MARCO TERZARIOL

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CIVIL ENGINEER, MSc, EIT

Structural and Seismic Design - Geotechnical Design - Environmental Engineering Design Topographic Surveying - Ground Investigation

Personal Details

Date of Birth:	August 14th, 1985
Birth Place:	Córdoba, Argentina
Nationality:	Dual Argentinian/Italian citizenships
Gender:	Male
Marital Status:	Single
Languages:	Spanish (native); professional proficiency in English; conversational in Italian; practical knowledge of French and Portuguese.

Education

MSCE – May 2013 – GPA: 3.90 Civil Eng. - Graduated with Honors - Feb 2009 - Grade: 8.16 – *Summa cum laude* Universidad Nacional de Córdoba (UNC) - Córdoba, Argentina

Awards: 2009 Special Mention (*Summa cum laude*) from Universidad Nacional de Cordoba, Arg; 2007 PROMEI (National Education Secretary) Scholarship.

Teaching Experience (Univ. Of Cordoba, Arg.): Teaching Assistant in Hydrology and Water Processes (2007-2008); Teaching Assistant in Geotechnics (2009-2010); Teaching Assistant in Hiperstatic Structures (2009 to 2011).

Research Projects (Staff member): "Behavior of the Loess in Provincia de Córdoba" (2009-2011), "Loessic Silt use as core material of an Earth Dam" (2009-2011) and "Effect of thermal history on properties of hydrate core samples" (2011-present).

Academic Consulting at Georgia Tech: Fly ash characterization – Static liquefaction (GeoSyntec Consultants-EPRI).

Publications:

Contributing author of:

- Terzariol, R.; Terzariol, M.; Stassi, M. "Evaluación Estructural Sísmica de una Torre de Toma para La Presa "Las Tunas" Provincia de Catamarca". 8 EIPAC, Mendoza, Septiembre 2009.
- **Terzariol, M.** and M. Zeballos (2010) "Uso de suelo loesico como material de presa de materiales sueltos", XX CAMSIG, Octubre 2010.
- Santamarina, J.C.; Dai, S.; Jang, J.; Terzariol, M. (2012) "Pressure Core Characterization Tools for Hydrate-Bearing Sediments". Scientific Drilling, 14, 44-48.
- Sapporo Scientific Team (Georgia Tech: Dai, S.; Jang, J.; Terzariol, M.; Papadopoulos, E. and Santamarina, J.C.; AIST: Konno, Y; Yoneda, J. and Nagao, J.; JOGMEC: Suzuki, K. and Fujii, T.; USGS: Winters, W.J.; Waite, W.; Mason, D. and Bergeron, E. (2013) "Pressure Core Analysis Tools used to Characterize Hydrate-Bearing Sediments from the Nakai Trough", Fire in the Ice, 13, 2, 19-22.
- The PCCT Development Team (Georgia Tech: Santamarina, J.C.; Dai, S.; Jang. J.; Terzariol, M. and Papadopoulos, E.; USGS: Winters, W.J.; Waite, W.; Mason, D. and Bergeron, E.) (2012) – "Pressure Core Characterization Tools to Enhance Gas Hydrate Field Programs", Fire in the Ice, 12, 2, 7-9.

Computer Skills

Business Productivity Software: Structural Programs:

Geotechnical Programs: Graphic Software: General Engineering: EndNote SAP2000 2D and 3D models (Static, dynamics and response spectral analysis); RAM Advanse; COMSOL PLAXIS; GeoStudio AutoCad; 3D Studio Max MathCad; MatLab; NASGRO

Organizations and Society Affiliations

- Sociedad Argentina de Ingenieria Geotecnica (Argentinian Geotechnical Society)
- ISSMGE (International Society for Soil Mechanics and Geotechnical Engineering)
- Student Member ASCE Geo Institute
- Vice President of the Geo-Society of Graduate Students Georgia Tech 2012-2013
- President of the Geo-Society of Graduate Students Georgia Tech 2013-2014
- Member of the CEE Strategic Planning Committee 2012-2013 at Georgia Tech
- Webmaster of Particulate Media Research Lab, Georgia Tech, 2012-2014
- GRS (Hydrate Bearing Sediments) co-chair, 2014-2016

Development of Unique Devices

- **Direct Shear Chamber**: Geotechnical device for the measurement of gas hydrate bearing sediment properties recovered at high water pressure First deployed in Japan 2013.
- **In-situ Characterization Tool for Deep Sediments:** Geotechnical device for the characterization of physical properties of hydrate bearing sediments

Professional Experience

Broad experience since 2005, including:

- Assistant in geotechnical and materials laboratory (in more than 50 projects): routine laboratory tests; special tests; unconfined compression tests on concrete; field tests.
- Structural analysis and design (in more than 30 projects): static and dynamic analysis on <u>SAP2000</u> (on bridges, houses, foundations, retaining walls and concrete buildings of more than 15 stories), <u>PLAXIS</u> (bridges, tunnels and water channels), COMSOL (tools and experimental design). Structural, foundations and seismic design on diverse structures including bridges (1 and 2 spans), concrete houses and buildings (to 17 stories).
- **Hydrologic, hydraulic and geometric design** (in more than 5 projects): of culverts, bridges (1 and 2 spans) and water channels.
- **Geotechnical** (in more than 20 projects): Ground investigation; slope stabilities, foundations and retaining walls design; topographic survey; geological data collection and earth dams geometric designs.