction), Harissa Highway (Shoring, Permanent Shotcrete Nailed Walls + Construction of 4 Bridges) , Hilton Hotel (Shoring with Special Dynamic Anchors to resist Implosion), Lebanese Order of Physicians (Shoring 30m deep with 15m below water level) , Levant Hospital (Shoring 22m deep), Sagesse University (Shoring 12m deep with nailed shotcrete), Zahrani Interchange (Piling), Underpinning of Wehbeh bldg (using Micropiles), etc...

Ref. Projects in USA :

Indevco Factory : Foundation Design in swamp area (Georgia- 2004)  
Freeman Residence: Slope Stability Analyses (Waco Texas, 2006)  
SPINAKER 80 MW Windfarm: Geotech & Civil Evaluation(Randaldo, TX, 2009)  
SPINAKER 86 MW Windfarm: Geotech & Civil Evaluations (Oilton, TX, 2009)  
RRE Solar Farm: Site Assessment, Geotech & Civil Evaluations (Manor, TX, 2010)  
FOTOWATIO Solar Farm: Foundation Design Evaluation (TX, 2010)  
SEABREEZE Wind Farm: Soil Exploration & Foundation Design ( TX, 2010)  
COMMANCHE Wind & Solar Farm: Site + Sodar Evaluation (TX, 2010)  
CHOCTAW Solar Farm: Site Evaluation (TX, 2010)  
WHITE RANCH WindFarm: Site Evaluation (TX, 2010)  
STARWOOD Solar Farm- Geotechnical Exploration & Site Assesment (AZ 2011)  
STARWOOD Solar Farm- Foundation Design & Cost Optimization (AZ 2011)  
THE BACKYARD -Structural&Geotech Evaluation ofOold Commercial Bldg (TX 2012)  
455W19 Tower: Forensic Evaluation of a Leaning Building (New York- 2016)

Ref. Projects in NIGERIA :

YF Resid. Complex- 8 GERARD: Piling Analysis & expertise ( Lagos, 2004)  
ABOTO Bridge: Piling expertise, Analysis & Remediation ( Ondo, 2005),  
AMASOMA Bridge: Detailed Structural and Pile design of all piers (Ondo- 2006)  
Okbia/Nembah Highway: Evaluation ,Pavemt & Bridges (Ondo-2006)  
Ondo Highway: Analysis & Remediation to Embankment Failure (Ondo- 2006)  
Ondo Phase II + Ughelli Bridge Dualization (Ondo- 2007)  
BANANA BAY Towers: Piling expertise & Analysis ( Lagos, 2007)  
LEKKI Mosque: Pile groups for 45m high minarets (Lagos,2007)  
GLOVER 13: Design/Build Piling Foundation for residential tower (Lagos, 2008)  
BANANA RESID II: Design/Build Piling Foundation for resid. Tower (Lagos, 2008)  
ABENOMA Bridge: Evaluation of bridge failure (Port Hartcourt, 2009)  
PETROSTAR Fuel: Remediation design of Jetty Failure (Port Hartcourt, 2009)  
GERARD 6: Design/Build Piling Foundation for residential tower (Lagos, 2009)  
NIPOST Lagos: Design/Build Piling Foundation for residential tower (Lagos, 2009)

**Consulting &  
Execution  
(cont'd)**

**Mar 97-present  
CONTINUED**

Ref. Projects in NIGERIA (continued):

GERARD 46: Design/Build Piling Foundation for residential tower (Lagos, 2010)  
MERIDIAN HOTEL: Design/Build Piling Foundation Hotel extension (Lagos, 2011)  
GERARD 21: Design/Build Piling Foundation for residential tower (Lagos, 2011)  
ATLANTIC TOWERS: Design/Build Piling Foundation for office bldg. (Lagos, 2012)  
OGUDU ISLAND: Design of Dredging/Subsidence control (Lagos 2012)  
OGUDU MALL: Design of Micropiling Foundation with Downdrag (Lagos 2013)  
TEMPLE 16: Design/Build Shoring & Foundation Systems (Lagos 2013)  
MADINA OFF TOWER: Design Foundation System (Lagos 2013)  
CRYSTAL TOWER: Design Shoring & Foundation Systems (Lagos 2014)  
EKOATLANTIC LST: Design Shoring & Foundation High Rise Tower (Lagos 2014)  
LE BUREAU: Design Shoring & Foundation Systems (Lagos 2014)  
EKOATLANTIC SEA WALL- Design Review of Canal Entrance (Lagos 2015)

Other International Consultancies:

Indevco Factory: Footings for Dynamic Generators (**Saudi Arabia**- 2003)  
Sheikh Allah Mall & Towers: Soil & Piling expertise (**Iraq**- Irbil, 2004)  
Homan Village: Foundation Systems for 50 villas (**Djibouti**- 2006)  
Pointe du Hoc: Analysis & Expertise on Erosion & Cliff Stability (**France**- 2006)  
Audi Bank: Geotech & Structural expertise on old bldg (**Syria**- Halab, 2006)  
Soma 120MW Windfarm: Site Assessment, Civil Works (**Turkey**- Izmir, 07)  
Alape Bridge: Complete Structural and Pile design (**Nigeria** - 2007)  
JEDDAH Sewage Network: Design & Analysis of 30m deep shafts (**KSA**- Jeddah,07)  
Masri Eng'g: Geotech & shoring expertise (**Emirates**- Abu Dahbi ,2008)  
PALIN Dams: Design Review for 2 DOD Dams (**Afghanistan**, 2009)  
DAHABSHIL Bank: Soil & Site Evaluation for Office tower (**Djibouti** 2011)  
QATAR RAYYAN ROAD: Design shoring for 3 underpasses (**Qatar**-2012)  
COMMON SEAWATER SUPPLY: Peer review of geotech studies (**Iraq** 2014/15)  
HILTON Hotel: Design of Shoring & Pile Foundation System (**Cameroon**-2015)

- Jan 14- present** - Consultant for RCF Foundation & Piling company in Lagos Nigeria. RCF is specialized in deep piling works, utilizing both CFA & Bentonite drilling technologies
- Apr 08 -present** - Partner, & Director, IGM/Nigeria. This company is a branch of Int'l IGM, and a child company to a large group **YF construction** based in Lagos , Nigeria. IGM/Nigeria is specialized in deep piling works, utilizing both CFA & Bentonite drilling technologies.
- Aug 96-Feb 97** - Owner, Partner, BKS Consultants. Establishing a new consulting firm that offers professional geotechnical services. Expertise in Non Destructive Testing (NDT) of Foundations.
- Feb 95-Jan 97** - Project Manager, with Entreprise E. Acar, Residential center with 35 apartments, 4m\$ turn key project.  
- Site Manager, Entreprise E. Acar. Main contractor of the Jounieh-Bkerke-Harissa highway. 22m\$ project with works involving, but not limited to: 2 reinforced concrete bridges, 2 cut & fill tunnels, 6km cantilever retaining walls, excavations, drainage systems, 12km pavement with the entire infrastructure
- Mar 94-Jan96** - Project Engineer, ATSER Eng'g Company, Houston TEXAS USA. Design, consulting, and inspection of many residential and industrial projects. Studies included without being limited to: site investigations, trenching, foundations, slope stability, retaining walls, with complete geotech reports.  
- Manager of Software Development Group, ATSER. Development of computer software for engineering and other applications.
- Mar 92** - Pressuremeter testing with Briaud Engineers, 80m. underground at the Superconducting Super-Collider project in Waxahachie, Texas.1992
- Jun 87-Aug 88** - Construction management with Entreprise E.Acar, General Contractors.

	<b>Mar 97-present</b>	- Applied research with IGM research Division. Energy Geotechnics, Monitoring data, Development of ISST, Supervision of Academic research projects at UL and LAU. Full scale testing on actual projects like “Micropiles in rock” and “Behavior of Anchors under Dynamic Loads”.
<b>Research &amp; Continuing Education</b>	<b>Aug 2016</b>	Keynote Lecturer & ISSMGE Board meeting – <i>Vth Young Geotechnical Engineer Conference</i> , August 9 to 13, in Kumasi, Ghana
	<b>Feb 2016</b>	- ISSMGE Board meeting – <i>Geotechnical &amp; Structural Engineering Congress</i> , in Phoenix Arizona, Feb 14 to 17, 2016, USA
	<b>Sept 2015</b>	- ISSMGE Board meeting - XVI ECSMGE conference Edinburgh, Scotland 2015
	<b>Feb 2015</b>	- ISSMGE Board meeting– <i>Geomechanics &amp; Human Influence</i> conference in Wellington, 23/24 Sept , 2015 , New Zealand
	<b>Sept 2014</b>	- ISSMGE Board meeting - <i>XVII Brazilian Congress of Soil Mechanics and Geotechnical Engineering</i> – Goiania, Brazil
	<b>March 2014</b>	- ISSMGE Board meeting – <i>Rankine Lecture</i> – Imperial College – London UK
	<b>May 2011</b>	- Attendee & IGM Exhibitor, booth 2986, AWEA Windpower Conference, Anaheim California, May 22, 2011
	<b>March 2011</b>	- Attendee & IGM Exhibitor, booth 521, GEOFRONTIERS Conference, Dallas Texas, March 13 to 16, 2011
	<b>June 2010</b>	- Attendee GEO-MOS Conference, Geotechnical Challenges in Megacities, Moscow , June 6, 2010
	<b>April 2010</b>	- REMITUF™ “Reticulated Micropile Turbine Foundations” an ongoing research & product trademark development targeting the Windfarm industry
	<b>Oct, 2009</b>	- Attendee at the ISSMGE’ <i>XVII<sup>th</sup> Int’l Conference on Soil Mechanics &amp; Geotechnical Engineering</i> , Alexandria, Oct. 5-9, 2009
	<b>June, 2007</b>	- Attendee & paper presentation at <i>First North American Landslide Conference</i> , Vail, Colorado, USA, June 4-8, 2007
	<b>Nov, 2006</b>	- Workshop on <b>PLAXIS</b> Finite Element software for Soil & Rock Mechanics, BAT Concept at Grand Gabriel Hotel, Adonis, 2006
	<b>Sept. 2005</b>	- Attendee & Speaker at <i>Tenth Multidisciplinary Conference on Sinkholes and the Engineering and Environmental Impact of Karst TM</i> , San Antonio, Texas USA, Sept. 24-28, 2005
	<b>May 2004</b>	- Workshop on <b>PLAXIS</b> Finite Element software for Soil & Rock Mechanics, Lebanese Order of Engineers, Beirut, 2004
	<b>May 2004</b>	- Attendee and Exhibitor at <i>GeoBeirut, Int’l Conference of Geotechnical Engineering</i> , Beirut, May19-22, 2004
	<b>April 2004</b>	- Attendee of the <i>Vth Int’l Conference on Case Histories in Geotechnical Engineering</i> , New York, April 13-17, 2004
	<b>May 2002</b>	- Attendee, Presenter & Publisher at <i>JLG Journee Libanaise de Geotechnique</i> , Lebanese University, Roumieh, May 8, 2002
	<b>Aug 2001</b>	- Attendee of the <i>XVth Int’l Conference on Soil Mechanics &amp; Geotechnical Engineering</i> , Istanbul, Aug 27-31, 2001
	<b>Nov. 2000</b>	- Committee Member, Lebanese Order of Engineers, for preparing the new guidelines for geotechnical requirements in Lebanon
<b>Jan 94</b>	- Research Project Manager, “WAK tests (NDT) on five full scale footings on sand”, <i>Settlement 94 ASCE Specialty Conference</i> , Texas A&M, June 16, 94	
<b>June 92-Dec 93</b>	- Research Assistant, Ph.D Dissertation; with Prof. J.L.Briaud, Texas A&M University. Development of a new non-destructive test LATWAK, to predict the lateral stiffness of piles.	
<b>Jul 92-Sep 93</b>	- LATWAK Tests and Lateral Static Load Tests on 22 full scale piles (different types & shapes) in Texas, New Orleans, and Edmonton Canada	
<b>Jan 92</b>	- Speaker at the Transportation Research Board, <b>TRB</b> , 71 <sup>st</sup> . Annual Meeting, session 174, January 13, 1992.	
<b>Nov 90-Aug 91</b>	- Research Assistant, Texas A&M University. Construction, and static and dynamic testing of 9 drilled concrete piles at the Texas A&M National Geotech Sites.	
<b>Jan 89-May 91</b>	- Research Assistant, M.Sc Thesis with Prof. I. Thompson @ Texas A&M University. New computational method to design trench supports	
<b>GENERAL</b>	<b>Sept 13- present</b>	ISSMGE Board Member (Int’l Society for Soil Mechanics & Geotechnical Engineering)
	<b>Feb 12-Sept 13</b>	Chair – Public Relations Committee, ISSMGE
	<b>Sept 09-Feb 12</b>	Vice-Chair of Innovation & Development Board Committee, ISSMGE
	<b>Since June.10</b>	Member of the Geo-Institute (US National Geotechnical Society) & ASCE
	<b>Since Oct. 09</b>	Member of Lebanese Order of Engineers & Architects
	<b>Since Sept 94</b>	Jury at the Lebanese University, Civil Engineering graduating project
<b>Since 1996</b>	Jury at the AUST , Engineering Final Projects (Beirut Lebanon)	
<b>Aug 94</b>	Recipient of ATSER Technical Achievement Award (Houston TX)	

<b>Since Mar 93</b>	Member of <i>Phi Kappa Phi</i> , $\Phi\Kappa\Phi$ , Honor Society
<b>Since Feb 93</b>	Member of A.S.C.E. American Society of Civil Engineers
<b>Since Jan 92</b>	Member of ALPA, Associat. of Lebanese Professionals in America
<b>Jan 91-Jan 93</b>	Geotech Graduate Student Representative at Texas A&M University
<b>1976 - present</b>	Member of Lebanese Forces Party
<b>March 86</b>	First Aid training with the Lebanese Red Cross

<b>COMPUTER Skills</b>	<b>Programming Systems</b>	Extensive knowledge with products shown below Windows VISTA, XP, Internet, DOS
	<b>Drawing</b>	Autocad, Corel Draw, and Paintbrush
	<b>Word-processing</b>	Microsoft Word
	<b>Spreadsheets</b>	Microsoft Excel
	<b>Engineering</b>	PLAXIS, GROUPV7, RIDO, TALREN, SNAILZ, SODA, PRIMAVERA, (+list below) Any software is welcome ...

<b>Developed Software</b>	<b>LATWAK</b>	Dynamic simulation and stiffness of laterally loaded piles
	<b>TRENCH 1.0</b>	Design of braced excavations
	<b>WELPLAN</b>	Planning of horizontal and directional Drilling for deep wells
	<b>GRAN</b>	Design of Ground Anchors
	<b>SLABON 1.0</b>	Design of Prestressed Slab-on-Grade foundations
<b>MBDH</b>	Macros Excel for designing structural and geotechnical elements	

<b>PUBLICATIONS &amp; REPORTS</b>	<b>Aug 13</b>	“What is Geotechnical Engineering” highest traffic on internet search engines ! youtube video: <a href="http://www.youtube.com/watch?v=uEIPkghqJw">http://www.youtube.com/watch?v=uEIPkghqJw</a> Internet website: <a href="http://www.whatisgeotech.org">www.whatisgeotech.org</a>
	<b>April 13</b>	-“The Hidden Treasures of Geotechnics”, <i>Science Omega Europe</i> magazine, issue 1, United Kingdom, April 2013
	<b>June 07</b>	- “How the ‘Bireh’ Landslide Quit Moving”, technical paper, ASCE Special Publication, <i>First North American Landslide Conference</i> , Vail, Colorado, USA, June 3-8, 2007
	<b>Sept. 05</b>	- “Micropiling in Karstic Rock: New CMFF Foundation Solution Applied at the Sanita Factory”, technical paper, ASCE Special Publication, <i>Tenth Multidisciplinary Conference on Sinkholes and the Engineering and Environmental Impact of Karst TM</i> , San Antonio, Sept. 24-28, 2005
	<b>April 03</b>	- “Improving Safety in Rock Engineering by Avoiding Common Mistakes”, paper, <i>Al Mouhandess</i> , the official semestrial magazine of the Lebanese Order of Engineers, Beirut, Lebanon
	<b>Apr 02</b>	- “ISST: In-Situ Shear Test for Soil Investigations”, technical paper, <i>JLG Journee Libanaise de Geotechnique</i> , Lebanese Univ., Roumieh, May 8, 2002
	<b>Mar 02</b>	- “Structural Evaluation and Strengthening Strategy for a Reinforced Concrete Commercial/Residential Complex in Northern Beirut”, Proceedings of the RTST 2002 Int’l Conference, Leb.Amer.Univ, March 4-6, 2002, Beirut, Lebanon
	<b>Feb 02</b>	- “Defects and Length Predictions by NDT Methods for 9 Bored Piles”, technical paper, <i>ASCE Special Publication: International Deep Foundations Congress</i> , Orlando , Feb 2002
	<b>Jul 00</b>	- “Static Capacity Prediction by Dynamic Methods for Three Bored Piles”, technical paper, <i>ASCE Geotechnical Journal</i> , Jul 2000
	<b>Jun 96</b>	- "LATWAK: A Test to Predict the Lateral Stiffness of Piles", a technical paper, <i>ASCE Geotechnical Journal</i> , June 1996.
	<b>May 94</b>	- "LATWAK: An Impact Test to Predict the Lateral Static Stiffness of Piles", <i>Ph.D. Dissertation</i> , Civil Engineering, Texas A&M University.
	<b>Jan 95</b>	- "WAK Tests On Five Full-Scale Footings in Sand", <i>Research Report</i> , Civil Engineering, Texas A&M University.
	<b>Sep 93</b>	- "LATWAK, User's Manual" <i>Computer Program Manual</i> , Civil Engineering, Texas A&M University.
	<b>Aug 93</b>	- "TRENCH-1.0-, User's Manual" <i>Computer Program Manual</i> , 2 <sup>nd</sup> Edition, Civil Engineering, Texas A&M University
	<b>Aug 91</b>	- "Dynamic and Static Testing of Nine Drilled Shafts at Texas A&M University, Riverside Campus", <i>Research Report</i> , Civil Engineering, Texas A&M University and TRB January 1992.
<b>May 91</b>	- "Design of Trench Supports", <i>M.Sc. Thesis</i> , Civil Engineering, Texas A&M University.	

***ACTIVITIES*** Sports (Crossfit training, soccer, skiing,...), Outdoors (Boating, Paragliding, Rappelling, Biking, Hiking, Hunting, Kayaking), Computer Programming, Reading, ... listening to Soft music & classic Rock

***Birth & Nationality*** Born July 1965 - Lebanese & US citizen

***M.Status*** Married since 1993 to Hala (M.Sc. Elect.Engr), Owner & president of EPE Electric Power Engineers- [www.epeconsulting.com](http://www.epeconsulting.com)

Raising 2 Beautiful kids:

Ronald (96) first year engineering at UT Austin; and

Christina (98) cruising through high school successfully.

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