

# Curriculum Vitae: Amerigo Corradetti



*Personal address:*

*Date of birth:* : 1985

*Nationality:* Italian

*Mobile phone:*

*E-mails:*

*Skype:*

*Qualification* **PhD**

## **Last position:**

Postdoctoral Researcher at the Department of Earth, Environmental and Resources Sciences (DiSTAR) – University of Naples Federico II. Largo San Marcellino 10, 80138 Naples, Italy.

## **Scientific interests**

Structural geology - Field geology - Seismic interpretation - Balanced cross-sections - Remote sensing - Reservoir characterization - Petroleum system - Virtual outcrops - Photogrammetry - GIS - Rock and earthquake mechanics

## **Degrees**

- 29/04/2016 **PhD** in Structural Geology at the University of Naples Federico II (Italy).  
**Thesis:** “Structural characterization of outcrops by means of close-range multi-view stereo-photogrammetry”.  
**Supervisor:** Prof. Stefano Tavani.
- 22/02/2012 **M.Sc.** in Geoenvironmental Resources and Risks at the University of Camerino (Italy).  
**Thesis** in Seismic Hazard: “Low to high velocity friction experiments on carbonates outcropping along the Colfiorito border fault, Umbria-Marche Apennines”.  
**Supervisors:** Prof. Emanuele Tondi, Dr. Nicola De Paola and Dr. Fabrizio Agosta.  
**Mark:** 110/110 with honours.
- 21/10/2009 **B.Sc.** in Geology at University of Camerino (Italy).  
**Thesis** in Sedimentology and Stratigraphy: “Geologic survey and facies analysis of a Pliocene deep-water canyon, Castignano (AP): premise in mechanical stratigraphy” (in Italian).  
**Supervisors:** Dr. Claudio Di Celma and Dr. Fabrizio Agosta.  
**Mark:** 110/110 with honours.
- 2005 **Maturity in accountancy, commercial expert and computer programmer** at Istituto Tecnico Commerciale “A.Capriotti”, San Benedetto del Tronto, Italy.  
**Mark:** 83/100.

## Certificates and memberships

04/04/2014 **Cambridge certificate in Advanced English (CAE), level C1.**

28/06/2012 **Licensed as Senior Geologist**, according to the Italian law.

2005-present Member of the Italian register of free-lance journalists.

## Relevant experiences

Apr. 2016 - Apr. 2017	<b>1 year post-doctoral position</b> at DiSTAR, University of Naples Federico II. Largo San Marcellino 10, 80138 Naples, Italy. <b>Project:</b> Collection and interpretation of structural data at different scales for the construction of balanced cross-sections in the Zagros Mt. belt, western Lurestan region (Iran).
2014	<b>5 months' internship at the Department of Earth Sciences, University of Durham (UK).</b> Activities: use of LiDAR methods and software. Software used: RiSCAN, Cyclone, SKUA(GoCAD) and MATLAB.
2013 - 2017	<b>Assistant to structural geology courses and field trips</b> at University of Naples. <b>Field assistant to the course of field geology</b> at University of Naples.
2011	<b>4 months' internship at the Rock Mechanics Laboratory, University of Durham (UK)</b> Activities: core drilling and grinding; Rock crashing and ball milling; Sieving of rock powders; Low and High velocity rock friction experiments on gouges; Light and SEM observations; Processing and analyzing quantitative mechanical datasets.
2008	<b>6 months' studies at the University of Bristol</b> , Department of Earth Sciences (UK) under an Erasmus programme.

## Field experiences

2017	<b>Geo-structural data collection</b> in the Lurestan region of the <b>Zagros</b> folds and thrusts belt of <b>Iran</b> (20 days in May).
2016	<b>Geo-structural data collection</b> in the <b>Hellenides</b> in <b>Greece</b> (14 days in June) and in the Lurestan region of the <b>Zagros</b> folds and thrusts belt of <b>Iran</b> (21 days in May).
2014	<b>Collection and analysis of geo-structural data</b> from fault zones in the southern and central area of the Matese mountains commissioned by DiSTAR at University of Naples Federico II; within the INGV project (CUP D52I14000040001) titled: " <i>SI UR SI.10.: Base-knowledge improvement for assessing the seismogenic potential of Italy</i> ".
2013	<b>Helper for a Field Workshop</b> in Northern Apennines 13-17 May 2013 held by DiSTAR for Maersk Oil.

## Software skills

Petrel - Move - ArcGIS - MATLAB - GoCAD - and others

## **Published Articles**

- Tavani, S., Granado, P., Arbués, P., **Corradetti, A.**, & Muñoz, J. A. (2017). *Syn-thrusting, near-surface flexural-slipping and stress deflection along folded sedimentary layers of the Sant Corneli-Bóixols anticline (Pyrenees, Spain)*. *Solid Earth*, **8**(2), 405–419. doi:10.5194/se-8-405-2017.
- Castelluccio, A., **Corradetti, A.**, Mazzoli, S., Savignano, E., & Vitale, S. (2017). *Post-thrusting fault systems in the Sicani Mountains (western Sicily): a record of transtensional to extensional deformation*. *Rendiconti Online Della Società Geologica Italiana*, **42**, 103–110. doi:10.3301/ROL.2017.25.
- Tavani, S., **Corradetti, A.**, & Billi, A. (2016) - *High precision analysis of an embryonic extensional fault-related fold using 3D orthorectified virtual outcrops: The viewpoint importance in structural geology*. *Journal of Structural geology*, **86**, 200–210. doi:10.1016/j.jsg.2016.03.009.
- Tavani, S., Storti, F., Lacombe, O., **Corradetti, A.**, Muñoz, J. A., & Mazzoli, S. (2015) - *A review of deformation pattern templates in foreland basin systems and fold-and-thrust belts: Implications for the state of stress in the frontal regions of thrust wedges*. *Earth-Science Reviews*, **141**, 82–104. doi:10.1016/j.earscirev.2014.11.013.
- Tavani, S., Granado, P., **Corradetti, A.**, Girundo, M., Iannace, A., Arbués, P., Muñoz, J.A., & Mazzoli, S. (2014) - *Building a virtual outcrop, extracting geological information from it, and sharing the results in Google Earth via OpenPlot and Photoscan: An example from the Khaviz Anticline (Iran)*. *Computers & Geosciences*, **63**, 44–53. doi:10.1016/j.cageo.2013.10.013.

## **Conference Proceedings**

- **Corradetti, A.**, De Paola, N., McCaffrey, K., & Tavani, S. (2016) – *Evaluating roughness scaling properties of natural active fault surfaces by means of photogrammetry*. *Proceedings of the 2<sup>nd</sup> Virtual Geoscience Conference*, Bergen, Norway, 21-23 September 2016: 117-118. ISBN: 978-82-8361-005-5.
- **Corradetti, A.**, Tavani, S., Iannace, A., Vinci, F., Pirmez, C., Torrieri, S., Giorgioni, M., Strauss, C., Pignalosa A., & Mazzoli, S. (2016) – *Reservoir-scale fracture characterization from an inaccessible carbonate analogue: an UAV photogrammetry application to geology*. *Proceedings of the 2<sup>nd</sup> Virtual Geoscience Conference*, Bergen, Norway, 21-23 September 2016: 119-120. ISBN: 978-82-8361-005-5.
- **Corradetti, A.**, Girundo, M., Tavani, S., Iannace, A., Parente, M., Mazzoli, S., Strauss, C., Torrieri, S., Pirmez, C., & Giorgioni, M. (2015) - *Analysis of Reservoir Scale Fracture Sets in Southern Italy's Carbonate Reservoir Analogues, Monte Faito, Sorrento Peninsula (Southern Italy)*. International Petroleum Technology Conference. doi:10.2523/IPTC-18433-MS
- **Corradetti, A.** – *From 2D photographs to 3D fracture characterization. A practical workflow from an inaccessible carbonate analogue in the Sorrento Peninsula (Italy)*. (2015) - *Rendiconti Online della Società Geologica Italiana*, Supplemento n.1 al Vol. 37/2015 pag.12. doi:10.3001/ROL.2015.180
- Ascione, A., Bigi, S., Ciotoli, G., **Corradetti, A.**, Etioppe, G., Ruggiero, L., Sacco, P., Tartarello, C., Tavani, S., & Valente, E. (2014) – *The Southern Matese active fault system: new geochemical and geomorphological evidence*. Conference: 33° Convegno Nazionale Atti – Tema 1: Geodinamica. Volume: 2. GNGTS 2014. Bologna 25-27 November 2014.

- Di Celma, C., Cantalamessa, G., Teloni, R., **Corradetti, A.**, & Marini, V. (2011) - *Evolution and history of filling of early Pleistocene, coarse-grained slope canyons (Peri-Adriatic basin, central Italy)*. AAPG Search and Discovery Article #50481.
- Agosta, F., Di Celma, C., Tondi, E., **Corradetti, A.**, & Cantalamessa, G., (2011) - *Mechanical stratigraphy of deep-water siliciclastic rocks: insights from a multidisciplinary field and laboratory study*. AAPG Search and Discovery Article #90123.

### **Congress Abstracts and Posters**

- **Corradetti, A.**, Tavani, S., Tramparulo, F.D'A., Prinzi, E.P., Vitale, S., Parente, M., Morsalnejad, D., & Mazzoli, S. (2017) – *Pre-folding fracture development in the Lurestan region of the Zagros Fold and Thrust Belt: constraints from early fracture sets in the Shabazan and Asmari Formations*. EGU General Assembly, Vienna, Austria, 23-28 April 2017, *Geophysical Research Abstracts* Vol. 19, EGU2017-8689.
- **Corradetti, A.**, Tavani, S., Parente, M., Iannace, A., Vinci, F., Pirmez, C., Torrieri, S., Giorgioni, M., Pignalosa, A., Mazzoli, S. (2017) – *Distribution and arrest of vertical through-going joints in shallow-water carbonates: Insights from an integrated virtual outcrop- field structural analysis of a reservoir-scale exposure (Sorrento Peninsula, Italy)*. EGU General Assembly, Vienna, Austria, 23-28 April 2017, *Geophysical Research Abstracts* Vol. 19, EGU2017-8850.
- Tavani, S., Bertok, C., D'Atri, A., Piana, F., Barale, L., **Corradetti, A.**, Granado, P., Martire, L., & Vigna, B. (2017) – *A Pyrenean Cretaceous extensional fault system in the Briançonnais Domain of the Alps: implications for the eastern termination of the segmented Bay of Biscay-Pyrenean rift system*. EGU General Assembly, Vienna, Austria, 23-28 April 2017, *Geophysical Research Abstracts* Vol. 19, EGU2017-7539.
- Tavani, S., Granado, P., Cantanero, I., Balsamo, F., **Corradetti, A.**, & Muñoz, J.A. (2017) – *Shear enhanced compaction-solution bands in quartz-rich calcarenites of the Cotiella Massif (Spanish Pyrennes)*. EGU General Assembly, Vienna, Austria, 23-28 April 2017, *Geophysical Research Abstracts* Vol. 19, EGU2017-7320.
- Tavani, S., Bertok, C., **Corradetti, A.**, Granado, P., & Vigna, B. (2016) – *A pyrenean mid-Cretaceous extensional fault system in the Briançonnais Domain of the Alps: implications for the eastern termination of the segmented Bay of Biscay-Pyrenean rift system*. “88th Congress of the Italian Geological Society”, 7-9 September 2016, Naples, Italy.
- **Corradetti, A.**, Tavani, S., Iannace, A., Vinci, F., Pirmez, C., Torrieri, S., Giorgioni, M., Strauss, C., Pignalosa A., & Mazzoli, S. (2016) – *Reservoir-scale stratigraphic controls on the distribution of vertical fractures: insights from a 200-m thick carbonate platform exposure (Sorrento peninsula, Italy)*. EGU General Assembly, Vienna, Austria, 17-22 April 2016, *Geophysical Research Abstracts* Vol. 18, EGU2016-12631.
- **Corradetti, A.**, Girundo, M., Tavani, S., Iannace, A., Parente, M., Mazzoli, S., Strauss, C., Torrieri, S., Pirmez, C., & Giorgioni, M. (2015) – *Analysis of Reservoir Scale Fracture Sets in Southern Italy's Carbonate Reservoir Analogues, Monte Faito, Sorrento Peninsula (Southern Italy)*. “International Petroleum Technology Conference”, 6-9 December 2015, Doha, Qatar.

- **Corradetti, A.**, Tavani, S., Pignalosa, A., Pirmez, C., Torrieri, S., Giorgioni, M., Strauss, C., Girundo, M., Iannace, A., Parente, M., & Mazzoli, S. (2015) - ***From photographs to 3D fracture characterization. A case study from an inaccessible carbonate reservoir analogue of the Sorrento Peninsula (Italy)***. “*Fractured Reservoirs: Geological, Geophysical and Engineering Tools to Crack Them*” AAPG in Sicily (Catania), 16th – 17th April 2015.
- Iannace, A., Parente, M., Strauss, C., Torrieri, S., Pirmez, C., Giorgioni, M., Girundo, M., **Corradetti, A.**, Tavani, S., & Mazzoli, S. (2015) - ***Reservoir-scale mechanical stratigraphy of the Lower Cretaceous carbonates of Monte Faito (Sorrento Peninsula, southern Italy)***. “*Fractured Reservoirs: Geological, Geophysical and Engineering Tools to Crack Them*” AAPG in Sicily (Catania), 16th – 17th April 2015.
- Tavani, S., Storti, F., Lacombe, O., **Corradetti, A.**, Muñoz, J., & Mazzoli, S. (2014) - **Fracturing stages in foreland fold and thrust belts**. *Geophysical Research Abstracts* Vol. 16, EGU2014-3030, 2014 EGU General Assembly 2014.
- Tavani, S., Granado, P., **Corradetti, A.**, Iannace, A., Arbués, P., Muñoz, J.A., & Mazzoli, S. (2014) - **Use of stereo-photogrammetry and virtual outcrops in structural geology**. “*Mesozoic and Cenozoic carbonates of the Neo-tethys: old and new concepts for petroleum exploration*” AAPG in Naples, 25th – 26th March 2014.
- Tavani, S., **Corradetti, A.**, & Mazzoli, S. (2014) - **Fracturing and stress field evolution in foreland thrust and fold belt**. “*Mesozoic and Cenozoic carbonates of the Neo-tethys: old and new concepts for petroleum exploration*” AAPG in Naples, 25th – 26th March 2014.
- Tavani S., **Corradetti, A.**, Girundo M., Iannace A., & Mazzoli S. (2013) - **Virtual outcrops for all**. “*IX Forum Italiano di Scienze della Terra*”. Geoitalia 2013. Pisa (Italy).
- Di Celma, C., Cantalamessa, G., Teloni, R., **Corradetti, A.**, & Marini, V. (2011) - **Evolution and history of filling of early Pleistocene, coarse-grained slope canyons (Peri-Adriatic basin, central Italy)**. *AAPG Annual Convention & Exhibition*, Houston (USA), 45, 10- 13 April.
- Agosta, F., Di Celma, C., Tondi, E., **Corradetti, A.**, & Cantalamessa, G., (2010) - **Mechanical stratigraphy of deep-water sandstones: insights from a multidisciplinary field and laboratory study**. EGU General Assembly, Vienna, Austria, 02-07 May 2010, *Geophysical Research Abstracts* Vol. 12, EGU2010-10992.
- Agosta, F., Di Celma, C., Tondi, E., **Corradetti, A.**, & Cantalamessa, G., (2009) - **Mechanical stratigraphy of deep-water siliciclastic rocks: insights from a multidisciplinary field and laboratory study**. AAPG Hedberg Conference “*Deepwater Fold and Thrust Belts*”, 6-7, Tirrenia, Italy, 4-9 October.
- Di Celma, C., Cantalamessa, G., **Corradetti, A.**, Marini, V., Teloni, R., Didaskalou, P., Lori, P., & Potetti, M. (2008) - **Architecture and lithofacies of erosionally-confined channel-levee complexes from the Pliocene of the Periadriatic basin, central Italy: II. Offida and Notaresco systems**. BSRG, 105, Liverpool, (UK), December 15-16.
- Di Celma, C., Cantalamessa, G., **Corradetti, A.**, Marini, V., Teloni, R., Didaskalou, P., Lori, P., & Potetti, M. (2008) - **Architecture and lithofacies of erosionally-confined channel-levee complexes from the Pliocene of the Periadriatic basin, central Italy: I. Ascensione and Castignano systems**. BSRG, 104, Liverpool, (UK), December 15-16.

### **Co-convener at Conferences**

2016 Convener at the 88<sup>th</sup> Congress of the Italian Geological Society 7-9 September 2016, Naples, Italy – Session S21. The international Map Year: new technologies, perspectives and outlook of geological mapping and outcrop visualization. Conveners: Chiara D’Ambrogio (Servizio Geologico d’Italia – ISPRA), Stefano Catalano (Università di Catania), Michele Zucali (Università di Milano), **Amerigo Corradetti** (Università di Napoli Federico II).

### **Thesis co-tutoring**

- 2015-2016 **M.Sc.** thesis in Structural Geology of Antonietta Olivieri. Thesis entitles “Ricostruzione di un modello 3D applicato ad un sistema di faglie estensionali Cretaciche nelle Alpi occidentali”. **Supervisor:** Dr. S. Tavani. **Assistant Supervisors:** Prof. M. Parente and **A. Corradetti**.
- 2015-2016 **M.Sc.** thesis in Structural Geology of Mario Russo. Thesis entitles “Analisi strutturale con tecnica fotogrammetrica di una meso-piega in calcari dell’appennino settentrionale”. **Supervisor:** Dr. S. Tavani. **Assistant Supervisors:** Prof. S. Vitale and **A. Corradetti**.
- 2015-2016 **B.Sc.** thesis in Structural Geology of Antonio Galderisi. Thesis entitles “Evidenze geologico-strutturali di tettonica estensionale del Miocene inferiore dell’area di Rocca di Cave (Monti Prenestini, Lazio)”. **Supervisor:** Dr. S. Tavani. **Assistant Supervisor:** **A. Corradetti**.

### **Awards**

Awarded with a scholarship for merit at University of Camerino in 2010/2011, placing to the 6<sup>th</sup> of 80 winners.