
Curriculum vitae

Rui Pedro Carrilho Gomes

July, 2017

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1. Personal data

Date and place birth: 18th October 1973, Viseu (Portugal)

Married, 2 sons (6 years and 20 months)

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Scopus Author ID	15836689100 https://www.scopus.com/authid/detail.uri?authorId=15836689100
ORCID	http://orcid.org/0000-0002-7794-5075
Google Scholar	https://scholar.google.pt/citations?user=Ehi7D9EAAAAJ&hl=pt-PT

Language skills	Writing	Conversation	Reading
Portuguese	Mother tongue		
English	Fluent	Fluent	Fluent
French	Good	Good	Fluent

2. Education

Year	Academic degree	Institution	Classification
2009	PhD in Civil Engineering	Instituto Superior Técnico Universidade de Lisboa	Very good
2000	MSc. In Structural Engineering (2 years)	Instituto Superior Técnico Universidade de Lisboa	Approved
1996	Degree in Civil Engineering (5 years)	Instituto Superior Técnico Universidade de Lisboa	14/20

3. Positions held

3.1. Academic experience

Period	Position	Institution
2009 – to date	Assistant Professor	Geotechnical division, Civil Eng. Dept.,
2008 – 2009	Assistant	Instituto Superior Técnico
2000 – 2008	Adjunct Professor	Barreiro School of Technology, Polytechnic Institute of Setúbal

3.2. Professional experience

Period	Position	Private companies
2000 – to date	Consultant of geotechnics	Safre, Cenor PRPC, Ferca, Factorial, Pecnon, Synege, Geoplano, Civiconcebe
1998 - 2000	Geotechnical design engineer	Cenor

3.3. Memberships

Association	Member
Portuguese Association of Engineers (Ordem dos Engenheiros)	Effective member
SPG - Portuguese Society for Geotechnics	Member
SPES – Portuguese Society for Earthquake Engineering - Board member from 2000 to 2013	Board Member from 2000 to 2013 (4 mandates)
ISSMGE - Technical Committees: - TC203 - Earthquake Geotechnical Engineering and Associated Problems, International Society for Soil Mechanics and Geotechnical Engineering; - TC204 - Underground Construction in Soft Ground, International Society for Soil Mechanics and Geotechnical Engineering.	Member (2010/13) Correspondent member (2014/17) Member (2014/17)
APIST - Staff Association of Instituto Superior Técnico	Vice-President of the General Assembly (2015/16)
ICIST - Institute of Structural Engineering, Territory and Construction	Vice-President (2017/18)

4. Teaching activity

4.1. Courses

Degree / course	Academic year / duration	Responsability
Integrated Master in Civil Engineering (IST)		
Soil and Rock Mechanics - MSR	3 rd year	
Analysis of Geotechnical Structures - AEG	4 th year	
Geotechnical Works - OG	4 th year	2009/10 to 11/12
Geotechnical Earthquake Engineering - ESG	5 th year - specialization in geotechnics	since 2009/10
Tunnels - T	5 th year - specialization in geotechnics	
Degree in Industrial Engineering and Management (IST)		
Elements of Civil Engineering – geotechnics – EEC;	2 nd year	
Advanced Specialization Diploma (DEA) in Structural Engineering (IST)		
Foundations of Structures – FE	25 hours	2009
Master in Structural Engineering, Universidade Agostinho Neto, Luanda, Angola		
Foundations of Structures and Retaining Walls	30 hours	2014

The courses ESG and T are lectured in English.

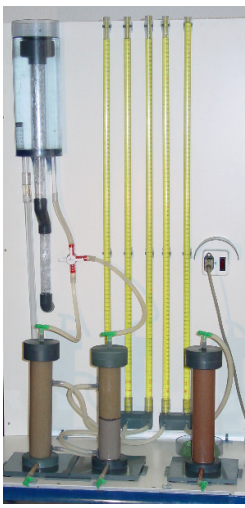
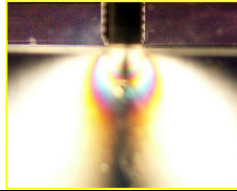

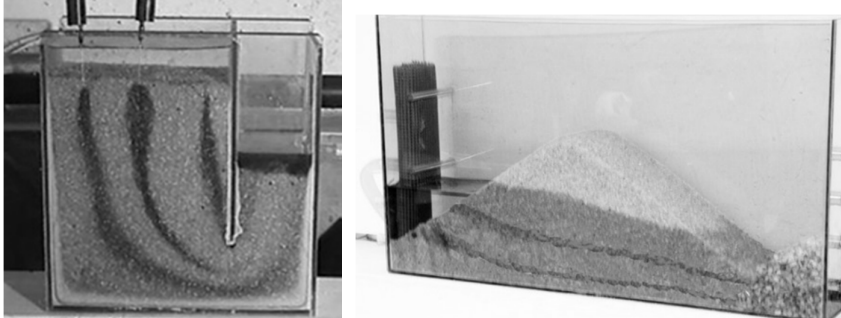
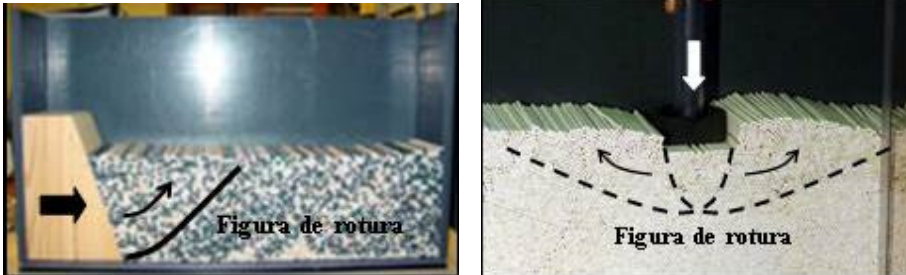
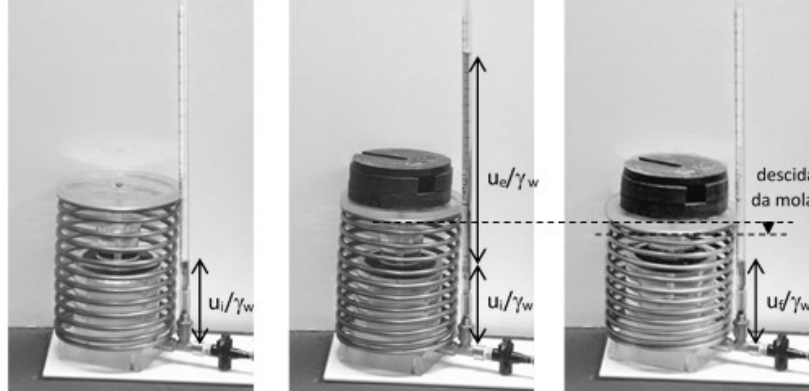
The next table summarises the courses lectured per semester, with indication of the workload, class type (P – Practical; T - Theoretical), number of students and global satisfaction with the lecturer (QUC) attributed by the students (scale 1 to 9, ^(ND) - Unavailable; ⁽¹⁾ - Classification not attributed due to the low number of answers.)

Year / semester	Course	Class type	Workload	No. students	lecturer QUC (scale 1 to 9)
2007/08 - 1°	OG	P	5.0	164	(ND)
2008/09 - 1°	AEG	P	6	384	(ND)
	ESG	T	2.0	10	(ND)
	ESG	P	1.5	10	(ND)
	FE (DEA)	T	1.5	8	(ND)
2008/09 - 2°	MSR	P	3.0	267	(ND)
	OG	T	1.3	266	(ND)
	OG	P	1.0	266	(ND)
2009/10 - 1°	ESG	T	2.0	15	6.6
	ESG	P	1.5	15	6.6
	AEG	P	3.0	307	7.0/8.6
2009/10 - 2°	OG	T	2.6	273	6.0
	OG	P	1.0	273	6.3
	MSR	P	3.0	276	4.4
2010/11 - 1°	ESG	T	2.0	23	7.8
	ESG	P	1.5	23	(^l)
	AEG	P	4.5	322	7.9
2010/11 - 2°	OG	T	1.3	303	8.0
	OG	P	2.9	303	(^l)
	MSR	P	3.9	392	8.1
2011/12 - 1°	ESG	T	2.0	7	(^l)
	ESG	P	1.5	7	(^l)
	AEG	T	3.0	348	8.0
	AEG	P	1.5	348	7.6
2011/12 - 2°	MSR	P	1.5	410	7.9
	OG	T	2.6	317	7.6
	OG	P	1.0	317	8.1
2012/13 - 1°	AEG	P	1.5	352	8.3
	ESG	T	3.0	28	8.5
	ESG	P	1.5	28	(^l)
2012/13 - 2°	MSR	P	3.0	407	7.9
	OG	T	1.3	339	7.0
	T	T/P	1.2	27	8.4
2013/14 - 1°	AEG	P	1.5	369	(^l)
	ESG	T	3.0	21	(^l)
	ESG	P	1.5	21	(^l)
2013/14 - 2°	MSR	P	4.5	391	8.0
	OG	T	1.3	343	(^l)
	T	T/P	1.2	23	(^l)
2014/15 - 1°	AEG	P	3.0	314	8.38
	ESG	T	2.0	21	8.75
	ESG	P	1.0	21	8.75
2014/15 - 2°	MSR	P	4.5	354	7.88
	T	T/P	0.9	16	(^l)
2015/16 - 1°	AEG	P	1.5	284	(^l)
	ESG	T	3.0	23	(^l)
	ESG	P	1.5	23	(^l)
2015/16 - 2°	MSR	P	3.0	283	(ND)
	T	T/P	1.3	18	(ND)
	EEC	T/P	1.5	123	(ND)
2016/17 - 1°	AEG	P	1.5	222	8.8
	ESG	T	3.0	8	(^l)
	ESG	P	1.5	8	(^l)
	T	T/P	1.3	2	(^l)
2016/17 - 2°	Sabbatical leave				

4.2. Class notes

Degree / course	Content
<hr/>	
Integrated master in Civil Engineering (IST)	
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Geotechnical Works (2012)	Flexible retaining structures.
Geotechnical Earthquake Engineering (2009)	Description of the seismic motion. Modal analysis and response spectrum analysis. Seismic code: Eurocode 8 part 1 and part 5. Application of Eurocode 8 part 5. Liquefaction. Shallow foundations. Slopes. Topographic effects.
Tunnels (2013)	Phenomenology of shallow tunnels. Preliminary analysis: empirical and simplified methods. Numerical simulation of tunnel construction.
Construction Pathology and Rehabilitation (2012)	Foundations pathology and reinforcement.
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Advanced Specialization Diploma (DEA) in Structural Engineering (IST)	
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Foundations of Structures (2009)	Ground improvement: replacement, densification, injection, mixture, inclusions.
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Master in Structural Engineering, Universidade Agostinho Neto, Luanda, Angola	
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Foundations of Structures and Retaining Walls (2014)	Current laboratory tests. Geology of Luanda. Revisions of the mechanical behaviour of the soil. Field tests. Correlations. Shallow foundations in soils and rocks. Deep foundations: vertical loads, trasversal loads and pile groups. Strengthening and ground improvement. Retaining walls: types, behaviour, construction sequence, design. Instrumentation of geotechnical works. Observational method.

4.3. Educational equipment

<p>Permeameter bench</p> 	<p>Analysis of the stress field through the photoelasticity technique.</p> 
	<p>Liquefaction</p> 
<p>Unconfined flow: retaining wall and dam.</p> 	
<p>Colapse mechanism in granular material: retaining wall and shallow foundation</p> 	
<p>One-dimensional consolidation model of Terzaghi</p> 	

5. Students supervision

5.1. PhD thesis

In progress:

No.	Student	Start	Expected	Instit.	Title	Other supervisors
3	Fátima Gouveia	2012	Discussion 24th July 2017	IST	Dynamic characterization of the soil in urban areas under confined conditions.	Isabel Figueiredo Lopes (IST)
2	Luís Miranda	2014	2018	IST	Liquefaction Mitigation Measures in Immersed Tunnel Foundations.	Laura Caldeira (LNEC), João Bilé Serra (LNEC)
1	Md. Aniszunnaman	2014	2019	IST	Numerical modelling of the cyclic behaviour of soils using soft-computing techniques.	Joaquim Dias (IST)

5.2. MSc thesis (concluded)

No.	Student	Grade	Instit.	Year	Title	Supervisor
23	João Belo	17/20	IST	2017	Numerical Modelling of the excavation of shafts	(-)
22	Giulia Mazzocchi	104/110	UPavia (Italy)	2016	Risk Assessment of Soil Liquefaction across Southern Europe	Carlo Lai (UPavia)
21	Sandra Reis	17/20	IST	2016	Influence of backfill slope on the dynamic response of flexible retaining walls	Baldomiro Xavier (TD)
20	Rodrigo Baptista	17/20	IST	2016	Ground Investigation in Urban Environment Based on Seismic Methods: Analysis of the influence of the boundary conditions	Isabel Lopes (IST)
19	Hugo Renda	18/20	IST	2016	Damage to masonry buildings induced by ground displacements. Study of a Pombalino building located at Lisbon downtown	Rita Bento (IST)
18	Joana Chouriço	17/20	IST	2015	Seismic fragility curves for caisson-type quay walls	A. Trigo Teixeira (IST)
17	José Rodrigues	18/20	IST	2015	Ground Motion Prediction Equations for Mainland Portugal for different ground types	Alexandra Carvalho (LNEC)

16	Bárbara Peniche	18/20	IST	2015	Use of seismic methods for 2D soil dynamic characterization	Isabel Lopes (IST)
15	Ana Abreu	17/20	IST	2015	Geological and geotechnical characterization of urban areas using seismic methods	Isabel Lopes (IST)
14	Ana Delfim	16/20	IST	2014	Study of the seismic site effects at Lisbon metropolitan area	Alexandra Carvalho (LNEC)
13	Sónia Pereira	15/20	IST	2014	Technical Control of geotechnical risk in buildings: Geotechnical investigation	Nuno Almeida (IST)
12	Catarina Vaz	17/20	IST	2013	“Irregularities” influence on underground structures seismic behaviour	(-)
11	Maria Gomes	16/20	IST	2013	Seismic Behaviour of Underground Structures Built from Shafts	(-)
10	Teresa Ferreira	15/20	IST	2013	Two-dimensional seismic response of Lisbon’s downtown	Isabel Lopes (IST)
9	António Abreu	17/20	IST	2013	Effect of nonlinear behavior in soil-structure interaction: application to tunnels	(-)
8	Filipe Rodrigues	15/20	IST	2013	Measurement and modeling of vibrations induced by the subway	Isabel Lopes (IST)
7	Telmo Antunes	17/20	IST	2012	Rehabilitation of foundations of old buildings using micropiles	João Ferreira (IST)
6	David Brito	17/20	IST	2012	Collapse analysis of the Daikai station in Kobe Metropolitan	(-)
5	Tiago Henrique	15/20	IST	2012	Performance of a ground anchored bored pile wall	João Ferreira (IST)
4	Francisco Marques	19/20	IST	2011	Coimbra sand - Influence of non-plastic fines in liquefaction resistance	Jaime Santos (IST)
3	Fátima Gouveia	18/20	IST	2011	The influence of geologic-geotechnical characteristics on site effects	Isabel Lopes (IST)
2	João Santos	17/20	IST	2011	Behavior Analysis of a Berlin-type Retaining Wall	João Ferreira (IST)
1	Diogo Torcato	19/20	IST	2010	Seismic behaviour of shallow tunnels in stratified ground	Jaime Santos (IST)

6. Publications

6.1 Thesis

[2] Gomes, R.C., 2009. Numerical modelling of the seismic response of the ground and circular tunnels. PhD thesis in Civil Engineering, Instituto Superior Técnico, Universidade de Lisboa (in Portuguese)

[1] Gomes, R.C., 2000. Behaviour of underground structures under seismic actions. MSc thesis in Structural Engineering, Instituto Superior Técnico, Universidade de Lisboa (in Portuguese)

6.2 Books

Editor:

LiMo: Lisbon in Motion – Risk Assessment, Rehabilitation, Urban Plan. Alexandre A. Costa, Mónica Amaral Ferreira, Alexandra Carvalho, Cristina Oliveira, Isabel Lopes and Rui Carrilho Gomes (Eds.) ISBN 978-989-20-5085-0, November 2014.

Autor:

J. de Brito, J. D. Silvestre, **R.C. Gomes**, Technology of Retaining Walls and Foundations (aprox. 400 pages, 28 chapters), Collection: Building Construction, IST Press (in Portuguese)

Under final revision by IST Press.

6.3 Chapters in books

[1] A Carvalho, RC Gomes, I Lopes, S Vilanova, Chapter 2. Seismology and Site Effects: Methodologies and Data for Participants. LiMo: Lisbon in Motion – Risk Assessment, Rehabilitation, Urban Plan. Alexandre A. Costa, Mónica Amaral Ferreira, Alexandra Carvalho, Cristina Oliveira, Isabel Lopes e Rui Carrilho Gomes (Eds.) ISBN 978-989-20-5085-0; Novembro 2014.

6.4. Papers in international scientific periodicals with referee

[9] Renda, H., Bento, R. and Gomes, R.C., 2016. ‘Impact of ground movements on the seismic performance of old heritage buildings’, Int. J. Earthquake and Impact Engineering, Vol. 1, No. 4, pp.360–376.

[8] Gouveia, F., Lopes, I., Gomes, R.C., 2016. Deeper VS profile from joint analysis of Rayleigh wave data. Engineering Geology, vol. 202, pp. 85–98. (Impact Factor: 2.196)

[7] Gomes, R.C., Santos, J.A., Modaressi-Farahmand Razavi, A., Lopez-Caballero, F., 2016. Validation of a Strategy to Predict Secant Shear Modulus and Damping of Soils with an Elastoplastic Model. KSCE Journal of Civil Engineering, vol. 20(2):609-622 (Impact Factor: 0.600)

- [6] Gomes, R.C., Gouveia, F., Torcato, D., Santos, J., 2015. Seismic response of shallow circular tunnels in two-layered ground. *Soil Dynamics and Earthquake Engineering*, 75, pp. 37–43. (Impact Factor: 1.481)
- [5] Lopes, I.F.; Santos, J.A.; Gomes, R.C, 2014. VS profile: measured vs empirical correlations. A Lower Tagus river valley example. *Bulletin of Engineering Geology and the Environment*, vol.73, pp.1127–1139. (Impact Factor: 1.252)
- [4] Gomes, R.C.; Lopes, I., 2014. How the response spectrum of non-liquefied loose-to-medium sand deposits is affected by the groundwater level. *Computers and Geotechnics*,
- [3] Gomes R.C. 2014. Numerical simulation of the seismic response of tunnels in sand with an elastoplastic model. *Acta Geotechnica*, Vol.9, pp.613–629. (Impact Factor: 2.426)
- [2] Gomes R.C. 2013. Effect of stress disturbance induced by construction on the seismic response of shallow bored tunnels. *Computers and Geotechnics*, Vol. 49, pp. 338-351. (Impact Factor: 1.705)
- [1] Gomes, R.C., Santos, J.A., Oliveira, C.S., 2006. Design spectrum-compatible time histories for numerical analysis: generation, correction and selection. *Journal of Earthquake Engineering*, Vol. 10, No. 6, pp.843-865. (Impact Factor: 0.922)

6.5. Citations in Scopus journals

Paper	Citations
[7]	1. Montoya-Noguera, S., Lopez-Caballero, F. 2016. Effect of coupling excess pore pressure and deformation on nonlinear seismic soil response. <i>Acta Geotechnica</i> , vol.11 (1), pp.191-207.
[6]	1. Lin, K.C., Hung, H.H., Yang, J.P., Yang, Y.B., 2016. Seismic analysis of underground tunnels by the 2.5D finite/infinite element approach. <i>Soil Dynamics and Earthquake Engineering</i> , Volume 85, June 2016, Pages 31–43
[3]	5. Tsinidis, G., Ptilakis, K., Anagnostopoulos, C., 2016. Circular tunnels in sand: dynamic response and efficiency of seismic analysis methods at extreme lining flexibilities. <i>Bulletin of Earthquake Engineering</i> , Volume 14, Issue 10, pp 2903–2929. 4. Moshirabadi, S., Soltani, M., Maekawa, K., 2015. Seismic interaction of underground RC ducts and neighboring bridge piers in liquefiable soil Foundation. <i>Acta Geotechnica</i> , Vol.10, Issue 6, pp 761–780. 3. Guoxing, C., Su, C., Xi, Z., Xiuli, D., Chengzhi, QI, Zhihua, W., 2015. Shaking-table tests and numerical simulations on a subway structure in soft soil. <i>Soil Dynamics and Earthquake Engineering</i> , Volume 76, Pages 13–28. 2. Tsinidis, G., Ptilakis, K., Madabhushi, G., Heron, C., 2015. Dynamic response of flexible square tunnels: centrifuge testing and validation of existing design methodologies. <i>Géotechnique</i> , Volume 65, Number 5, Page 401. 1. Bilotta, E., Lanzano, G., Gopal Madabhushi, S. P., Silvestri, F., 2014. A numerical Round Robin on tunnels under seismic actions. <i>Acta Geotechnica</i> 9:563–579.
[2]	9. Abate, G., Massimino, M.R., Maugeri, M., 2015. Numerical modelling of centrifuge tests on tunnel–soil systems. <i>Bulletin of Earthquake Engineering</i> , Volume 13, Issue 7, pp 1927–1951.

8. Yan, Q.-X., Yao, C.-F., Yang, W.-B., He, C., Geng, P., 2015. An Improved Numerical Model of Shield Tunnel with Double Lining and Its Applications. *Advances in Materials Science and Engineering*, Volume 2015, Article ID 430879, 15 pages.
 7. Hamdy, H.A.A., Enieb, M., Khalil, A.A., Ahmed, A.S.H., 2015. Seismic analysis of urban tunnel systems for the greater Cairo metro line no.4. *Electronic Journal of Geotechnical Engineering*, Vol.20, 4207-4222.
 6. Liu, X.-R., Li, D.-L., Wang, J.-B., Wang, Z., 2015. Surrounding rock pressure of shallow-buried bilateral bias tunnels under earthquake. *Geomechanics and Engineering*, Volume 9, Issue 4, pp.427-445.
 5. Xin, C.L., Gao, B., 2014. Composite lining aseismic design for fault-crossing tunnel structures. *Advanced Materials Research*, Vols. 971-973, pp. 30-34.
 4. Do, N.A., Dias, D., Oreste, P., 2014. 2D seismic numerical analysis of segmental tunnel lining behaviour. *Bulletin of the New Zealand Society for Earthquake Engineering*, Volume 47, Number 3.
 3. Amorosi, A., Boldini, D., Falcone, G., 2014. Numerical prediction of tunnel performance during centrifuge dynamic tests. *Acta Geotechnica*, Vol.9:581–596.
 2. Conti, R., Viggiani, G.M.B., Perugini, F., 2014. Numerical modelling of centrifuge dynamic tests of circular tunnels in dry sand. *Acta Geotechnica*, vol. 9:597–612.
 1. Todo-Bom, L.B., Modaresi-Farahmand-Razavi, A., 2014. Constitutive model for granular materials considering grain breakage in finite deformations. *European Journal of Environmental and Civil Engineering*, Vol. 20, No. 9, 971-1003.
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- [1] 1. Corigliano, M., Lai, C.G., Rota, M., Strobbia, C.L., 2012. ASCONA: Automated Selection of COmpatible Natural Accelerograms. *Earthquake Spectra*, Volume 28, No. 3, pages 965–987.
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6.6. Internacional conferences

- [13] Roque, D., Perissin, D., Falcão, A.P., Gomes, R.C., Roque, A.J., Fonseca, A.M., 2016. Displacement Measurement Using SAR Interferometry – An Application to the Lisbon Regional Outer Circular and Its Neighborhood. ICUR2016 – International Conference on Urban Risks. Lisbon, Portugal.
- [12] Gouveia, F.M., Lopes, I.F., Gomes, R.C., 2014. Combined Analysis of Ambient Vibration HVSR and Active MASW Method. Near Surface Geoscience 2014 - 20th European Meeting of Environmental and Engineering Geophysics, Athens, Greece.
- [11] Gomes, R.C., 2013. Adequate Number Of Time-Histories To Predict The Ground Seismic Response Using Non-Linear Analyses. International Conference on Earthquake Geotechnical Engineering, from Case Histories to Practice; In the Honor of Prof.Kenji Ishihara, Istanbul, 17-19 June.
- [10] Marques, F., Santos, J.A., Gomes, R.C., 2012. Coimbra Sand – Influence of Non-Plastic Fines In Liquefaction Resistance. 15th World Conference on Earthquake Engineering, Lisbon, 24-28 September, paper n° 3404.
- [9] Santos, J.A., Gomes, R.C., Lourenço, J.C., Marques, F., Coelho, P., Azeiteiro, R., Santos, L.A., Marques, V., Viana da Fonseca, A., Soares, M., Abreu, É., Taborda, D.M.G., 2012. Coimbra Sand – Round Robin Tests to Evaluate Liquefaction Resistance.

15th World Conference on Earthquake Engineering, Lisbon, 24-28 September, paper nº 4933.

[8] Gouveia, F., Gomes, R.C., Lopes, I.F., 2012. Influence of stiffness contrast in non-horizontally layered ground on site effects. 15th World Conference on Earthquake Engineering, Lisbon, 24-28 September, paper nº 3710.

[7] Gomes, R.C., 2012. Numerical simulation of RRTT with an elastoplastic multi-mechanism model. 2nd International Conference on Performance-Based Design in Earthquake Geotechnical Engineering. May 28-30, 2012 - Taormina, Italy.

[6] Gomes, R.C., 2012. Prediction of permanent displacements on a gentle slope with an elastoplastic model. 2nd International Conference on Performance-Based Design in Earthquake Geotechnical Engineering. Paper 8.02, pp.963-974, May 28-30, 2012 - Taormina, Italy.

[5] Gomes, R.C., Santos, J.A., 2011. Influence of using records and artificial time-histories on ground seismic response. 5th International Conference on Earthquake Geotechnical Engineering, Santiago, Chile, January 10-13, Paper nº 6.8.IOUGO.

[4] Neves e Sousa, A., Guerreiro, L., Gomes, R.C., 2008. A combined approach for base isolation design. Acoustics'08, Paris, June 20 – July 04, Paper nº 3588.

[3] Santos, J.A., Gomes Correia, A., Modaressi, A., Lopez-Caballero, F., Gomes, R.C., 2003. Validation of an elastoplastic model to predict secant shear modulus of natural soils by experimental results. 3rd International Symposium on Deformation Characteristics of Geomaterials, Lyon, September 22 - 24, pp.1057-1062.

[2] Gomes, R.C., Oliveira, C.S., Gomes Correia, A., 2001. Seismic response analysis of underground structure cross-sections using response spectra. 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, 26-31 March, San Diego, California, paper 6.29.

[1] Gomes, R.C., Oliveira, C.S., Gomes Correia, A., 1999. Analysis of the dynamic response of the Volvi valley. 2nd International Conference on Earthquake Geotechnical Engineering, LNEC, Lisboa, pp.187-192.

6.7. Nacional conferences

[23] Gouveia, F., Lopes, I.F., Gomes, R.C., 2016. Identificação do perfil de velocidades do terreno em meio urbano utilizando métodos de ondas superficiais. 15º Congresso Nacional de Geotecnia, FEUP, Porto, 19 a 23 de Junho de 2016.

[22] Peniche, B., Lopes, I.F., Gomes, R.C., 2016. Modelo bi-dimensional do terreno baseado no método de ondas superficiais. 15º Congresso Nacional de Geotecnia, FEUP, Porto, 19 a 23 de Junho de 2016.

[21] Chouriço, J., Gomes, R.C., 2016. Curvas de fragilidade sísmicas para muros-cais de caixotões. 15º Congresso Nacional de Geotecnia, FEUP, Porto, 19 a 23 de Junho de 2016.

- [20] Gomes, M.J., Gomes, R.C., 2014. Resposta sísmica de estruturas subterrâneas construídas através de poços. 9º Congresso Nacional de Sismologia e Engenharia Sísmica, Lisboa, LNEC, 26 a 28 de novembro de 2014.
- [19] Vaz, C.B., Gomes, R.C., 2014. Influência de descontinuidades no comportamento sísmico de túneis circulares. 9º Congresso Nacional de Sismologia e Engenharia Sísmica, Lisboa, LNEC, 26 a 28 de novembro de 2014.
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- [16] Delfim, A.R., Rodrigues, J., Gomes, R.C., Carvalho, A., 2014. Estudo da resposta sísmica local na área metropolitana de Lisboa e região do Algarve. 9º Congresso Nacional de Sismologia e Engenharia Sísmica, Lisboa, LNEC, 26 a 28 de novembro de 2014.
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- [13] Rodrigues, F., Gomes, R.C., Lopes, I.F., Gouveia, F., Almeida, I.M., 2014. Medição e modelação de vibrações geradas pelo metropolitano. 14º Congresso Nacional de Geotecnia, UBI, Covilhã.
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- [4] Santos, J.A., Gomes, R.C., Antão, A., 2002. Aplicação de modelos lineares e elastoplásticos na análise dos efeitos locais da acção sísmica. 8º Congresso Nacional de Geotecnia, LNEC, Lisboa, pp.1995-2004.
- [3] Dessai, P., Oliveira, C.S., Gomes, R.C., Sousa, F.M., Escuer, M., Góngora, E., 2001. Estudo da actividade sísmica na estação de Chã de Macela (São Miguel, Açores). Caracterização do campo sísmico e influência das propriedades geotécnicas do sítio. 5º Encontro Nacional de Sismologia e Engenharia Sísmica. Universidade dos Açores, Açores, pp.143-154.
- [2] Gomes, R.C., Oliveira, C.S., Gomes Correia, A., 2000. Uma contribuição para o estudo do comportamento sísmico de estruturas subterrâneas. 7º Congresso Nacional de Geotecnia, FEUP, Porto, pp.885-894.
- [1] Gomes, R.C., Oliveira, C.S., Gomes Correia, A., 1999. Modelação expedita de estruturas subterrâneas pouco profundas submetidas a acções sísmicas. Aplicação ao caso de túneis. 4º Encontro Nacional de Sismologia e Engenharia Sísmica. Universidade do Algarve, Faro, Vol.II, pp.15-25.

6.7. Research projects

Last 5 years:

4. CAPACITY4RAIL – Increasing Capacity 4 Rail networks through enhanced infrastructure and optimized operation

FP7-SST-2013-RTD-1 - Sustainable Surface Transport (2015-17) PI: Paulo Teixeira (IST)

3. KnowRISK – Know your city, reduce seismic risk

European Commission's Humanitarian Aid and Civil Protection Grant agreement ECHO/SUB/2015/718655/PREV28 - 2016-2017 - PI: Carlos Sousa Oliveira e Mário Lopes - IST.

Partners: LNEC, INGV (Italy), University of Iceland

2. WaveSoil – Innovative seismic wave-based tools for the characterization of damping and anisotropy of soils in routine tests

PTDC/ECM/122751/2010 - 2012-2015 - PI: António Gomes Correia, C-TAC/Universidade do Minho.

Partners: UMinho, FEUP, IST

1. Tools for Performance-Based Design in Liquefiable Deposits

(PTDC/ECM/103220/2008) - 2010-2012 - PI: Paulo Coelho, FCT - Universidade de Coimbra.

Partners: UCoimbra, FEUP, IST

6.8. Scientific journals

Member of the *editorial board* of the international journal *Computers and Geotechnics* (Impact Factor: 1.705 – Q1)

Outstanding Reviewer Award 2013 of Computers and Geotechnics.

External evaluator for *Icelandic Research Fund* (2015 and 2016).

Reviewer for:

- *Computers and Geotechnics*
- *Géotechnique*
- *Bulletin of Earthquake Engineering*
- *Tunnelling and Underground Space Technology*
- *Journal Building Engineering*
- *Environmental Earth Sciences Journal*
- *Earthquake Engineering and Engineering Vibration*
- *European Journal of Environmental and Civil Engineering*

6.9. Scientific events

Organizing committee:

2012 - Workshop LiMo - *Lisbon in Motion*, on the seismic risk for young researchers (<http://sites.google.com/site/limo15wcee/home>), 20 to 23 setember 2012, satellite to 15th World Conference on Earthquake Engineering (15WCEE)

2012 – *Local Advisory Committee* of the 15th World Conference on Earthquake Engineering (15WCEE), Lisboa, 24-28 September.

2012 - 13º National Conference on Geotechnics, April, IST/LNEC.

Scientific committee:

2017 - 9th International Symposium on Geotechnical Aspects of Underground Construction in Soft Ground, IS - São Paulo, Brasil. 4 e 5 Abril

2016 - 6th International Conference on Earthquake Geotechnical Engineering, Christchurch, New Zealand, 1-4 Novembro.

2014 - 5as Jornadas Portuguesas de Engenharia de Estruturas em conjunto com o Encontro Nacional Betão Estrutural 2014 (GPBE) e o 9º Congresso Nacional sobre Sismologia e Engenharia Sísmica (SPES), LNEC de 26 a 28 de novembro de 2014.

2012 - Second International Conference on Performance-Based Design in Earthquake Geotechnical Engineering, May 28-30, 2012 Conference Center Taormina (Italia).

2010 - 8º Nacional Congress on Seismology and Earthquake Engineering - SÍSMICA 2010, 20 to 23 October, Universidade de Aveiro.

Application:

2008 - Preparation of the Portuguese application for the organization of the 15th World Conference on Earthquake Engineering held in 2012. The organization was awarded to Portugal.

6.10. Invited lectures

3. Gomes, R.C., 2016. “Seismic design of tunnels”. Invited lecture, 4th CPT International Seminar "Tunnels. From exploration back to design", 4 e 5 February 2016, LNEC, Portugal.

2. Gomes, R.C. Invited Panellist in the Workshop ‘Round Robin centrifuge and numerical Test on Tunnels’, 2nd International Conference on Performance-Based Design in Earthquake Geotechnical Engineering. May 28-30, 2012 - Taormina, Italy.

1. Gomes, R.C. — Site effects – Local Site Conditions. (1h) International Workshop “LiMo - Lisbon in Motion” on seismic risk for young researchers, linked to the 15th World Conference on Earthquake Engineering, Lisboa, 20 September 2012.

7. Consultancy (selected)

Head

[9] Gomes, R.C., 2017. Characterization of the retaining wall located in the backyard of Infante D. Pedro Street 3 and 4, Lisbon. Report FUNDEC PS n° 17/2017; Report Ceris EP n° 18/2017

[8] Gomes, R.C., Lopes, I.F., Gouveia, F., 2015. Retaining wall located in the backyard of Infante D. Pedro Street 3 and 4, Lisbon: analysis and recommendation. Report CERis EP n° 8/2015.

[7] Gomes, R.C., Matos e Silva, J., Freire, P., 2013. Expert Report related to the process 1722/08.3TVLSB, 1ª Vara Cível, Civil court of Lisbon.

[6] Gomes, R.C., Lopes, M., Lopes, I.F., 2012. Characterization of the ground seismic response for the expansion of Line 1 « Extension A / Place Emir Abdelkader - Place des Martyrs » from Algiers underground metro, Argelia. (2 km) Report ICIST, EP n.º 13/2012.

Member

[5] Lopes, I.F., Gomes, R.C., Santos, J.A., 2010. Dynamic characterization of the METROPOLIS CAMPO GRANDE building site using surface wave method. Report ICIST, EP n.º 22/2010.

[4] Guerreiro, L., Neves e Sousa, A., Gomes, R.C., Santos, J.A., Lopes, I.F., 2009. Study for noise and vibration isolation of a residence building at Av. Duque de Ávila (Lisbon). Report ICIST, EP n.º 14/09.

[3] Oliveira, C.S., Lopes, M., Gomes, R.C., 2006. Reinforcement of Terreiro do Paço tunnel. Study to support the comparison between the seismic behaviour of the solution proposed by the designer and an alternative solution. Report ICIST, EP n.º 3/06.

[2] Lopes, M., Gomes, R.C., 2001. Assessment of the seismic behaviour of the retaining wall piles from the Terreiro do Paço underground station from Lisbon metro. Report ICIST, EP n.º 33/01.

[1] Oliveira, C.S., Lopes, M., Gomes, R.C., Santos, J.A., Fonseca, J., 2000. Assessment of the seismic behaviour of the Terreiro do Paço underground station from Lisbon metro. Report ICIST/CEGEO, EP n.º 32/00.

8. Training courses

Coordinator

[3] Workshop Plaxis/IST. Excavation Modelling in Urban Environment with PLAXIS 2D, June 09, 2016, Lisbon, Portugal

[2] Course on “Eurocode 7: Application to the design of current geotechnical structures”. 11 September 2015, OE/Viseu.

[1] Course on "Seismic design of geotechnical structures according to Eurocode 8 - Part 5". 9 and 10 February 2015, IST.

Lecturer

[5] Course on "Japanese port standard: Technical Standards for Port and Harbours Facilities in Japan". Fundec/IST, 3 and 4 April 2017.

[4] Gomes, R.C. — Pathologies of masonry buildings due to foundation issues. (1h) Seminar on Masonry Structures: Conception, Modelling and checking the safety of existing and new structures. 7, 9, 14, 16, 21 e 23 January de 2014. Coordinator: Prof. António Sousa Gago (IST), FUNDEC, IST.

[3] Gomes, R.C., Lopes, I.F., Gouveia, F. – Definition of the seismic action: classification of the ground through seismic methods in confined areas. (1h) Seminar on Masonry Structures: Conception, Modelling and checking the safety of existing and new structures. 7, 9, 14, 16, 21 e 23 January de 2014. Coordinator: Prof. António Sousa Gago (IST), FUNDEC, IST.

[2] Gomes, R.C. — Numerical modelling of the seismic response of the ground using recorded time-histories. (15 min.) — Workshop Improving Strong Motion Data for Engineering Applications, Lisbon, IST, March 25-27, 2010. Coordinator: Prof. Carlos Sousa Oliveira (IST)

[1] Gomes, R.C. — Ground improvement. (1h) — Seminar on Techniques to Rehabilitate Constructions. 23 de janeiro a 3 de fevereiro de 2012, com 30h de duração total. Coordinators: Prof.s Fernando Branco, João Gomes Ferreira e João Ramôa Correia (IST). FUNDEC, IST.

IST, Lisboa, 12th July 2017

