

# CURRICULUM VITAE

EUROPEAN FORMAT

## PERSONAL INFORMATION

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## WORK EXPERIENCE

Dates	From June 2019 – today
Name and address of employer	Istituto di Geologia Ambientale e Geoingegneria (IGAG-CNR) – Italian National Research Council - Via Mario Bianco 9 -20131 Milano
Type of business or sector	Research institution
Occupation or position held	Researcher Geophysicist
Main activities and responsibilities	Application of geophysical prospecting techniques to geo-resources (water, geothermal and storage), to seismic-volcanic risk and environment.
Dates	From 16/11/2011 – May 2019
Name and address of employer	Istituto per la Dinamica dei Processi Ambientali – Italian National Research Council Via Mario Bianco 9 -20131 Milano
Type of business or sector	Research institution
Occupation or position held	Researcher Geophysicist
Main activities and responsibilities	Application of geophysical prospecting techniques to geo-resources (water, geothermal and storage), to seismic-volcanic risk and environment.
Dates	From 2018 to 2020
Name and address of employer	University of Milano Bicocca – Geotechnology Department Piazza della Scienza, 4
Type of business or sector	Education
Occupation or position held	Contract Professor
Main activities and responsibilities	Course of Applied Geophysics
Dates	From 2013 to 2014
Name and address of employer	University of Milano Bicocca – Geotechnology Department Piazza della Scienza, 4
Type of business or sector	Education
Occupation or position held	Contract Professor
Main activities and responsibilities	Course of Applied Geophysics
Dates (from – to)	From 2012 to 2013
Name and address of employer	University of Milano Bicocca – Geotechnology Department Piazza della Scienza, 4

Type of business or sector	Education
Occupation or position held	Contract Professor
Main activities and responsibilities	Course of Environmental Geophysics
Dates	From 2011 to 2012
Name and address of employer	Istituto per la Dinamica dei Processi Ambientali – Italian National Research Council Via Mario Bianco 9 -20131 Milano
Type of business or sector	Research institution
Occupation or position held	Research contract
Main activities and responsibilities	Geophysical data processing in support of geothermal zonation
Dates	From 2010 to 2011
Name and address of employer	Istituto per la Dinamica dei Processi Ambientali – Italian National Research Council Via Mario Bianco 9 -20131 Milano
Type of business or sector	Research institution
Occupation or position held	Research contract
Main activities and responsibilities	Acquisition, processing and interpretation of seismic data for the characterization of surface structures
Dates	From 2010 to 2012
Name and address of employer	University of Milano Bicocca – Geotechnology Departement Piazza della Scienza, 4
Type of business or sector	Education
Occupation or position held	Contract Professor
Main activities and responsibilities	Applied Geophysics Laboratory
Dates	From 2008 to 2021
Name and address of employer	University of Milano Bicocca – Geotechnology Departement Piazza della Scienza, 4
Type of business or sector	Education
Occupation or position held	Contract Professor
Main activities and responsibilities	Geophysical Prospecting Laboratory
Dates	From 2008 to 2010
Name and address of employer	Istituto per la Dinamica dei Processi Ambientali – Italian National Research Council Via Mario Bianco 9 -20131 Milano
Type of business or sector	Research institution
Occupation or position held	Researcher Geophysicist
Main activities and responsibilities	Acquisition, processing and interpretation of geophysical data

## EDUCATION AND TRAINING

Dates	1993
Name and type of organisation providing education and training	Milan University, Italy
Principal subjects occupational skills covered	Geological Sciences
Title of qualification awarded	Laurea in Geology

## RESEARCH ACTIVITIES

Research sectors Study, development and application of geophysical with particular attention to procedures for seismic data acquisition, seismological data, geoelectrical and georadar and to the optimization techniques for processing of the acquired data and to the techniques of inversion and integration of geophysical data.

Recent Scientific Activities. Technical and scientific responsible for the execution of the micro-seismic survey in "ICEIDA ICE 23066-1301NDF ETHIOPIA / 1 geothermal Surface Exploration in Ethiopia Tendaho Alolobeda project " and in "ICEIDA ICE 23066-1301NDF ETHIOPIA/2 Geothermal Surface Exploration in Aluto-Langano Ethiopia" ELC-Electroconsult contract VIGOR PROJECT for zonation and potential assessment of geothermal low-medium-high enthalpy resources for the Convergence Regions in Southern Italy: re-processing and interpretation of the old seismic reflection data.  
Interpretation of seismic data for water research in the West and East Borama area – Somaliland in NGO Terre Solidali contract  
Seismic Microzonations in Urban areas: seismic network and seismic acquisition planning; site transfer function from local earthquake acquisition; local site characterization with seismic refraction, reflection, microtremors, and MASW. Data acquisition, processing and interpretation. IMAGE (European Project Grant Agreement Number 608553) - Integrated Methods for Advanced Geothermal Exploration: seismic modelling.  
Microzonation studies in the area of 2016 Central Italy earthquake - Agreement of CentroMS e Commissario straordinario del Governo per la ricostruzione sisma 2016: I e II phases. Geophysical acquisitions and Local Seismic Response assessment.  
UNICEF PO 43248251 research agreement CNR-IDPA and NGO Terre Solidarity - Baidoa water plan - Ground water research: Processing and interpretation of seismic reflection data in the Baidoa area - Somaliland.  
LOBSTER Ligurian Ocean Bottom Seismology and Tectonics Research - (coo-partnership GEOMAR-Kiel, IPGP-Paris, ISTerre-Grenoble, GeoAzur-Nice). Sea-Land wide angle seismic data acquisition and processing.

- Books and Articles
1. de Franco R., Biella G., Caielli G., Berra F., Guglielmin M., Lozej A., Piccin A., Sciunnach D., 2009 - Overview of high resolution seismic prospecting in pre-Alpine and Alpine basins, *Quaternary International* 204, 65-75, doi:10.1016/j.quaint.2009.02.011.
  2. Caielli G., de Franco R. et al., 2011. – Echi sismici nella valle di San Lucano. *Atti Convegno "L'armonia fra uomo e natura nelle valli Dolomitiche Aldighieri B. e Testa B. eds, Aracne editrice, 113-130. ISBN 978-88-548-4171-0.*
  3. Priolo E., de Franco R., Vuan A., Romanelli M., Barnaba C., Caielli G., Corsi A., Morrone A., Laurenzano G., Tento A., Sugan M., 2011 - Stima della risposta di sito per la microzonazione sismica della città di Perugia. In *Progetto STESSA: Tecniche Semplificate per la Stima dell'Amplificazione Sismica. Avanzamenti teorici e casi pratici*, M. Mucciarelli eds., 141-160, Editrice Aracne, ISBN: 978-88-548-4495-7.
  4. Scardia G., de Franco R., Muttoni G., Rogledi S., Caielli G., Carcano C., Sciunnach D., and Piccin A., 2012 - Stratigraphic evidence of a Mid-Pleistocene climate-driven flexural uplift in the Alps, *Tectonics*, doi:10.1029/2012TC003108, in press (accepted 16 October 2012).
  5. Tallini M., Cavuoto G., Del monaco F., Di fiore V., Mancini M., Caielli G., Cavinato GP., de franco R., Pelosi N. & Rapolla A. , 2012 - Seismic surveys integrated with geological data for in-depth investigation of Mt. Pettino active Fault area (Western L'Aquila Basin). *Ital. J. Geosci. (Boll. Soc. Geol. It.)*, 131, 3 (2012), 389-402, doi: 10.3301/IJG.2012.10.
  6. Testa B., Aldighieri B., Bertini A., Blendinger W., Caielli G., de Franco R., Giordano D., Kustatscher E., 2013. - Geomorphodiversity of the San Lucano Valley (Belluno Dolomites, Italy): a Well-Preserved Heritage. *Geoheritage*, DOI 10.1007/s12371-013-0079-3.
  7. Inversi B., Scrocca D., Montegrossi G., Livani M., Petracchini L., Brandano M., Brilli M., Giustini F., Recanati R., Gola G., Polemio M., Romi A., de Franco R., Caielli G., Testa B., 2013 - 3D geological modelling of a fractured carbonate reservoir for the study of medium enthalpy geothermal resource in the Southern Apennines (Campania Region, Italy). Extended abstract, *European Geothermal Congress 2013 Pisa, Italy*, 3-7 June 2013
  8. Montanari D., Bertini G., Botteghi S., Caielli G., Caiozzi F., Catalano R., de Franco R., Doveri M., Gianelli G., Gola G., Manzella A., Minissale A., Montegrossi G., Monteleone S., Norini G., Tranchida G., Trumpy E., 2013 - Medium enthalpy geothermal systems in carbonate reservoirs, the Western Sicily example. Extended abstract, *European Geothermal Congress 2013 Pisa, Italy*, 3-7 June 2013.
  9. Rizzo E., Iovine G., Muto F., Pizzino L., Caputi A., Romano G., Balasco M., Giampaolo V., Votta M., Terranova O., Greco R., Iaquineta P., Soleri S., Quattrocchi F., Mele G., Caielli G.,

- Aldighieri B., de Franco R., Manzella A., 2013 - Terme Caronte geothermal area (Lamezia Terme-Calabria, Italy): preliminary results. Extended abstract, European Geothermal Congress 2013 Pisa, Italy, 3-7 June 2013.
10. Brunetti E., Trezzi A., Caielli G., de Franco R., Villa A., Osella D., Di Carlo C., Matz P., 2013 - Treatment of chromium VI in the unsaturated zone coupled with geophysical monitoring: a field scale pilot test at the industrial site of Spinetta M. (AL). Extended abstract, REMTECH2013, sessione Impianti pilota, Ferrara, 18-20 sett.
11. Priolo E., R. de Franco, C. Barnaba, G. Boniolo, G. Caielli, A. Corsi, G. Laurenzano, A. Morrone, P. Ragazzo, M. Romanelli, A. Tenta, 2014 - Stima della risposta sismica di sito da dati sismometrici. In La microzonazione sismica dell'area di Umbertide, A. Motti eds., report POR-FESR-2007/13, *Regione dell'Umbria*, febbraio 2014, 37-44, ISBN: 978-8-896-27719-5.
12. Priolo E., R. de Franco, C. Barnaba, G. Boniolo, G. Caielli, A. Corsi, G. Laurenzano, A. Morrone, P. Ragazzo, M. Romanelli, A. Tenta, F. Pergalani, M. Compagnoni, 2014 - Spettri di risposta e Norme Tecniche per le Costruzioni. In La microzonazione sismica dell'area di Umbertide, A. Motti eds., report POR-FESR-2007/13, *Regione dell'Umbria*, febbraio 2014, 69-78, ISBN: 978-8-896-27719-5.
13. Crosta G. B., Castellanza R., de Franco R., Villa A., Frigerio G., Caielli G., 2015. Earth Pyramids: Precarious Structures Surviving Recurrent Perturbations. Engineering Geology for Society and Territory - Volume 8. eds. G. Lollino, D. Giordan, C. Marunteanu, B. Christaras, I. Yoshinori, C. Margottini 2015, pp 59-63. ISBN: 978-3-319-09407-6 (Print) 978-3-319-09408-3 (Online). DOI: 10.1007/978-3-319-09408-3.
14. de Franco R., Caielli G., Villa A., Agliardi F., Franchino F., 2016. Ground-penetrating radar refraction imaging with stacked refraction convolution section method. *Geophysics*, 81(5), H33-H45. doi: 10.1190/geo2015-0475.1
15. Mirabella F., Bucci F., Santangelo M., Cardinali M., Caielli G., De Franco R., Guzzetti F., Barchi M.R., 2018. Alluvial fan shifts and stream captures driven by extensional tectonics in central Italy. Accepted manuscript in *Journ. of Geol. Soc.* DOI: <https://doi.org/10.1144/jgs2017-138>
16. de Franco R., Caielli G., Mollica R., Norini G., Aghib F.S., Di Capua A., Boniolo G., Corsi A., Piccin A., Facciorusso J., Martelli L., 2019. Geophysical characterization of liquefaction-prone areas: The Quistello test site, central Po Plain, Northern Italy. *Soil Dynamics and Earthquake Engineering*, 116, January 2019, 130-144. <https://doi.org/10.1016/j.soildyn.2018.10.001>
17. de Franco R., Petracchini L., Scrocca D., Caielli G., Montegrossi G., Santilano A., Manzella A., 2019. Synthetic Seismic Reflection Modelling in a Supercritical Geothermal System: An Image of the K-Horizon in the Larderello Field (Italy). *Geofluids*, Volume 2019, Article ID 8492453, 21 pages <https://doi.org/10.1155/2019/8492453>
18. de Franco R., Petracchini L., Scrocca D., Caielli G., Montegrossi G., Santilano A., Manzella A., 2019 - SYNTHETIC SEISMIC REFLECTION MODELLING IN THE SUPERCRITICAL GEOTHERMAL SYSTEM OF THE LARDERELLO FIELD (ITALY). Contribution in *Proceeding of European Geothermal Congress 2019 Den Haag, The Netherlands*, 11-14 June 2019, pp. 9.
19. Cara F., Cultrera G., Riccio G., Amoroso S., Bordoni P., Bucci A., D'Alema E., D'Amico M., Cantore L., Carannante S., Cogliano R., Di Giulio G., Di Naccio D., Famiani D., Felicetta C., Fodarella A., Franceschina G., Lanzano G., Lovati S., Luzi L., Mascandola C., Massa M., Mercuri A., Milana G., Pacor F., Piccarreda D., Pischiutta M., Pucillo S., Puglia R., Vassallo M., Boniolo G., Caielli G., Corsi A., de Franco R., Tenta A., Bongiovanni G., Hailemikael S., Martini G., Paciello A., Peloso A., Poggi F., Verrubbi V., Gallipoli M. R., Stabile T. A., Mancini M., 2019 - Temporary dense seismic network during the 2016 Central Italy seismic emergency for microzonation studies. *Nature Scientific Data*, (2019) 6:182. <https://doi.org/10.1038/s41597-019-0188-1>
20. Caielli G., de Franco R., Di Fiore V., Albarello D., Catalano S., Pergalani F., Cavuoto G., Cercato M., Compagnoni M., Facciorusso J., Famiani D., Ferri F., Imposa S., Martini G., Paciello A., Paolucci E., Passeri F., Piscitelli S., Puzilli L. M., Vassallo M., 2020. Extensive surface geophysical prospecting for seismic microzonation. *Bulletin of Earthquake Engineering*, <https://doi.org/10.1007/s10518-020-00866-4>
21. Mollica R., de Franco R., Caielli G., Boniolo G., Crosta GB., Motti A., Villa A., Castellanza R., 2020. Micro electrical resistivity tomography for seismic liquefaction study. *Journal of Applied Geophysics*, <https://doi.org/10.1016/j.jappgeo.2020.104124>
22. Norini G, Aghib F.S., Di Capua A., Facciorusso J., Castaldini D., Marchetti M., Cavallin A., Pini R., Ravazzi C., Zuluaga M.C., Aldighieri B., Furlanetto G., Testa B., de Franco R., Caielli G., Gropelli G., Boniolo G., Corsi A., Baraldi F., Piccin A., 2021; Assessment of liquefaction potential in the central Po plain from integrated geomorphological, stratigraphic and geotechnical analysis, *Engineering Geology*. <https://doi.org/10.1016/j.enggeo.2021.105997>

Date: february 25<sup>th</sup>, 2021

Dr. Grazia Maria Caielli

A handwritten signature in black ink, reading "Grazia Maria Caielli". The signature is written in a cursive style with a distinct flourish at the end.