

EUROPEAN CV



PERSONAL INFORMATION

Name and Surname	ELENA MARROCCHINO
Phone	3393807477
Email	mrrlne@unife.it
Role	Researcher at the University of Ferrara – Dept of Environmental and Prevention Sciences Scientific-disciplinary sector Geochemistry (GEO/08).

EDUCATION

1997 - 2000	PhD in MINERALOGY, PETROLOGY and CRYSTALLOGRAPHY.
21/03/1997	Degree in GEOLOGICAL SCIENCES with the highest grade (110/110 cum laude)
06 -13/04/2000	TEACHING QUALIFICATION;
Form 21/07/2003 to 31/07/2003	Training course TYL 2b 2003 “Teaching English for Young Learners” Socrates/Comenius 2.2 Norwich Institute for Language Education.
From 20/07/2009 to 24/07/2009	Training course EI-2009-127-001 “The active use of handheld technologies at heritage sites in the domain of physics, biology, chemistry and environmental science” IE Institute of Technology, Tralee, Education Centre, Dromtacker, Tralee. Co. Kerry (Ireland)
June 2009	B2 level of linguistic competence certification at the University of Ferrara
From 05/02/2010 to 28/05/2010	Training course TKT CLIL.

ACADEMIC AND WORKING EXPERIENCES

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| • From 04/11/2002 to 03/01/2008 | Post Doc Fellow
Department of Earth Science University of Ferrara |
| • From 01/09/2006 to 28/02/2020 | Primary School Teacher (Maths and Sciences)
Italian Ministry for Education |
| • From 01/03/2020 to 31/06/2021 | Post Doc Fellow
Department of Physics and Earth Sciences University of Ferrara |
| • From 01/07/2021 to now | Researcher |

MOTHER TONGUE	ITALIAN
OTHER LANGUAGE	ENGLISH
COMPETENCES	B2 Level
TECHNICAL SKILLS AND COMPETENCES <i>Con computer, attrezzature specifiche, etc.</i>	Excellent knowledge of the Office package (Word, Excel, Power Point) Excellent knowledge of graphics programs (Inkscape, Graphic) Excellent laboratory competencies (Ability to use specific equipment for the evaluation of elementary quantities of C, N, S and the relative isotope ratios in solid matrices (e.g. soils, agri-food products and rocks); Chemical treatment of solid matrixes
PERSONAL SKILLS AND COMPETENCES	I am a solid team player and an independent thinker. A deadline-oriented person, organized, capable of multitasking, with solid analytical skills, with good autonomy and strong aptitude for collaborative scientific work in a multidisciplinary team
SCIENTIFIC PROFILE	Scopus Author ID: 8624684100 Web of Science Researcher ID: AAJ-6316-2020 Scientific Production at 23/05/2024 Total Number of Publications on Scopus: 54 Total Number of Publications on Web of Science: 48 Hirsch/H-index: 11 EDITORIAL ACTIVITY - Guest Editor Special Issue "Geochemical, Mineralogical, and Petrographical Applications to Environment and Cultural Heritage" a special issue of Minerals (ISSN 2075-163X). This special issue belongs to the section "Environmental Mineralogy and Biogeochemistry". https://www.mdpi.com/journal/minerals/special_issues/GMPAECH - Guest Editor Special Issue "Natural and Environmental Hazards of Cultural Heritage" a special issue of Geosciences (ISSN 2076-3263). This special issue belongs to the section "Geoheritage, Geoparks and Geotourism". https://www.mdpi.com/journal/geosciences/special_issues/hazards_heritage - Currently Guest Editor Special Issue "Approaches and Challenges in Diagnostics and Conservation of Cultural Heritage" " a special issue of Materials (ISSN: 2076-3417) This special issue belongs to the section "Civil Engineering". Activity as a Reviewer for https://publons.com/dashboard/records/review/
MAIN RESEARCH FIELDS	- Application of scientific methodologies for the diagnostics and management of the intervention on the existing built historical and artistic heritage. - Characterization of river sediments from Italian and foreign contexts (Mozambique, Argentina and Morocco) to assess their environmental quality and possible uses as raw and secondary materials for industry and construction.

- Historical and conservative analysis of the cultural heritage from museums, archaeological sites and monuments for petrochemical-mineralogical investigation of medieval fusion, pigments, frescoes, lithoid building materials, such as mortars, plasters and bricks.
- Petrographic, mineralogical and geochemical study and characterization of construction and demolition aggregates in order to promote their reuse, after appropriate recycling treatments.
- Study and characterization of airborne particulate matter in the atmosphere with the focus on the petrochemical and morphological characterization of the particulate with the aim of defining its origin, environmental hazard and relationship with seasonal climatic variations with the purpose of defining abatement strategies to protect human health.
- Characterization of the geochemical and compositional footprint of soils and food in the context of food traceability projects, for the development of analytical methods aimed at food traceability and in this context.
- Study and characterization of thermal muds for human use.
- Evaluation of the presence of asbestoid minerals in natural and anthropogenic contexts with particular attention to the use of these materials in ornamental rocks and historic buildings
- Exploitation and transferability activities of research results in the field of natural georesources from quarries and mines, under Project LIFE19 ENV/IT/000373 - Recycling of granite scraps II - LIFE REGS II (duration: 36 months). The project aims to produce feldspars, using granite scraps instead of raw material. The technologies will be environmentally friendly and use 100 percent renewable energy. As part of this project, the undersigned is responsible for UNIFE 's Unit for the analysis of the impacts of mining on environmental matrices Role: Unit Collaborator. The undersigned has presented research results in this area at national and international conferences and published several papers in national and international journals.

PEER-REVIEWED PAPERS

1. Marrocchino E. *, Coltorti M., Visonà D. and Thirwall M.F. 2002. "Petrology of Predazzo Magmatic Complex (Trento, Italy)". *Geochimica Et Cosmochimica Acta*, 66 (15A) A486 Supplement 1 2002 <https://goldschmidtabstracts.info/2002/486.pdf>
2. Marrocchino E. *, Bianchini G., Tassinari R., Vaccaro C. 2004. "Chemical mineralogical investigation of construction and demolition waste materials". *Proceedings of the International Conference on Sustainable Waste Management and Recycling: Construction Demolition Waste*. Pages 97 - 104 2004 International Conference on Sustainable Waste Management and Recycling, 14-15 September 2004. ISBN 0727732854, 978-072773285-9
3. Bianchini G., Marrocchino E., Vaccaro C. 2004. "Chemical and mineralogical characterisation of historic mortars in Ferrara (NE, Italy)". *Cement and Concrete Research* 2004, 34(8), 1471-1475. <https://doi.org/10.1016/j.cemconres.2003.12.030>
4. Bianchini G., Marrocchino E., Tassinari R., Vaccaro C. 2005. "Recycling of construction and demolition waste materials: a chemical-mineralogical appraisal". *Waste Management*, 2005, 25, 149-159. <https://doi.org/10.1016/j.wasman.2004.09.005>
5. Fried A.N., Marrocchino E., Bradsell C and Roberts J.J. 2005. "Un-reinforced solid dense concrete block walls constructed using thin joint technology". *The Structural Engineers*, 2005, 83, (12) 33-370. [https://www.istructe.org/journal/volumes/volume-83-\(published-in-2005\)/issue-12/unreinforced-solid-dense-concrete-block-walls-cons/](https://www.istructe.org/journal/volumes/volume-83-(published-in-2005)/issue-12/unreinforced-solid-dense-concrete-block-walls-cons/)

6. Teruggi L.B., Marrocchino E., Rapti-Caputo D. & Vaccaro C. 2005. "Geochemical characterization of the bed sediments of the Rio Quequen catchment, Argentina". *Geologica Romana*, 2005, 38, 19-24. <https://www.dst.uniroma1.it/VolumeXXXVIII>
7. Bianchini G., Marrocchino E., Moretti A., Vaccaro C. 2006. "Chemical-mineralogical characterisation of historical bricks from Ferrara: an integrated "bulk" and "in-situ" analytical approach". Special Publications London Geological Society Maggetti M & Messiga B. (Eds) "Geomaterials in cultural heritage", 2006, 257, 127–139. ISBN 1-86239-195-5. <https://doi.org/10.1144/GSL.SP.2006.257.01.10>
8. Limbachiya M.C., Marrocchino E., Koulouris A. 2007. "Chemical-mineralogical characterisation of coarse recycled concrete aggregate". *Waste Management* 2007, 27, 201-208. <https://doi.org/10.1016/j.wasman.2006.01.005>
9. Lugli S., Marrocchino E.*, Mazzucchelli M., Sighinolfi F. Vaccaro C. 2007. "Petrochemical characterisation of natural stones from the Etruscan site of Marzabotto (Bologna-Italy): Preliminary results". *Geochimica Et Cosmochimica Acta* 2007, 71 (15) A601 Supplement S. <https://goldschmidtabstracts.info/abstracts/abstractView?id=2007005553>
10. Marrocchino E.*, Fried A.N., Koulouris A., Vaccaro C. 2009. "Micro-chemical/structural characterisation of thin layer masonry: A correlation with engineering performance". *Construction and Building Materials* 23 (1), 2009, 582-594. <https://doi.org/10.1016/j.conbuildmat.2007.09.010>
11. Rossetti, M., Bartolomei, P., Esposito, M., Marrocchino, E., Vaccaro, C. 2009. "Indoor radon concentrations: The influence of geological factors in Italian study case"". *Geochimica et Cosmochimica Acta* 2009, 73 (13) A1122 Supplement S. ISSN: 0016-7037. <https://goldschmidtabstracts.info/abstracts/abstractView?id=2009002068>
12. Telloli C., Coren F., Marrocchino E., Vaccaro C., Bovolenta M.R. 2010. "Monitoring and comparison of solid particulate matter between Po valley and Friuli plain". *Geochimica et Cosmochimica Acta* 2010, 74 (12) A1034 Supplement 1 ISSN 0016-7037. <https://goldschmidtabstracts.info/abstracts/abstractView?id=2010001505>
13. Touchnt, A A.; Ibhi, A.; Marrocchino, E.; Vaccaro, C. 2010. "Mineralogical and petrological analyses of three chondrite meteorites recovered from the Istfane strewnfield (Morocco)". *Geochimica et Cosmochimica Acta*. 2010, 74 (12) A7 Supplement 1 ISSN: 0016-7037. <https://goldschmidtabstracts.info/abstracts/abstractView?id=2010002242>
14. Ferioli, D., Bartolomei, P., Esposito, M., Marrocchino, E., Sansone, L., Tassinari, R., Vaccaro, C. 2010. "Grapes and wines on basic anorogenic volcanic rock terrains in South Lessini (Italy): Geochemical fingerprint and heavy metals assimilation". *Geochimica et Cosmochimica Acta*, 2010, 74 (12) A288; Supplement 1 ISSN 0016-7037. <https://goldschmidtabstracts.info/abstracts/abstractView?id=2010001586>
15. Faccia, F. A.; Vaccaro, C.; Sansone, L.; Marrocchino, E.; Tassinari, R. 2010. "Trace and ultratrace elements in grapes: Possible applications for geographical traceability". *Geochimica et Cosmochimica Acta*, 2010, 74 (12) A276; Supplement 1 ISSN 0016-7037. <https://goldschmidtabstracts.info/abstracts/abstractView?id=2010001590>
16. Marrocchino E.*, Rapti D., Vaccaro C. 2010. "Chemical-mineralogical characterisation as useful tool in the assessment of the decay of the Mesola Castle (Ferrara, Italy)". *Construction and Building Materials*, 2010, 24 (12) 2672-2683 <https://doi.org/10.1016/j.conbuildmat.2010.04.063>

17. Marrocchino E. *, Toffano A., Vaccaro C., Borsa M. e Cangiano S. 2010. "Petrochemical and petrophysical characterisation of construction and demolition inert materials for concrete". 2nd International Conference on Sustainable Construction Materials and Technologies 2010, 31-41, Proceedings of Honouree sessions ed. T. Naik, F. Canpolat, P. Claisse, E. Gajinan. ISBN 978-1-4507-1487-7. <http://www.claisse.info/2010%20papers/p2.pdf>
18. Marin, E., Nachite, D., Najih, M., Anfuso, G., Marrocchino, E., Vaccaro, C. 2010. "The lagoon of Nador (Morocco): Geochemical and petrographic analysis of sediments and environmental conditions". Rendiconti Online Società Geologica Italiana. 2010, 21, 875-876. ISSN: 2035-8008
19. Bruni S., Maino G., Marrocchino E., Vaccaro C., Volpe L. 2013. "Study of the Civic Tower in Ravenna as an example of medieval towers preservation problem". European Physical Journal 2013, 128, 1- 20 Springer Heidelberg Tiergartenstrasse 17, D-69121 Heidelberg, Germania <https://doi.org/10.1140/epjp/i2013-13033-1>
20. El Mrini A., Nachite D., Anfuso G., Maanan M., Cultrone G., Vaccaro C. and Marrocchino E. 2015. "The Coastal Sediment Provenance and Their Distribution in the Mediterranean Beaches of NW Morocco". Chapter in Volume "Sediment Fluxes in Coastal Areas" 10 Springer Science & Business Media Dordrecht 2015, 91 - 120; Print ISBN 978-94-017-9259-2; Online ISBN 978-94-017-9260-8. https://doi.org/10.1007/978-94-017-9260-8_5
21. Pepi S., Sansone L., Chicca M., Marrocchino E., Vaccaro C. 2016. "Distribution of rare earth elements in soil and grape berries of Vitis vinifera cv. "Glera". Environmental Monitoring and Assessment, 2016, 188, 477 - 486, <https://doi.org/10.1007/s10661-016-5490-1>
22. Casetta, F., Coltorti, M., Marrocchino, E. 2018. "Petrological evolution of the Middle Triassic Predazzo Intrusive Complex, Italian Alps". International Geology Review. 2018, 60 (8), 977-997. <https://doi.org/10.1080/00206814.2017.1363676>
23. Punturo R.; Ricchiuti C.; Rizzo M. and Marrocchino E. 2019. "Mineralogical and Microstructural Features of Namibia Marbles: Insights about Tremolite Related to Natural Asbestos Occurrences". Fibers, 2019, Vol 7, Issue 4. <https://doi.org/10.3390/fib7040031>
24. Bergamaschi B., Marzola L., Radice M., Manfredini S., Baldini E., Vicentini C.B., Marrocchino E., Molesini S., Ziosi P., Vaccaro C., Vertuani S.. 2020. "Comparative Study of SPA Mud from "Bacino Idrominerario Omogeneo dei Colli Euganei (B.I.O.C.E.)-Italy and Industrially Optimized Mud for Skin Applications". Life, 2020, vol. 10, p. 78-95, <https://doi.org/10.3390/life10060078>
25. Marrocchino E. *, Telloli C., Novara P., Vaccaro C. 2020. "Petro-archaeometric characterization of historical mortars in the city of Ravenna (Italy)". Proceeding of Imeko Tc-4 International Conference on Metrology for Archaeology and Cultural Heritage. 2020, Editore Athena SrL, 32-37.
26. Marrocchino, E. *, Telloli, C., Vaccaro, C. 2020. "Microscopic and chemical characterization of metal slags found at the Porta Paola excavation in Ferrara". Proceeding of Imeko Tc-4 International Conference on Metrology for Archaeology and Cultural Heritage. 2020, Editore Athena SrL, 347-352.

27. Marrocchino E. *, Telloli C., Caraccio S., Guarnieri C., Vaccaro C. 2020. "Medieval Glassworks in the City of Ferrara (North Eastern Italy): The Case Study of Piazza Municipale". *Heritage* 2020, 3 (3), 819-837 <https://doi.org/10.3390/heritage3030045>
28. Marrocchino E. *, Telloli C., Pedrini M. and Vaccaro C. 2020 "Natural Stones Used in the Orsi-Marconi Palace Façade (Bologna): A Petro-Mineralogical Characterization". *Heritage* 2020, 3(4), 1109-1123; <https://doi.org/10.3390/heritage3040062>
29. Marrocchino, E., Lattaio, V., Eftekhari, N., Conte, A.M., Franceschini, S., Pepi, S., Rizzo, M., Vaccaro, C. 2021. "Rationalist architecture in rural villages: petro-morphological characterization of natural asbestos fibers in decorative plasters used for artificial stones". *Episodes*, 2021, 43 (3), 893-908
<https://doi.org/10.18814/epiiugs/2020/0200s08>
30. Marrocchino E*, Telloli C, Faccia F, Rizzo A, Volpe L. 2021. "Morphological and chemical analysis of Tremolite related to natural asbestos in the road paving". *Episodes*, 2021, 43 (3), 869-879 ISSN: 0705-3797,
<https://doi.org/10.18814/epiiugs/2020/0200s05>
31. Marrocchino Elena*, Telloli Chiara and Vaccaro Carmela. 2021. "Geochemical and Mineralogical Characterization of Construction Materials from Historical Buildings of Ferrara (Italy)". *Geosciences*, 2021, 11(1), 31.
<https://doi.org/10.3390/geosciences11010031>
32. Eftekhari, N., Holakoei, P., Marrocchino, E., Vaccaro, C. 2021. "To be or not to be local: a provenance study of archaeological ceramics from Shahr-i Sokhta, eastern Iran". *Archaeological and Anthropological Sciences*, 2021, 13 (4), Article number 68.
<https://doi.org/10.1007/s12520-021-01307-2>
33. Marrocchino E. *, Telloli C., Aprile A. Capuani D., Malaguti D. & Vaccaro C. 2021. "Case study on the mineralogical and petrophysical analysis of reinforced concrete slabs of a highway viaduct of the S.G.C. Orte-Ravenna". *SN Applied Science* 2021, 3, 623. <https://doi.org/10.1007/s42452-021-04620-6>
34. Marrocchino E. *, Telloli C., Cesarano M., Montuori M. 2021. "Geochemical and Petrographic Characterization of Bricks and Mortars of the Parish Church Santa Maria in Padovetere (Comacchio, Ferrara, Italy)". *Minerals*, 2021, 11, 530.
<https://doi.org/10.3390/min11050530>
35. Marrocchino E. *, Telloli C., Rizzo A. 2021. "Chemical Characterization of Particulate Matter in the Renaissance City of Ferrara". *Geosciences*, 2021, 11, 227.
<https://doi.org/10.3390/geosciences11060227>
36. Marrocchino E., Zanelli C., Guarini G., Dondi M. 2021. "Recycling mining and construction wastes as temper in clay bricks". *Applied Clay Science*, 2021, 209, 106152. <https://doi.org/10.1016/j.clay.2021.106152>
37. Zanelli C., Marrocchino E. *, Guarini G., Toffano A., Vaccaro C., Dondi, M. 2021. "Recycling Construction and Demolition Residues in Clay Bricks". *Applied Sciences* 2021, 11, 8918. <https://doi.org/10.3390/app11198918>
38. Telloli C., Aprile A., Marrocchino E*. 2021. "Petrographic and Physical-Mechanical Investigation of Natural Aggregates for Concrete Mixtures". *Materials* 2021, 14, 5763.
<https://doi.org/10.3390/ma14195763>

39. Sardella A., Canevarolo S., Marrocchino E., Tittarelli F., Bonazza, A. 2021. "Investigation of Building Materials Belonging to the Ruins of the Tsogt Palace in Mongolia". *Heritage* 2021, 4, 2494-2514. <https://doi.org/10.3390/heritage403014>

40. Marrocchino E. *, Telloli C., Leis M., Vaccaro, C. 2021. "Geochemical-Microscopical Characterization of the Deterioration of Stone Surfaces in the Cloister of Santa Maria in Vado (Ferrara, Italy)". *Heritage* 2021, 4, 2996-3008. <https://doi.org/10.3390/heritage4040167>

41. Peresani M., Bertola S., Caricola I. , Nunziante Cesaro S., Duches R. , Ferretti P., Margaritora D., Marrocchino E., Eftekhari N, Vaccaro C., Zupancich A., Cristiani E. 2021. "A taste for the unusual. Green, flat pebbles used by late Neanderthals". *Journal of Anthropological Archaeology*, 2021, 64. <https://doi.org/10.1016/j.jaa.2021.101368>

42. Marrocchino, E., Sciavicco, G., Lucena-Sánchez, E., Vaccaro, C. 2021. "On Intelligent Fingerprinting of Antique Buildings from Clay Composition". In: Valencia-García, R., Bucaram-Leverone, M., Del Cioppo-Morstadt, J., Vera-Lucio, N., Jácome-Murillo, E. (eds) *Technologies and Innovation. CITI 2021. Communications in Computer and Information Science*, vol 1460. Springer, Cham. https://doi.org/10.1007/978-3-030-88262-4_3

43. El Ouaty O., El M'rini A., Nachite D., Marrocchino E., Marin E., Rodella I. 2022. "Assessment of the heavy metal sources and concentrations in the Nador Lagoon sediment, Northeast-Morocco". *Ocean and Coastal Management*, 2022, 216, 105900. <https://doi.org/10.1016/j.ocecoaman.2021.105900>

44. Telloli, C., Rizzo, A., Salvi, S., Pozzobon, A., Marrocchino, E., and Vaccaro, C. 2022. "Characterization of groundwater recharge through tritium measurements", *Advances in Geosciences*. 2022, 57, 21–36, <https://doi.org/10.5194/adgeo-57-21-2022>

45. Elena Marrocchino*, Chiara Telloli, Maria Grazia Paletta, Marilena Leis, Carmela Vaccaro. 2022. "The mural paintings of the cloister in the Certosa di Calci, Pisa". *Journal of Archaeological Science: Reports* 2022, 43, 103461, <https://doi.org/10.1016/j.jasrep.2022.103461>

46. Elena Marrocchino, Chiara Telloli, Sofia Rimoldi, Carmela Vaccaro. 2022. "Microanalysis of metal slab used in motorway tunnels to protect concrete and assessment of the state of conservation", *Materials Today Communications* 2022, 32, 104023, <https://doi.org/10.1016/j.mtcomm.2022.104023>

47. Marrocchino E. *, Telloli C., Finotti S., Facchi A., Eftekhari N., De Vito C. 2022. "Microstructure, Chemistry and Mineralogy Approach for the Diagnostics of Metallic Finds of the Tomba della Biga (Adria, Italy)". *Applied Sciences*. 2022, 12, 11365. <https://doi.org/10.3390/app122211365>

48. Marrocchino, E. *, Telloli, C., Tessari, U., Cesarano, M., Bruni, M., Vaccaro, C. 2022. "Archaeometric Surveys of the Artifacts from the Archaeological Site of Baro Zavelea, Comacchio (Ferrara, Italy)". *Applied Sciences*. 2022, 12, 11692. <https://doi.org/10.3390/app122211692>

49. Marrocchino, E. *, Paletta, M.G., Telloli, C. 2022. "Microanalytical Determinations to Distinguish Maiolica and Mezza Majolica Ceramics from Faenza (Emilia-Romagna Region, Italy)". *Heritage* 2022, 5, 3515-3529. <https://doi.org/10.3390/heritage5040182>

50. Franzo A., Caffau M., Nasi F., Marrocchino E., Paletta M.G., Bazzaro M., Cibic T. 2023. "Benthic foraminifera for the ecological status assessment of tourist marinas". *Ecological Indicators* 2023, 147 number 110006 <https://doi.org/10.1016/j.ecolind.2023.110006>
51. Monaco, D., Saggioro, F., Marrocchino, E., Vaccaro, C., Marchesini, M. 2023. "Archaeometric Analysis of Encrustations Adhering to Pietra Ollare Fragments from the Medieval Village of Nogara". *Heritage* 2023, 6, 3365-3384. <https://doi.org/10.3390/heritage6040178>
52. Di Renzo, D., Rizzo, A., Telloli, C. Salvi S., Marrocchino E., Yàbar D.N. & Vaccaro C. 2023. "Geochemical and isotopic tracers to define the aquifer's vulnerability: the case study of the alluvial multi-aquifer system of the Friulian plain". *Environmental Monitoring and Assessment* 2023, 195, 781. <https://doi.org/10.1007/s10661-023-11359-7>
53. Marrocchino E. *, Paletta MG, Ferroni L, Manfrini R, Telloli C. 2023. "Contribution of Geosciences to Cultural Heritage Conservation Assessment: The Case Study of the Loggiato dei Cappuccini in Comacchio (Italy)". *Geosciences*. 2023; 13(6):157. <https://doi.org/10.3390/geosciences13060157>
54. Aquilano A., Marrocchino E. *, Paletta M.G., Tessari U., Vaccaro C. 2023. "Geochemical Characterization of Sediments from the Bibione Coastal Area (Northeast Italy): Category Rank Details on Bulk Composition and Particle Size Distribution". *Journal of Marine Science and Engineering*. 2023; 11(9):1650. <https://doi.org/10.3390/jmse11091650>
55. Marrocchino E., Telloli C., Faccia F., Sansone L., Vaccaro C. 2023. "Geochemical fingerprint and heavy metals assimilation on grapes from south Lessini (Italy)" *Journal of Wine Research*, 2023. 34, Issue 3, Pages 186 – 209. <https://doi.org/10.1080/09571264.2023.2254243>
56. Aquilano A., Marrocchino E. *, Tessari U., Paletta M.G. 2024. "Granulometric Analysis of Sediments for Sustainable Management of Tourist Ports: The Case Study of the Interreg ECOMAP Project Tourist Marinas" *Advances in Science, Technology and Innovation* 2024. Pages 223-227. 2nd International Conference on Mediterranean Geosciences Union, MedGU 2022. https://doi.org/10.1007/978-3-031-48754-5_52
57. Marrocchino E. *, Telloli C., Leis M. 2024. "Micro-analysis as a Tool for the Characterization of Historical Masonry Buildings: The Decorative Elements of the Basilica Della Beata Vergine Maria Del Rosario (Polesella, Rovigo)" *Advances in Science, Technology and Innovation* 2024. Pages 205-209. 2nd International Conference on Mediterranean Geosciences Union, MedGU 2022. https://doi.org/10.1007/978-3-031-48754-5_48
58. Marrocchino E. *, Telloli C., Gulinelli M.T, Guarnieri C. 2024. "Archeometric Study of Medieval Ceramic Finds from the Porta Reno Excavation in Ferrara (Italy)" *Advances in Science, Technology and Innovation* 2024. Pages 201-204. 2nd International Conference on Mediterranean Geosciences Union, MedGU 2022. https://doi.org/10.1007/978-3-031-47079-0_27
59. El-Mounja M.M., Rizzo A., Telloli C., Marrocchino E., Vaccaro C. 2024. "Analysis of Perchlorate in Aquatic Food and Evaluation of Human Exposure" *Advances in Science, Technology and Innovation* 2024. Pages 121-123. 2nd International Conference on Mediterranean Geosciences Union, MedGU 2022. https://doi.org/10.1007/978-3-031-47079-0_27

60. Gomes H., Collado H., Garcês S., Lattao V., Nicoli M., Eftekhari N., Marrocchino E., Rosina P. 2024. "Archeometrical Characterization of Rock Art Pigments from Puerto Roque Open-Air Rock Art Shelter (Valencia De Alcantara, Extremadura, Spain)" Heritage Open Access Volume 7, Issue 3, Pages 1123 – 1139 March 2024. . <https://doi.org/10.3390/heritage7030053>

61. El Ouaty O, El M’rini A, Nachite D, Marrocchino E, Rodella I. 2024. "Sediment Quality Indices for the Assessment of Heavy Metal Risk in Nador Lagoon Sediments (Morocco) Using Multistatistical Approaches." Sustainability. 2024; 16 (5):1921. <https://doi.org/10.3390/su16051921>

TRAINING AND RESEARCH
ACTIVITIES AT QUALIFIED
FOREIGN RESEARCH INSTITUTES

ROYAL HOLLOWAY UNIVERSITY OF LONDON ISOTOPIC LABORATORIES FROM JUNE 2001 TO SEPTEMBER 2001 TO INVESTIGATE ISSUES RELATING TO ISOTOPIC ANALYZES OF IGNEOUS ROCKS. PP
KINGSTON UNIVERSITY, KINGSTON UPON THAMES (UK) WHERE THE RESEARCH ACTIVITY TOOK PLACE FROM 2005 TO 2007 AS HONORARY RESEARCHER AT THE SUSTAINABLE TECHNOLOGY RESEARCH CENTER OF THE FACULTY OF ENGINEERING.

PROJECT ACTIVITIES

- MURST YOUNG RESEARCHERS PROJECT AA 1999/2000 RESEARCH PROJECT ENTITLED "TRIASSIC MAGMATISM IN THE SOUTHERN ALPINE SECTOR". **ROLE: PROJECT MANAGER.** PP
- MURST YOUNG RESEARCHERS PROJECT AA 2000/2001 RESEARCH PROJECT ENTITLED "TRIASSIC MAGMATISM IN THE SOUTHERN ALPINE SECTOR". **ROLE: PROJECT MANAGER.**
- TECHNOLOGY TRANSFER PROJECT AT THE SPINNER CONSORTIUM (SERVICES FOR THE PROMOTION OF INNOVATION AND RESEARCH. **ROLE: PROJECT MANAGER**
- INTERREG V-A PROJECT ITALY - CROATIA 2014 - 2020 CBC PROGRAM - PRIORITY AXIS: ENVIRONMENT AND CULTURAL HERITAGE. PROJECT TITLE: ECOMAP - ECOSUSTAINABLE MANAGEMENT OF MARINE AND TOURIST PORTS. (DURATION: 36 MONTHS). AS PART OF THE PROJECT, AS REGARDS THE PARTNER FOR UNIFE, HE IS RESPONSIBLE FOR THE ACTIONS THAT INVOLVE THE GEOCHEMICAL ANALYSIS OF SEDIMENTS AND BIOTA AND CHARACTERIZATION OF THEIR ISOTOPIC FOOTPRINT. **ROLE: PROJECT MANAGER.**
- LIFE19 ENV / IT / 000373 PROJECT - RECYCLING OF GRANITE SCRAPS II - LIFE REGS II (DURATION: 36 MONTHS). AS PART OF THIS PROJECT, THE UNDERSIGNED IS RESPONSIBLE FOR THE UNIFE UNIT FOR THE ANALYSIS OF THE IMPACTS OF MINING ON ENVIRONMENTAL MATRICES. **ROLE: COLLABORATOR OF THE OPERATING UNIT.**
- PROJECT 5x1000 - CALL FOR RESEARCH PROJECTS FUNDED WITH THE CONTRIBUTION OF THE CHAMBER OF COMMERCE, INDUSTRY, CRAFTS AND AGRICULTURE OF FERRARA YEAR: 2018 - PROT. 5x10001841. **ROLE: OPERATING UNIT MEMBER (OF THE PRINCIPAL INVESTOR).**

Ferrara, 23/05/2024