

CURRICULUM VITAE

Jessica Maria Chicco, was born in Fossano (CN) on April 16, 1984. She obtained the bachelor's degree in Earth Science at the Department of Earth Science of the University of Turin (Italy) in 2007; in 2011, she got the Master's degree in Geological Sciences at the Department of Earth Sciences of the University of Pisa (Italy). In 2016, she obtained the title of Doctor of philosophy (PhD) with a thesis entitled "The role of hydrogeological conditions and thermo-physical properties on the evaluation of the geothermal exchange potential: an application in Marche region (Italy)". In the two years following she got two teaching assignments at two high schools; in the meantime, she won two research grants at the Department of Earth Science of the University of Turin (Italy), focusing her activity on the low enthalpy geothermal energy research field.

Actually, she is a Researcher at the Interuniversity Department of Regional and Urban Studies and Planning (DIST), University of Turin. Her research activity is mainly focused on environmental topics linked to the climate change and the reduction of greenhouse gas emissions. In particular they deal with the use of "clean" energies" such as the shallow geothermal resources for thermal energy production and storage in district heating and cooling networks (DHC), as well as to the analysis of the air pollution in dense urban areas and how this can affect the groundwater characteristics.

Since 2019, she is part of the Geothermal DHC Cost Action (CA18219), European project in which she is involved in the executive committee, and as coordinator of the working group 1 about "Technology". Since October 2022 she is also involved in the Horizon Europe project "SAPHEA": the project addresses the integration of geothermal energy into multivalent decarbonized district heating and cooling (DHC) networks operating at temperature levels between less than 30°C (5th generation DHC) and approximately 100°C (3rd generation DHC).

Among other activities, Jessica Maria Chicco got the license to practice as geologist and, from June 2021, she is part of the Regional Roll of the Geologists as a Counsellor

PERSONAL INFORMATION

- **Jessica Maria Chicco**, born in Fossano (CN), the 16/04/1984, based in Fossano (CN), Via Craveri n. 55.
- **Contact:** +39 3926024060
jessica.chicco@unito.it ; jessica.chicco@polito.it; chiccojessicamaria@gmail.com
- **ID Research and Education:** Orcid: orcid.org/0000-0001-6877-5425.
Scopus: 57193122175)
Web of Science: AAG-9428-2019

EDUCATION

➤ SCIENTIFIC EDUCATION

- 22/07/2016: PhD in Earth Science (ciclo XXVIII), at the School of Science and Technology, Geology Division, University of Camerino (Italy).
PhD thesis: "The role of hydrogeological conditions and thermo-physical properties on the evaluation of the geothermal exchange potential: an application in Marche region (Italy)".
PhD project: "Thermo-physical properties of groundwater in sedimentary deposits of Umbria-Marche Succession and their role in low enthalpy geothermal studies" (Eureka project, FSE Marche)"
- 11/02/2011: Master's Degree in Geological Sciences (Classe 86/S; D.M. 509/99), at the Department of Earth Science of the University of Pisa (Italy).
- 17/07/2007: Bachelor's Degree in Earth Sciences (classe 16; D.M. 509/99), at the Department of Earth Sciences of the University of Turin (Italy).

➤ INTERNATIONAL AND NATIONAL POSTGRADUATE TRAINING ACTIVITIES

- From 18/05/2011 to 20/05/2011: "XI Corso di Idrologia Isotopica - Corso breve sull'applicazione delle tecniche isotopiche allo studio, valutazione e protezione delle risorse idriche", at CNR in Pisa (Italy)
- From 11/07/2011 to 15/07/2011: "Melts, glasses, magmas" course, at the Ludwig Maximilians Universität, in Munich (Germany)

➤ **TRAINING AND RESEARCH ACTIVITIES DURING THE PHD, AT INTERNATIONAL AND NATIONAL INSTITUTES**

- September 2013: “Correct interpretation and reading of well profiles and geophysical logs”, at the "Business Unit Onshore, Operation Environment", SAIPEM S.p.A, Fano (Italy)
- April/May 2014: short course on “Relationships between geological structures and geothermal resources”, by Prof. Domenico Liotta from the Department of Earth Science of the University of Bari, at the School of Science and Technology, Geology Division, University of Camerino (Italy).
- April/May 2014: short course on “Geophysical methods for exploration”, by Dr. Carlo Ungarelli from Schlumberger, at the School of Science and Technology, Geology Division, University of Camerino (Italy).
- From September 2015 to October 2015: PhD visiting at the Department of Geothermics dell’Institute of Geophysics, The Czech Academy of Science, in Praga (Czech Republic). Supervisor: Rndr. DrSc. Vladimir Cermak

➤ **POST DOC TRAINING AND RESEARCH ACTIVITIES AT INTERNATIONAL AND NATIONAL INSTITUTES**

- From 25/11/2017 to 08/12/2017: visiting researcher for the project “*Évaluation du potentiel géothermique face la production agricole au nord du Québec et en Italie*”, at the ETE/INRS in Québec (Canada), cooperation between Italy and Québec. Supervisor: Prof. Jasmin Raymond.
- 30/11/2017: training seminar “Simulation énergétique des bâtiments”, by Dr. Jean-Michel Dussault, at the ETE/INRS in Québec (Canada)
- 17/08/2022 to 30/08/2022: visiting researcher for the project: “*The current status of UTES in Norway and Italy in terms of geology, technology and energy policies*” at NTNU in Trondheim (Norway), with the Prof. Rao Martand Singh.
- 13/11/2023 to 20/11/2023: visiting researcher for the project “*Valutazione della qualità delle acque sotterranee in ambiente densamente urbanizzato alla luce dei cambiamenti climatici*” at the AGH University of Science and Technology in Krakow (Poland), with the Prof. Marek Hajto. The project is part of the call “Grant for internationalization” funded by University of Torino, and for which the undersigned is the principal investigator.

SCIENTIFIC ACTIVITY

➤ **CURRENT POSITION**

- **From 01/10/2022:** Researcher **Non tenured Assistant Professor (IT: Ricercatrice rtdA)**, at the Interuniversity Department of Regional and Urban Studies and Planning (DIST), University of Turin (Italy).

➤ **PREVIOUS POSITIONS**

- From 01/06/2021 to 30/09/2022: **Post Doc Research Fellow (IT: Assegnista di Ricerca)**, at the Interuniversity Department of Regional and Urban Studies and Planning (DIST), Politecnico di Torino.
- From 01/04/2020 to 31/03/2021: **Post Doc Research Fellow (IT: Assegnista di Ricerca)**, at the Department of Earth Sciences of the University of Turin (Italy).
- From 01/03/2019 to 29/02/2020: **Post Doc Research Fellow (IT: Assegnista di Ricerca)**, at the Department of Earth Sciences of the University of Turin (Italy).
- 2017/18 and 2018/19: **Subject Expert (IT: Culture della Materia)**, for the degree courses i) “Applied Geology” (L-34) and “Geothermics” (LM 74) at the Department of Earth Sciences of the University of Turin (Italy).
- From 01/02/2018 to 28/02/2019: **Post Doc Research Fellow (IT: Borsista di Ricerca)**, at the Department of Earth Sciences of the University of Turin (Italy).
- From 01/02/2017 to 31/01/2018: **Post Doc Research Fellow (IT: Borsista di Ricerca)**, at the Department of Earth Sciences of the University of Turin (Italy).

- From 01/06/2016 al 30/09/2016: **Post Doc Research Fellow (IT: Borsista di Ricerca)**, at the Department of Earth Sciences of the University of Turin (Italy).
- 2014/15: **Subject Expert (IT: Cultore della Materia)**, for the degree courses in: i) “Geology” e ii) “Structural Geology” (L-34); iii) “Geothermics” (LM 74), at the School of Science and Technology, Geology Division, University of Camerino (Italy).
- From 31/01/2013 to 31/01/2016: **PhD student (IT: Dottoranda)**, at the School of Science and Technology, Geology Division, University of Camerino (Italy).
PhD course: “Science and Technology”, curriculum “Earth Science”

➤ NATIONAL AWARDS

- May 9, 2019: Scientific National Awards “Industria 4.0” of the 8th edition of “Giovedì Scienza”. Scientific awards for the project “Stoccaggio del calore nel sottosuolo: nuova forma di risparmio energetico” (underground storage: new kind of energetic saving)

➤ CERTIFICATIONS

- 31/07/2023: Certification issued by the University of Turin entitled: "Quality of teaching in presence and at a distance, evaluation and inclusion", as part of the research and training project for the improvement of the quality of teaching and evaluation in the University.

➤ PARTICIPATION TO NATIONAL AND INTERNATIONAL CONGRESSES

- September 2016: Speaker of the talk “*Quaternary tectonics from seismic interpretation and its relationship with deepest geothermal fluids in the Marche region (Central Italy)*”, during the “88° Congresso Nazionale della Società Geologica Italiana: Geosciences on a changing learning from the past, exploring the future”, held in Napoli (Italy).
- March 2017: Speaker of the talk “*Thermo-hydraulic characterization of a fractured shallow reservoir in Bergen (Norway) to improve the efficiency of a BHE field*”, during the “8th European Geothermal PhD Days (EGPD)”, held at the GZB in Bochum (Germany).
- April 2017: Poster Judge (Outstanding Student Poster & Pico, OSP) and **chairperson** of the session “*The Earth’s thermal state and heat budget of crustal metamorphism (co-organized)*”, during the EGU (European Geosciences Union) General Assembly 2017, held in Vienna (Austria).
- March 2018: Speaker of the talk “*Fault zone: geomechanical and thermo-physical characterization vs IR thermal transient analysis*”, during the “9th European Geothermal PhD Days (EGPD)”, held at the ETH in Zurich (Switzerland).
- June 2018: Speaker of the talk “*Comparative methods to determine thermal conductivity of grouting mixtures, and 3D simulations in vertical closed loop systems*”, during the “VI Congresso Nazionale dell’Associazione Italiana di Geologia Applicata ed Ambientale”, held in Courmayeur (Italy).
- October 2020: Speaker of the talk “*The Salinelle of Mt. Etna” Geosite: thermo-physical and geochemical monitoring of hydrothermal fluids, aimed at understanding both their geothermal potential and their possible correlations with Mt. Etna activity*”, during the online digital workshop “Geothermal energy use for heating and electricity in volcanic islands”, organized by the Cost Action Geothermal DHC and EGEC Geothermal
- July 2021: Chair of the workshop “*Legal and financial framework for geothermal DHCs*”, during the “Geothermal DHC meetings and workshops” of the Cost Action CA18219, held at the GeoZS (Geological Survey) in Ljubljana (Slovenia).
- October 2021: Invited Speaker for the KeyNote “*Capitalizing decarbonized, multivalent district heating and cooling networks by underground thermal energy storage*”, during the online event “European Sustainable Energy Week (EUSEW), Geothermal energy use in multivalent district heating and cooling networks”.
- May 2022: Speaker of the talk “*Improving the Efficiency of District Heating and Cooling Using a Geothermal Technology: Underground Thermal Energy Storage (UTES)*”, during the international symposium “New metropolitan perspectives” in the section “Energy transition: citizen’s active role, processes and impacts”, held in Reggio Calabria (Italy)
- June 2022: Speaker of the talk “*Geothermal and Geological Frameworks in the Acqui Terme area*”, during the annual assembly of the Swiss Association of Energy Geoscientists (SASEG), held in Acqui Terme, Italy.

- September 2022: **Speaker** of the talk “*Shallow geothermal heating for plant phenotyping greenhouses: a case study in NW Italy*”, during the joint congress of the Italian Geological Society (SGI) and the Italian Society of Mineralogy and Petrology (SIMP) Congress “Geosciences for a sustainable future”, held in Torino (Italy)
- October 2022: **Speaker** of the talk “*The current legal framework for the use of shallow geothermal energy in district heating and cooling grids: comparison between EU Countries*”, during the European Geothermal Congress, held in Berlin (Germany).
- April 2023: **Speaker** of the talk: “*Borehole thermal energy storage (BTES) as backup systems in district heating and cooling contexts: result from numerical simulations*”, during the “European Geosciences Union (EGU) General Assembly”, held in Vienna (Austria)
- May 2023: **Chair** of the side event organised as Cost Action (“Geothermal DHC”) representative called “*Underground Thermal Energy Storage Systems*” during the “2nd European Underground Energy Storage Workshop”, held in Paris (France) between 23/05/23 to 24/05/23
- June 2023: **Convener** of the scientific session “*Monitoraggio*” during the “XII Convegno Nazionale Giovani Ricercatori di Geologia Applicata”, held in Urbino (Italy)
- June 2023: **Speaker** of the talk “*Temperature variations in grounds affected by wildfire: an experimental study in NW Italy*”, during the “XII Convegno Nazionale Giovani Ricercatori di Geologia Applicata”, held in Urbino (Italy)
- November 2023: **Speaker** of the talk “*Hybrid heating system (geothermal energy and gas) for an innovative greenhouse in NW Italy: how to optimize investment and operative costs*” during the “European Geothermal Workshop”, held in Utrecht (The Netherlands)
- November 2023: **Invited Speaker** for the KeyNote “*Geothermal energy for thermal energy production and storage and its integration in multivalent district heating and cooling grids*”, during the Congress “Geothermix” held in Pisa (Italy)
- March 2024: **Speaker** for the talk: “*Design of a cooling system fed by shallow geothermal energy: results from a real case study in NE Italy*”, during the conference on “Geothermal Cooling” in the framework of the final meeting of the CA18219 “Geothermal DHC” Cost Action, held in Limassol (Cyprus).

➤ COORDINATION AND ORGANIZATION OF INTERNATIONAL SCIENTIFIC EVENTS

- From February 2022 to July 2022: **organization and coordination** of the “Geothermal DHC Summer School”, held in Delft at the Technical University of Delft (The Netherlands), between 11/07/2022 to 15/07/2022
- From January 2023 to May 2023: **organization and coordination** of the “2nd European Underground Energy Storage Workshop”, held in Paris (France), between 23/05/23 to 24/05/23

➤ INVOLVMENT IN RESEARCH AGREEMENTS

- 2015-2016: “Aspetti neotettonici e sismotettonici relativi alle strutture presenti nell’Appennino umbro-marchigiano, per scopi geotermici”. Non-disclosure agreement between the School of Science and Technology, Geology Division, University of Camerino (Italy) and Eni S.p.A.
- 2018-2019: “Aspetti neotettonici e sismotettonici relativi alle strutture presenti nel margine esterno dell’Appennino centrale marchigiano”. Non-disclosure agreement between the School of Science and Technology, Geology Division, University of Camerino (Italy) and Eni S.p.A.
- 2018-2019: “Seismotectonic and geothermal characterization of deep subsoil in Southern Piedmont”. Non-disclosure agreement between the Department of Earth Sciences of the University of Turin (Italy) and Eni S.p.A.
- 2019-2020: “Realizzazione di un innovativo impianto geotermico a bassa entalpia, finalizzato alla riduzione dei consumi energetici per la gestione di un magazzino frigorifero mediante l’utilizzo di fonti rinnovabili (Vigasio, Verona)”. Agreement between the University of Turin and Novatek s.r.l.
- 2020-2021: “Sviluppo e test del brevetto relativo al metodo per aumentare la capacità portante dei terreni e per sollevare edifici mediante precarica meccanica di inerte, ottenuta per compressione di martinetto idraulico in assenza di vibrazioni”. Agreement between the University of Turin and Novatek s.r.l.
- 2020-2021: “La modellazione numerica della perturbazione termica del sottosuolo indotta dai campi sonde

geotermici in Loc. San Giorgio – Bosco Chiesanuova (VR). Condominio ‘Malera’. Agreement between the University of Turin and Novatek s.r.l.

- 2021-2022: “Studio tecnico-normativo sullo stoccaggio di energia termica nel sottosuolo”. Agreement between the Interuniversity Department of Regional and Urban Studies and Planning (DIST), University of Turin. Agreement between Dipartimento Interateneo di Scienze, Progetto e Politiche del Territorio (DIST) and the Italian District Heating Association (AIRU)

➤ INVOLVEMENT IN RESEARCH ACTIVITIES FINANCED BY NATIONAL AND INTERNATIONAL CALLS

- 2014 - 2016: “Materials and Technologies for improving the use of Renewable ENergy in the Districts of smart city (MATREND)”.
Aim of the project: to implement the whole quality of future geothermal plants, thanks to the study of the underground geoexchange potential, and to new solutions for geothermal pipes and grouts.
Funding: Fondo Ateneo per la Ricerca project (FAR 2014-15) of the University of Camerino
Partner companies: Pensy s.r.l. - Geotermia Marche s.n.c. - Otto s.r.l. - Fullservice Soc.Coop.
- 2017 - 2020: “Cooperation in Geothermal energy research in Europe-Mexico for development of Enhanced Geothermal Systems and Superhot Geothermal Systems (GEMex)”.
Aim of the project: i) evaluation of geothermal resources, for the EGS systems development; ii) characterization of the geothermal reservoirs.
Program H2020-EU.3.3.2. Low-cost, low carbon energy supply
Funding: RIA, Research and Innovation action
- 2018 - 2019: “Évaluation du potentiel géothermique face la production agricole au nord du Québec et en Italie” (QU17MO07).
Aim of the project: evaluation of the geothermal exchange potential in the North of the Québec, aimed at strengthening the food production of the Inuit Community.
Funding: Ministère des relations Internationales (Québec) and Ministero degli Affari Esteri e della Cooperazione internazionale (Italy)
- From June 2019 - present: “Research network for including Geothermal technologies into Decarbonized Heating and Cooling grids” (CA18219 Geothermal DHC)
Aim of the project: to create a network of collaboration between several European Universities and Research Institutes, developing skills and research platforms for the use of the geothermal energy in district heating and cooling networks.
Intergovernmental Program COST (European Cooperation in Science and Technology) Association.
Funding: progetto supportato dal “EU Framework Program Horizon 2020”
- From January 2021- present: “MINA: Mappatura spaziale integrata dell’Inquinamento Naturale e Antropico”
Aim of the project: i) observation of chemical-physical parameters to evaluate air quality in urban and volcanic areas; ii) evaluations through the use of numerical simulations software; iv) verification of the potential of engineering integration in providing measurements scientifically validated
Funding: “Investimenti a favore della crescita e dell’occupazione” F.E.S.R. 2014/2020 Program.
- From October 2022 – present: “SAPHEA. Developing a single access point for the market uptake of geothermal energy use in multivalent heating and cooling networks across Europe”
Aim of the project: Integrating geothermal energy (source and storage) at its full technological range into heating (and cooling) networks at temperature ranges between <30°C and up to ~100°C (‘geoHC networks’)
Funding: HORIZON-CL5-2021-D3-02-03

➤ PRINCIPAL INVESTIGATOR OF RESEARCH PROJECTS

- From July 2023: Project funded by the University of Turin “Quantificazione degli effetti dei cambiamenti climatici a scala globale e locale in ambiente urbano sulle falde idriche e sulla qualità dell’aria” (project duration: 2 years)
- From October 2023: Project funded by the University of Turin “Valutazione della qualità delle acque sotterranee in ambiente densamente urbanizzato alla luce dei cambiamenti climatici” (project duration: 2 months)

➤ COORDINATION OF NATIONAL AND INTERNATIONAL RESEARCH GROUPS

As part of the COST (CA18219) European project “Research network for including Geothermal technologies into Decarbonized Heating and Cooling grids”:

- From June 2019 - present: **member of the Executive Committee**
- From June 2019 - present: **member of the Management Committee**, as Italian representative
- From February 2020 - present: **leader** of the Ad Hoc Working Group 2 “Underground Thermal Energy Storage”
- From December 2020 - present: **deputy coordinator** of the permanent working group “Technology” (PWG1)

➤ **REVIEWER FOR ACADEMIC SCIENTIFIC JOURNALS**

Reviewer for the academic journals, edited by Springer:

- Rock Mechanics and Rock Engineering
- Geothermal Energy

Reviewer for the academic journals, edited by Elsevier:

- Journal of Energy Storage
- Bulletin of Engineering Geology and the Environment
- Applied Energy
- Energy

Reviewer for the academic journals, edited by Wiley:

- Engineering Reports

Reviewer for the academic journals, edited by MDPI:

- Sustainability
- International Journal of Environmental Research and Public Health
- Energies
- Applied Sciences
- Resources
- Water

DIDACTIC ACTIVITIES

➤ **TEACHING ACTIVITIES**

- 2014/15: **collaborator** for the academic course (Master’s degree) “Geothermics” (ITLM 74), at the School of Science and Technology, Geology Division, University of Camerino (Italy)
- 2018/19: **collaborator** for the academic course (Master’s degree) “Geotermia” (LM 74), at the Department of Earth Sciences of the University of Turin (Italy).
- From 24/09/2020 to 30/09/2021: **contract Professor** for the academic course “Impiego sostenibile delle Fonti Energetiche Rinnovabili” (LM 75), at the Department of Earth Science, University of Turin (Italy)
- 11/07/2022: **trainer** of the summer school “Renewable energy for the mountain territories” at the Campus Luigi Einaudi, University of Turin (Italy)
- From 11/07/2022 to 15/07/2022: **trainer** of the summer school “Design your own renewable district heating and cooling system”, at the Technical University in d Delft (TU Delft, Netherlands)
- 2022/23: **collaborator** for the academic course “Impiego sostenibile delle Fonti Energetiche Rinnovabili” (LM 75), at the School of Science and Technology, Department of Earth Science, University of Turin (Italy)
- 2022/23: **collaborator** for the academic course (Bachelor’s degree) “Petrofisica” (L-34), at the Department of Earth. Environment, and Life Sciences, University of Genova (Italy)
- 2022/23: **collaborator** for the academic course (Master’s degree) “Geotermia” (LM 74), at the Department of Earth. Environment, and Life Sciences, University of Genova (Italy)
- 2023/24: **collaborator** for the academic course “Impiego sostenibile delle Fonti Energetiche Rinnovabili” (LM 75), at the School of Science and Technology, Department of Earth Science, University of Turin (Italy)

- 2023/2024: **teacher** for the Doctoral School in Earth Sciences (IT: Didattica di III livello) of the course “Geothermal energy for civil uses: thermal energy production and storage”, at the Department of Earth Sciences, University of Turin (Italy).

➤ **ASSISTANCE FOR BACHELOR’S AND MASTER’S DEGREE THESIS**

- 2014/15: Master’s degree thesis in “Geoenvironmental resources and risks” (LM 74), with the title: “Thermal conductivity in low enthalpy conditions: ground behaviour and implementation of new grouting materials” Candidate: Chiara Pacetti; Supervisor: Prof. Chiara Invernizzi.
- 2015/16: Bachelor’s degree thesis in “Scienze Geologiche” (L-34), with the title “Calibrazione dei sensori per la costruzione della thermal box 2.0”. Candidate: Marco Rollino; Supervisor: Prof. Giuseppe Mandrone
- 2016/17: Bachelor’s degree thesis in Scienze Geologiche (L-34), with the title “Caratteristiche tecniche comparate dei principali cementi geotermici utilizzati in Italia”. Candidate: Giuseppe Bongiorno; Supervisor: Prof. Giuseppe Mandrone;
- 2016/17: Master’s degree thesis in “Scienze Geologiche applicate” (LM 74), with the title “Studio geologico-tecnico ai fini di un impianto a bassa entalpia, nell’isola di Litle Sotra, Norvegia”. Candidate: Rossana Scuderi; Supervisor: Prof. Giuseppe Mandrone.
- 2017/18: Master’s degree thesis in “Scienze Geologiche applicate” (LM 74), with the title “Variazione dei parametri fisico-tecnici al trattamento termico di rocce carbonatiche. Candidate: Tivano Cristina; Supervisor: Prof. Giuseppe Mandrone.
- 2018/19: Bachelor’s degree thesis in Scienze Geologiche (L-34), with the title “Studio della frana di Cascina Gilli (Castelnuovo Don Bosco, Asti): correlazione tra monitoraggio e dati climatici”. Candidate: Fabio Paletto; Supervisor: Prof. Giuseppe Mandrone
- 2018/19: Master’s degree thesis in “Scienze Geologiche applicate” (LM 74), with the title “Studio dei rapporti tra le Salinelle di Paternò e l’attività dell’Etna: evidenze in terreno e laboratorio”. Candidate: Loris Olocco. Supervisor: prof. Giuseppe Mandrone
- 2018/19: Master’s degree thesis in “Scienze Geologiche applicate” (LM 74), with the title “Variazione dei parametri fisico-meccanici di rocce carbonatiche al variare di temperatura e pressione”. Candidate: Michela Conserva. Supervisor: prof. Giuseppe Mandrone
- 2019/20: Master’s degree thesis in “Scienze Geologiche applicate” (LM 74), with the title “Analisi comparate delle principali risorse rinnovabili e possibili applicazioni nelle zone di Borgone di Susa e Villar Focchiardo”. Candidate: Marika Fedele; Supervisor: Prof. Giuseppe Mandrone.
- 2019/20: Master’s degree thesis in “Scienze Geologiche applicate” (LM 74), with the title “Studio geologico-ambientale per la massimizzazione del periodo d’uso della pista di sci di fondo del Parco Naturale Regionale della Lessinia”. Candidate: Silvia Rivero; Supervisor: Prof. Giuseppe Mandrone.
- 2020/21: Master’s degree thesis in “Monitoraggio ambientale, tutela e ripristino” (LM 75), with the title “Le miniere abbandonate di Saint-Barthélemy: una possibile valorizzazione come stoccaggio di energia”. Candidate: Mathieu Vuillermoz; Supervisor: Prof. Giuseppe Mandrone
- 2022/23: Master’s degree thesis in “Monitoraggio ambientale, tutela e ripristino” (LM 75), with the title “Riuso di un sito estrattivo dismesso per la produzione di energia rinnovabile a servizio di una comunità energetica”. Candidate: Ilaria La Camera; Supervisor: Prof. Giuseppe Mandrone
- 2022/23: Master’s degree thesis in “Monitoraggio ambientale, tutela e ripristino” (LM 75), with the title “Integrazione dell’impianto di teleriscaldamento di Nizza Monferrato da fonte geotermica: valutazione preliminare della sostenibilità”. Candidate: Giulia Ponzetta; Supervisor: Prof. Giuseppe Mandrone

INSTITUTIONAL RESPONSABILITIES

- 2019-2021: **Department Council and Teaching Commission**, at the Department of Earth Sciences, University of Turin (Italy).
- From June 2021 - present: **in charge** of the “Flux Lab” of the Interuniversity Department of Regional and Urban Studies and Planning (DIST), University of Turin, for the thermo-physical materials determinations.

- From October 2022 - present: **Department Council** of the Interuniversity Department of Regional and Urban Studies and Planning (DIST), University of Turin
- From January 2023 – present: **Welfare Committee** of the Interuniversity Department of Regional and Urban Studies and Planning (DIST), University of Turin
- From March 2023 - present: **Delegate** of the of the Interuniversity Department of Regional and Urban Studies and Planning (DIST), for the University of Turin (Italy), of the Horizon 2020 project “MindTheGeps” (Modifying Institutions by Developing Gender Equality Plans)

OTHER TITLES AND ACTIVITIES

- August 2011 - March 2013: expert consultant in the quarries field, for a local authority (Provincia di Cuneo).
- January 2012: geological expedition “Dancalia 2012”. During the expedition, a field work consisting of sampling of waters from the volcanic crater “Dallol” (Afar Region, Ethiopia), was conducted. These water samples were then analysed by Prof. Orlando Vaselli (Department of Earth Sciences of the University of Florence, Italy), and the results were published in “Chemical Geology” journal (Darrah, T., H., Tedesco, D., Tassi, F., Vaselli, O., Cuoco, E., Poreda, R., J. 2013. *Gas chemistry of the Dallol region of the Danakil Depression in the Afar region of the northern-most East African Rift*. Chemical Geology, 339, 16-29).

LANGUAGE SKILLS

- **Mother tongue:** Italian
- **Others:** English (C1); Français (C1); Español (B1)

COMPUTER SKILLS

- FeFlow
- Landmark’s SeisWorks SD
- QGis
- Microsoft Office (Word, Excel, Power Point)
- Adobe illustrator

PUBLICATIONS

➤ **ARTICLES IN ACADEMIC SCIENTIFIC JOURNALS (Scopus and Web of Science indexed)**

- **Chicco, J.M.,** Mandrone, G. (2023) *Effects of wildfire on soils: field studies and modelling on induced underground temperature variations*, Frontiers in Earth Sciences, Interdisciplinary Climate Studies, 11. <https://doi.org/10.3389/feart.2023.1307569>
- **Chicco, J. M.,** Comina, G., Mandrone, G., Vacha D., Vagnon, F. (2023) *Field surveys in heterogeneous rock masses aimed at hydraulic conductivity assessment*. SN Applied Sciences 5, 374 (2023). <https://doi.org/10.1007/s42452-023-05578-3>.
- Mandrone, G., Vacha D., **Chicco J.** (2023). Post-wildfire erosion and triggering of debris flows: a case study in Susa valley (Bussoleno). E3S Web of Conferences 415, 04009. <https://doi.org/10.1051/e3sconf/202341504009>.
- **Chicco, J.M.;** Fonte, L.; Mandrone, G.; Tartaglino, A.; Vacha, D. (2023). *Hybrid (Gas and Geothermal) Greenhouse Simulations Aimed at Optimizing Investment and Operative Costs: A Case Study in NW Italy*. Energies, 16(9), 3931. <https://doi.org/10.3390/en16093931>
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Fossano, lì 03/04/2024

Jessica Maria Chicco

A handwritten signature in black ink, appearing to read 'Jessica Maria Chicco', written in a cursive style.