

**Curriculum Vitae**  
**Dott. Eng. Alessandra Nocilla**

**DATE OF BIRTH** 17-06-1973 in Petralia Sottana (PA)

**NATIONALITY** Italian

**CURRENT POSITION** Lecturer in Soil Mechanics, Department DICATAM , University of Brescia.

**EDUCATION**

**29 April 2005:** PhD in Soil Mechanics, University of Parma. Title of the thesis submitted: *“The mechanics of silty soils from the Po river embankments”*. The work presented in this thesis has defined a transitional mode of behaviour that is between that for clean sands and clays. The study was promoted by the Magistrato per il Po (AIPO) the institution dedicated to the Po river planning and management.

**6 Nov 1998:** Degree in Civil Engineering and Soil mechanics, University of Palermo, Italy. Final Mark 110/110 with distinction. Title of dissertation thesis: *“Joints mechanical behaviour: Experimental research through photo-elasticity”*.

**June 1991:** Scientific studies Liceo Scientifico A. Einstein, Palermo, Italy. Final mark: 60/60.

**PROFESSIONAL EXPERIENCE**

**City University London (UK): January 1999- August 1999**

Research student in the Geotechnical Engineering Research Centre of City University (London) under the supervision of Prof. J.H. Atkinson.

**University of Trento (IT): October 1999- October 2000**

Research assistant in Soil Mechanics in the Mechanics and Structural Engineering Department of the University of Trento under the supervision of Prof. L. Mongiovì.

**University of Brescia: February 2001– December 2005**

Research assistant in Soil Mechanics and PhD student in the Civil Engineering Department of the University of Brescia under the supervision of Prof. F. Colleselli.

**Imperial College of London (UK) September 2002 to February 2004**

Research student in Soil Mechanics under the supervision of Prof. M. Coop. Soil Mechanics Section of Imperial College.

**University of Brescia (IT): 4 September 2006 - to date**

Lecturer in Soil Mechanics

**University of Brescia (IT): 1 September 2011 - to date**

Professor (Professore Aggregato) in Soil Mechanics according to art.6 IV comma e dell'art. 23 della L.30.10.2010 n240.

**PROFESSIONAL MEMBERSHIP**

**Since 1998.** Chartered member of the Italian Institution of Civil Engineers. Provincia di Palermo.

**Since 2013.** Chartered member of the Italian Geotechnical Society AGI (Associazione Geotecnica Italiana).

**Since 2015.** Chartered member of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE).

**COMMITTEES**

**Since June 2014.** Member of the COST TU1202: WG1. COST Action TU1202. Impact of climate change on engineered slopes for infrastructure.

**Since May 2015** Member of the Technical Committee "Laterites and Lateritic soils" TC107.

**Since June 2015** Member of the committee (GIUNTA) of National Group of Geotechnical Engineering (GNIG). Triennium 2015-2018.

## ACCADEMIC COMMITMENTS

List of Courses at the **University of Brescia**:

**Course of *Opere in Terra*** (earthworks)- Academic year 2007/2008- 2008/2009-2009/2010 - 5 CFU. C.L.S. Ingegneria per l'Ambiente ed il Territorio.

**Course of *Geotecnica EA*** (Soil mechanics) – Academic year 2010/2011- 2011/2012-2012/2013- 9 CFU- C.L.S. a ciclo Unico in Ingegneria Edile-Architettura (ex DM509/99).

**Course of *Geotecnica*** (Soil mechanics) - Academic year 2013/2014- 2014/15 9 CFU- C.L.S. a ciclo Unico in Ingegneria Edile-Architettura (ex DM 270/04).

**Course of *Geotechnical Engineering*** – Academic year 2015/16- 2016/17- 2017/18 9 CFU. Corso di laurea magistrale CIVIL AND ENVIRONMENTAL ENGINEERING. INGEGNERIA CIVILE E AMBIENTALE.

List of Courses at the **University of Bergamo**:

**Course of *Geotecnica*** (Soil mechanics) - Academic year 2006/2007 - 2007/2008-2008/2009- 2009/2010 - 5 CFU. C.L. Triennale in Ingegneria Edile.

**Course of *Tecnica delle Fondazioni*** (Foundations) – Academic year 2010/2011- 5 CFU C.LS. in Ingegneria Edile.

**Course of *Geotecnica e Tecnica delle Fondazioni*** (Soil mechanics and Foundations) Academic year 2011/2012- 2012/2013- 2013/2014 - 9 CFU C.L Magistrale in Ingegneria Edile.

## RESEARCH TOPICS

- 1) Embankments stability. In collaboration with AIPO (Agenzia Interregionale Fiume Po) and University of Parma and Napoli.
- 2) Transitional soils. In collaboration with Prof. Matthew Coop del Department of Building & Construction of City University of Hong Kong.
- 3) Mixture of soils. In collaboration with Prof. Matthew Coop del Department of Building & Construction of City University of Hong Kong.

- 4) Effects of climate change on the stability of slopes. In collaboration with University of Palermo.
- 3) Dogs bay sand behaviour. In collaboration with Prof. John Atkinson, former City University of London.
- 4) Collapsible soils and cultural heritages. In collaboration with the University of Palermo.
- 6) Stress state in rock surfaces: evaluation through photoelasticity. In collaboration with the University of Palermo.
- 7) Cultural heritages: weathering degree estimation through the use of Laser scanners methodologies. In collaboration with the University of Palermo.
- 8) Behaviour of sandy mixtures.

Alessandra Nocilla appears as author of papers published on international research journals, of scientific books and chapters of scientific volumes, of a number of papers published on the proceedings of national and international conferences. She is also included in the list of reviewers of some diffused scientific publications.

The main bibliometric indices of A. Nocilla from SCUPUS are listed below (update Oct 2016).

#### SCOPUS

Total SCOPUS records for the author = 14

Number of Journal Papers in the SCOPUS record = 10

Number of Citations = 92

H index = 5 (4 excluding self citations)

#### **PUBLICATIONS**

##### **Journal Paper**

1. Ponzoni, E.; Nocilla, A.; Coop, M.R. (2017). The behaviour of a gap graded sand with mixed mineralogy. SOILS AND FOUNDATION, Accepted for publication 25 Aug 2017.

2. Elia, G.; Cotecchia, F.; Vardon, P. J.; Pereira, C.; Springman, S. M.; Rouainia, M.; Esch, J. V.; Koda, E.; Josifovski, J.; Nocilla, A.; Askarinejad, A.; Stirling, R.; Helm, P.; Lollino, P.; Osinski, P. (2017). Numerical modelling of slope–vegetation–atmosphere interaction: an overview. *QUARTERLY JOURNAL OF ENGINEERING GEOLOGY AND HYDROGEOLOGY*, 22 p. DOI: 10.1144/qjegh2016-079.
3. Vitali D., Zimbardo M., Nocilla A., Ercoli L., Nocilla N. (2015). Meccanismi di Collasso delle Latomie di Siracusa. *RIVISTA ITALIANA DI GEOTECNICA*, vol. 3, p. 47-57, ISSN: 0557-1405.
4. Ercoli L., Zimbardo M., Nocilla N., Nocilla A., Ponzoni E. (2015). Evaluation of cliff recession in the Valle dei Templi in Agrigento (Sicily). *ENGINEERING GEOLOGY*, vol. 192C, p. 129-138, ISSN: 0013-7952, doi: 10.1016/j.enggeo.2015.04.008.
5. Nocilla N., Zimbardo M., Ercoli L., Nocilla A., Ponzoni E. (2015). Terreni collassabili e processi di instabilità nella Valle dei Templi. *RIVISTA ITALIANA DI GEOTECNICA*, vol. 1, p. 65-78, ISSN: 0557-1405.
6. Ponzoni E., Nocilla A., Coop M.R., Colleselli F. (2014). Identification and quantification of transitional modes of behaviour in sediments of Venice lagoon. *GEOTECHNIQUE*, vol. 64 (9), p. 694-708, ISSN: 0016-8505, doi: 10.1680/geot.13.P.166.
7. Ercoli L., Zimbardo M., Nocilla A. (2014). Rock decay phenomena and collapse processes in the “Latomiae del Paradiso” in Syracuse (Sicily). *ENGINEERING GEOLOGY*, vol. 178, p. 155-165, ISSN: 0013-7952, doi: 10.1016/j.enggeo.2014.06.015.
8. Calabresi G., Colleselli F., Danese D., Giani G.P., Mancuso C., Montrasio L., Nocilla A., Pagano L., Reali E., Sciotti A. (2013). A research study of the hydraulic behaviour of the Po river embankments. *CANADIAN GEOTECHNICAL JOURNAL*. Volume 50, Issue 9, September 2013, Pages 947-960. ISSN: 00083674.
9. Ercoli L., Megna B., Nocilla A., Zimbardo M.. (2012). Measure of a limestone weathering degree using Laser Scanner. *INTERNATIONAL JOURNAL OF ARCHITECTURAL HERITAGE*, vol.7, Volume 7, Issue 5, 1 January 2013, Pages 591-607. ISSN: 1558-3058, doi: 10.1080/15583058.2012.654893.
10. Nocilla A., Coop M.R (2008). The behaviour of sub-soils from the Po river embankments: an example of transitional behaviour in natural soils. *RIVISTA ITALIANA DI GEOTECNICA*, vol. Anno XLII, No 1., p. 49-58, ISSN: 0557-1405

11. Nocilla A., Coop M.R, Colleselli F. (2006). The mechanics of an Italian silt: an example of "transitional" behaviour. *GEOTECHNIQUE*, vol. 56, No4, p. 261-271, ISSN: 0016-8505.
12. Atkinson J, Nocilla A. (2003). Suction and strength in heavily compressed carbonate sand. *GEOTECHNIQUE*, vol. 59, No. 9, p. 831-832, ISSN: 0016-850.

### **Other publications**

1. Mastelloni G. M.A., Ercoli L., Nocilla A., Nocilla N., Sciortino R., Zimbardo M..(2014). The Latomie of Syracuse: A Geotechnical Mapping Through Rock Reflectivity. *ENGINEERING GEOLOGY FOR SOCIETY AND TERRITORY*. Volume 8 2015. Editori: Springer International Publishing. Giorgio Lollino, Daniele Giordan, Cristian Marunteanu, Basiles Christaras, Iwasaki Yoshinori and Claudio Margottin. Pag. 409-413. ISBN: 978-3-319-09407-6. DOI: .10.1007/978-3-319-09408-3\_71.
2. Nocilla N., Ercoli L., Zimbardo M., Nocilla A., Meli P., Grado G., Parello G., Presti G. (2013). Unsaturated sand in the stability of the cuesta of the Temple of Hera (Agrigento). *GEOTECHNICAL ENGINEERING FOR THE PRESERVATION OF MONUMENTS AND HISTORIC SITES – Bilotta, Flora, Lirer & Viggiani (eds) © 2013 Taylor & Francis Group, London*. Volume unico, p. 603-611. ISBN 978-1-138-00055-1.
3. Zimbardo M., Ercoli L., Cannone C., Nocilla A. (2013). The safety of an industrial archaeological heritage: The underground quarries in Marsala (Sicily). *GEOTECHNICAL ENGINEERING FOR THE PRESERVATION OF MONUMENTS AND HISTORIC SITES – Bilotta, Flora, Lirer & Viggiani (eds) © 2013 Taylor & Francis Group, London*. Volume unico, p. 785-792. ISBN 978-1-138-00055-1.

### **Conference Papers**

1. M. Zimbardo, L. Ercoli; Nocilla, A.; Macaluso R. (2017). Un antico sistema di drenaggio sotterraneo: i "Cunicoli Borbonici" di Petralia Sottana (Sicilia). In: *XXVI CONVEGNO NAZIONALE DI GEOTECNICA: La Geotecnica nella Conservazione e Tutela del Patrimonio Costruito*. vol. 2, p. 813-821, Edizioni AGI Roma, ISBN: 978 88 97517 09 2, Roma, 20-22 giugno 2017.
2. Nocilla A., Grossi G., Ponzoni E. (2016). Influence of the soil-atmosphere interaction

on the collapse of sand in the Valle dei Templi in Agrigento. In: VI Italian Conference of researchers in Geotechnical Engineering "Geotechnical Engineering in multidisciplinary research: from microscale to regional scale". CNRIG2016. Bologna, 22nd-23rd September 2016. Procedia Engineering 158 ( 2016 ) 386 – 391.  
doi: 10.1016/j.proeng.2016.08.460. Codice Scopus: 2-s2.0-84988422363.  
<http://www.sciencedirect.com/science/journal/18777058>.

3. Ponzoni E., Nocilla A., Coop M.R. (2014). Effetto di mineralogia e granulometria sul comportamento di transizione di miscele di sabbia. . In: IARG 2014 Chieti. vol. unico, p. "-", Chieti, 14-16 Luglio 2014
4. Belardi A., Colleselli F., Ferrero M., Mancuso C., Nocilla A., Pagano L., Rosso A., Segalini A. (2014). Studio del comportamento idraulico degli argini dell'alto bacino del Po. In: XXV CONVEGNO NAZIONALE DI GEOTECNICA: La Geotecnica nella difesa del territorio e delle infrastrutture dalle calamità naturali. vol. 2, p. 771-779, Edizioni AGI Roma, ISBN: 9788897517054, Baveno, 4-6 giugno 2014.
5. Pagano L., Nocilla A. (2013). Studio sperimentale del comportamento idraulico degli argini del medio corso del po.. IARG 2013 Perugia. Perugia, 16-18 Luglio 2013, vol. 1, p. "-", Curatori: M. Cecconi, V. Pane. Editore: Università degli Studi di Perugia. ISBN: 9788890642135.
6. Ponzoni E., Nocilla A., Coop M.R. (2012). Comportamento di transizione dei terreni della Laguna di Venezia. In: Università degli Studi di Padova. IARG 2012 Padova. Padova, 2-4 Luglio 2012, vol. 1, p. "-", Grafiche Turato Edizioni, ISBN: 9788889524671
7. Shipton B.J.I, Coop M.R, A. Nocilla (2006). Particle Breakage in transitional soils. In: GEOMECHANICS AND GEOTECHNICS OF PARTICULATE MEDIA. vol. unico, p. 143-147, LONDON: Hyodo, Murata & Nakata eds., Taylor & Francis Group, ISBN: 0415410975, Ube, Yamaguchi, 12 September 2006through14 September 2006.

### **PhD Thesis**

1. Nocilla A. (2005). The mechanics of silty soils from the Po river embankments. PhD thesis.. BRESCIA:Starrylink Editrice, ISBN: 9788888847924

