PERSONAL INFORMATION

Name: Elena

Surname: Pavoni

Place and date of birth: Tolmezzo (UD), 16/08/1989

Nation: Italy

PRESENT ACADEMIC POSITION

• Field of Research	GEO/08 – Geochemistry and volcanology
• Academic position	Researcher (RTDa) University of Trieste (Italy) Department of Mathematics and Geosciences – DMG Via E. Weiss 2, 34128 Trieste Phone: +39.040.5582217 e-mail: epavoni@units.it website: website: http://www.mercurilab.units.it/

PROFESSIONAL AND SCIENTIFIC EXPERIENCES

• January 2022 - Currently	RTDa in Geochemistry and volcanology (GEO/08), Department of Mathematics and Geosciences, University of Trieste. PON "Ricerca e Innovazione" 2014-2020 – D.M. n. 1062, 10 august 2021. Funding MUR-FSE REACT-EU – PON R&I 2014-2020. Research project: "*Application of sustainable amendments to reduce mercury bioavailability in contaminated soil and sediments*". Scientific sucpervisor: Prof. Stefano Covelli. Member of the Italian Geochemistry Society
• October 2021 – December 2021	Post DOC in Geochemistry and volcanology (GEO/08) – Analytical chemistry (CHIM/01), Department of Mathematics and Geosciences – Department of Chemical and Pharmaceutical Sciences, University of Trieste (Italy). Research project: ""*Mobility and speciation of potentially toxic elements (Thallium, Lead, Zinc, Arsenic) in surface and groundwaters, soil and stream sediments in dismissed mining areas*". Scientific supervisor: Prof. Stefano Covelli. Teaching activity (Environmental chemistry, CHIM/12 - 2 CFU, 20 h) for the BSc Degree in Tecniche della Prevenzione nell'Ambiente e nei Luoghi di Lavoro, Department of Medical Area, University of Udine. First semester, academic year 2021-2022.

• October 2020 – October 2021	Post DOC in Geochemistry and volcanology (GEO/08) – Analytical chemistry (CHIM/01), Department of Mathematics and Geosciences – Department of Chemical and Pharmaceutical Sciences, University of Trieste (Italy). Research project: "*"Mobility and speciation of potentially toxic elements (Thallium, Lead, Zinc, Arsenic) in surface and groundwaters, soil and stream sediments in dismissed mining areas*". Scientific supervisor: Prof. Stefano Covelli.
• June 2020 – September 2020	Research fellow - MercuRILab (www.mercurilab.units.it) and TrEELab – Department of Mathematics and Geosciences – University of Trieste (Italy). Research activity: analytical determination of trace elements in water samples by means of ICP-MS. Supervisors: Prof. Stefano Covelli, Prof. Gianpiero Adami.
• November 2019 – May 2020	Research grant in Geochemistry and volcanology (GEO/08) – Analytical chemistry (CHIM/01), Department of Mathematics and Geosciences – Department of Chemical and Pharmaceutical Sciences, University of Trieste (Italy). Research project: "*Trace element (Thallium, Lead, Zinc, Arsenic) occurrence, mobility and speciation in mining dump groundwater and surface freshwater*". Scientific supervisor: Prof. Stefano Covelli.
• March 2020	Ph.D. in Chemistry (XXXII cycle) - University of Trieste and University Cà Foscari of Venezia (Italy). Funded by European Social Fund (ESF, 2014-2020) FP1685623003 – Friuli Venezia Giulia Region. Ph.D. thesis "*Trace elements in estuarine environments: mixing, partitioning and fate in the main Italian and Slovenian river mouths (Gulf of Trieste, northern Adriatic Sea*". Ph.D. Program Coordinator: Prof. Barbara Milani; Supervisor: Prof. Gianpiero Adami; Co-supervisors: Prof. Stefano Covelli, Prof. Jadran Faganeli.
• 10 – 14 September 2018	Research activity planned within the framework of the ECOMER Project entitled "*Effects of the abandoned Hg mining on the environmental quality of fluvio-litoral ecosystems in the Asturian coast: water-sediment-biota interactions*" coordinated by Prof. Jorge Loredo, at the University of Oviedo - Departamento de Explotación y Prospección de Minas, Spain. Sampling and laboratory activities were performed under the supervision of Prof. Stefano Covelli.
• July and September 2016	Research fellow – MercuRILab (www.mercurilab.units.it) - Department of Mathematics and Geosciences - University of Trieste (Italy). Research project FRA 2014 (Scientific supervisor: Prof. Stefano Covelli) "*Monitoraggio ambientale di una valle da pesca in ambiente lagunare contaminato da mercurio attraverso un approccio multidisciplinare*".
• January – April 2016	Teaching activity - Department of Mathematics and Geosciences - University of Trieste – Course in Geological Sciences, topic: Geochemistry. Assistant in preparing material for teaching and for students. Activity: modelling of major and trace elements biogeochemical cycles in various environmental compartments (lithosphere, pedosphere, hydrosphere, atmosphere), techniques for the study of the impact of these elements on natural environments modified by human activities. Scientific supervisor: Prof. Stefano Covelli

• September – December 2015	Research fellow – MercuRILab (www.mercurilab.units.it) - Department of Mathematics and Geosciences - University of Trieste (Italy). "*Progetto di Monitoraggio Pre-escavo del canale del Porto di Monfalcone*". Research activity: measurements of chemico-physical parameters of the water column; water and sediment sampling, estimation of sedimentary fluxes of mercury. Scientific supervisor: Prof Stefano Covelli
• April 2015	MSc in Scienze e Tecnologie per l'Ambiente e il Territorio - University of Udine and Trieste, final marks of 110/110 *cum laude*. Thesis in Environmental Geochemistry entitled "*Caratterizzazione geochimico-ambientale di un'area mineraria dismessa: presenza e mobilità di metalli pesanti in diverse matrici ambientali*". Supervisor: Prof. Stefano Covelli. Co-supervisors: Dott. Andrea Emili, Dott. Elisa Petranich.
• September 2012	BSc in Geologia - University of Trieste, final marks of 107/110. Thesis in Geochemistry entitled "*Gradienti di salinità in ambiente di estuario, implicazioni sulle dinamiche dell'ecosistema. Un esempio dai fiumi Aussa - Corno (Regione Friuli - Venezia Giulia)*". Supervisor: Prof. Riccardo Petrini. Co-supervisor: Dott. Francesca Federica Slejko.

SCIENTIFIC AND TECHNICAL SKILLS

General experience in the analysis, monitoring and management of the terrestrial and costal-marine environments, mainly focused on the occurrence, distribution and mobility of potentially toxic trace elements in different environmental matrices. Moreover, I have acquired expertise in the interdisciplinary evaluation of combined geochemical, environmental and mineralogical data.

As part of the scientific and professional experience, I have improved my knowledge on the mobility of potentially toxic trace elements in terrestrial (soils, stream sediments, mine tailings, surface and groundwater) and coastal-marine (water column, suspended particulate matter, sediment, porewater) environmental systems. I have also improved my skills regarding the sampling of different environmental matrices and the sample preparation procedures in the laboratory for different chemical analyses. I have improved my knowledge on the marine-coastal environment by acquiring skills in sampling sediments (grab) and water samples at different depth (Niskin and Van Dorn bottles), in the acquisition of vertical profiles of the main physico-chemical parameters (temperature, salinity and turbidity) and in *in situ* determination of pH, Eh and dissolved oxygen using portable multiprobes. Moreover, within the research activity I gained experience in groundwater sampling both in static (bailer) and dynamic (pumping) modes. As part of the ECOMER Project (*Effects of the abandoned Hg mining on the environmental quality of fluvio-litoral ecosystems in the Asturian coast: water-sediment-biota interactions* in collaboration with the University of Oviedo - Departamento de Explotación y Prospección de Minas, Spain), I have improved my skills in the evaluation of the biogeochemical behaviour of potentially toxic trace elements in estuarine environments by means of resuspension experiments, *in situ* benthic chamber experiments, extrusion of sediment cores under inert atmosphere and isolation of sediment porewater.

Regarding the laboratory activities, I have acquired experience in the filtration and ultrafiltration procedures allowing the isolation of the suspended particulate matter and the colloidal material, respectively. I have also experience in the microwave acid digestion of inorganic and organic samples for the analytical determination of the total concentration of potentially toxic trace elements as well as in the evaluation of their bioavailable fraction in soils, sediments and mine tailings by laboratory extraction procedures.

During scientific and professional career, I gained experience in the analytical determination of major ions in surface and groundwater samples by using ion chromatography (IC), mercury and other potentially toxic trace elements in different environmental matrices by means of elemental mercury analyzer (Direct Mercury Analyser - DMA), cold vapor atomic fluorescence spectrophotometry (CV-AFS), inductively coupled plasma mass and optical spectrometry (ICP-MS and ICP-OES).

SCIENTIFIC ACTIVITY

Courses and seminars

• 16-18 March 2022 Trieste (Italy)	Training course "*Geostatistica Base con R e QGIS*" - TerreLogiche. Live streaming.
• 14-18 June 2021 Trieste (Italy)	School "*Lake Como International Summer School – Principles, Applications and New Frontiers in Isotope Geochemistry*" – Department of Earth Sciences "A. Desio", University of Milano. Online.
• 17-18 March 2021 Trieste (Italy)	Training course "*Come scrivere un progetto ERC-Consolidator in Horizon Europe*" - Agenzia per la Promozione della Ricerca Europea (APRE). Online.
• 11 December 2020 Trieste (Italy)	Course "*3-Way data analysis*" - Research Group of Analytical Chemistry and Chemometrics – Department of Pharmacy, University of Genova.
• 30 September 2020 Trieste (Italy)	Webinar "*Il Vostro NexION ICP-MS. Come ottenere un'ottima performance. La calibrazione: guida per ottenere risultati accurati*" organised by Commercial Learning Experience Team l.
• April – May 2020 Trieste (Italy)	Course on health and safety in the workplace: - General Part - Specific Part, Low Risk - Specific Part, Medium Risk, Biological - Specific Part, Medium Risk, Chemical - Specific Part, Medium Risk, Physical/Mechanical - Specific Part, Medium Risk, Geology/Archeology - Coronavirus Risk
• 14 - 15 February 2019 Venezia – Italy	II Winter School "Mentoring *for Chemists: Bringing Excellence to grow Excellence*" – Joint Doctoral Program in Chemistry, University of Trieste, University Ca' Foscari Venezia.
• 9 November 2018 Udine - Italy	Scientific conference "I giovani e la Chimica in Friuli Venezia Giulia" – Italian Chemistry Society (SCI), University of Udine.
• 24 - 28 September 2018 Genova – Italy	School "Chemometric School: Multivariate Analysis" – Research Group of Analytical Chemistry and Chemometrics – Department of Pharmacy, University of Genova.
• 4 May – 6 July 2018 Trieste – Italy	Course "*Academic English for PhD Students*" – Prof. Katia Peruzzo – University of Trieste – Complementary Skills Training.
• 18 – 22 June 2018 Abbadia San Salvatore (Siena Province – Italy)	The 3rd CAMGEO School – "Campionamento ed Analisi di Matrici Geologiche" – Italian Geochemistry Society (SoGeI).
• 01 March 2018 Pisa - Italy	Workshop "Geochimica del Tallio: sorgenti, problematiche ambientali ed effetti biologici di un contaminante emergente" - Italian Geochemistry Society (SoGeI).
• 15 - 16 February 2018 Venezia - Italy	Workshop "Small Molecules Activation" – Joint Doctoral Program in Chemistry, University of Trieste, University Ca' Foscari Venezia.
• 27 March – 01 April 2017 Castiglione del lago (Perugia Province – Italy)	The 2nd "*Interational GeoScience Communication School*" – 44 hours of lectures and 30 hours dedicated to preparatory studies and exercises for a total of 74 hours.
• 20 - 24 June 2016 Abbadia San Salvatore (Siena Province – Italy)	The 2nd CAMGEO School – "Campionamento ed Analisi di Matrici Geologiche" – Italian Geochemistry Society (SoGeI).

• 10 June 2016 Trieste - Italy	Seminar "Mutamenti nel patrimonio idrico di un territorio e possibili effetti epigenetici e genetici" - Meetings Health Environment in FVG 2016 - FNOMCeO (Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri).
• 9-13 November 2015 Trieste - Italy	GIS (Geographic Information Systems) ECDL – Level "*Specialized*"
• 13 December 2013 Trieste - Italy	Seminar "*Sistemi di monitoraggio diffuso per la rilevazione di parametri chimico – fisici e ambientali*" - IAL – FVG.

Scientific awards

• February 2021	Award for young researchers for the scientific production – 4th Conference of the Italian Maine Geologists.
• September 2020	Award for the best flash oral communication. **Pavoni E.**, Crosera M., Petranich E., Klun K., Faganeli J., Covelli S., Adami G., 2018. *Potentially harmful element (PHE) occurrence and phase partitioning in the river mouths of the Gulf of Trieste (northern Adriatic Sea)*. XXVII Congresso della Divisione di Chimica Analitica della Società Chimica Italiana, Book of Abstracts F2 EC p. 152, Bologna (Italy), 16-20 September 2018.

Publications

Co-author of 17 scientific articles peer-review, 1 extended abstract and 21 abstracts including oral and poster communications at national and international conferences.
(SCOPUS H Index = 7, 102 total citations by 88 documents).

• Scientific articles (peer-review)

1. Magnano G.C., Marussi G., **Pavoni E.**, Adami G., Larese Filon F., Crosera M., 2021. Percutaneous metals absorption following exposure to road dust powder. *Environmental Pollution*, 292 Part B, 118353.
2. Zanoni I., Crosera M., **Pavoni E.**, Adami G., Mauro M., Costa A.L., Lead, J.R., Larese Filon F., 2021. Use of single particle ICP-MS to estimate silver nanoparticle penetration through baby porcine mucosa. *Nanotoxicology*, 15 (8), 1005-1015.
3. **Pavoni E.**, Petranich E., Signore S., Fontolan G., Covelli S., 2021. The legacy of the Idrija mine twenty-five years after closing: is Mercury in the water column of the Gulf of Trieste still an environmental issue? *International Journal of Environmental Research and Public Health*, 18 (19), 19192.
4. Millo C., Bravo C., Covelli S., **Pavoni E.**, Petranich E., Contin M., De Nobili, M., Crosera M., Otero Sutti, B., das Mercês Silva, C., de Santis Braga E., 2021. Metal binding and sources of humic substances in recent sediments from the Cananéia-Iguape estuarine-lagoon complex (South-Eastern Brazil). *Applied Sciences*, 11 (18), 8466.
5. **Pavoni E.**, García-Ordiales E., Covelli S., Cienfuegos P., Roqueñi N., 2021. Legacy of past mining activity affecting the present distribution of dissolved and particulate mercury and methylmercury in an estuarine environment (Nalón River, Northern Spain). *Applied Sciences*, 11 (10), 4396.
6. Petranich E., Crosera M., **Pavoni E.**, Faganeli J., Covelli S., 2021. Behaviour of metal(loid)s at the sediment-water interface in an aquaculture lagoon environment (Grado Lagoon, Northern Adriatic Sea, Italy). *Applied Sciences*, 11 (5), 2350, 1-16.
7. Covelli S., Petranich E., **Pavoni E.**, Signore S., 2021. Can sediments contaminated by mining be a source of mercury in the coastal environment due to dredging? Evidence from thermo-desorption and chemical speciation. *Bulletin of Environmental Contamination and Toxicology*, 106 (6), 942-948.

8. **Pavoni E.**, Crosera M., Petranich E., Faganeli J., Klun K., Oliveri P., Covelli S., Adami G., 2021. Distribution, Mobility and Fate of Trace Elements in an Estuarine System Under Anthropogenic Pressure: the Case of the Karstic Timavo River (Northern Adriatic Sea, Italy). *Estuaries and Coasts*, 44 (7), 1831-1847.

9. García-Ordiales E., Covelli S., Braidotti G., Petranich E., **Pavoni E.**, Acquavita A., Sanz-Prada L., Roqueñí N., Loredo J., 2020. *Mercury and arsenic mobility in resuspended contaminated estuarine sediments (Asturias, Spain): a laboratory-based study*. Science of the Total Environment, in press.

10. Petranich E., Terribili L., Acquavita A., **Pavoni E.**, Langone L., Covelli S., 2020. The role of a tidal flat-saltmarsh system as a source-sink of mercury in a contaminated coastal lagoon environment (Northern Adriatic Sea). *Aquatic Geochemistry*, 26 (3), 245-267.

11. **Pavoni E.**, Crosera M., Petranich E., Oliveri P., Klun K., Faganeli J., Covelli S., Adami G., 2020. Trace elements in the estuarine systems of the Gulf of Trieste (northern Adriatic Sea): A chemometric approach to depict partitioning and behaviour of particulate, colloidal and truly dissolved fractions. *Chemosphere*, 252, 126517.

12. Bazzaro M., Ogrinc, N., Relitti, F., Lucchi, R.G., Giani, M., Adami, G., **Pavoni, E.**, De Vittor, C., 2020. *Geochemical signatures of intense episodic anaerobic oxidation of methane in near-surface sediments of a recently discovered cold seep (Kveithola trough, NW Barents Sea)*. Marine Geology, 425, 106189.

13. **Pavoni E.**, Crosera M., Petranich E., Adami G., Faganeli J., Covelli S., 2020. *Partitioning and mixing behaviour of trace elements at the Isonzo/Soča River mouth (Gulf of Trieste, northern Adriatic Sea)*. Marine Chemistry, 223, 103800.

14. Petranich E., Croce S., Crosera M., **Pavoni E.**, Faganeli J., Adami G., Covelli S., 2018. Mobility of metal(loid)s at the sediment-water interface in two tourist port areas of the Gulf of Trieste (northern Adriatic Sea). *Environmental Science and Pollution Research*, 25 (27), 26887-26902.

15. **Pavoni E.**, Covelli S., Adami G., Baracchini E., Cattelan R., Crosera M., Higueras P., Lenaz D., Petranich E., 2018. Mobility and fate of Thallium and other potentially harmful elements in drainage waters from a decommissioned Zn-Pb mine (North-Eastern Italian Alps). *Journal of Geochemical Exploration*, 188, 1-10.

16. Cerovac A., Covelli S., Emili A., **Pavoni E.**, Petranich E., Gregorič A., Urbanc J., Zavagno E., Zini L., 2018. Mercury in the unconfined aquifer of the Isonzo/Soča River alluvial plain downstream from the Idrija mining area. *Chemosphere*, 195, 749-761.

17. **Pavoni E.**, Petranich E., Adami G., Baracchini E., Crosera M., Emili A., Lenaz D., Higueras P., Covelli S., 2017. Bioaccumulation of thallium and other trace metals in Biscutella laevigata nearby a decommissioned zinc-lead mine (Northeastern Italian Alps). *Journal of Environmental Management*, 186, 214-224.

• Oral communications

1. **Pavoni E.**, De Marchi A., Petranich E., Crosera M., Adami G., Faganeli J., Covelli S., 2021. *Trace element behaviour along the water column and mobility at the sediment-water interface in a stratified estuarine environment (Gulf of Trieste, northern Adriatic Sea)*. I Congresso Nazionale dei Giovani Geoscienziati - BeGeo Scientists 2021, Book of Abstracts p. 31, Napoli (Italy) 7-10 October 2021. Presenting author: **Elena Pavoni**.

2. BARAGO N., **PAVONI E.**, FLOREANI F., CROSERA M., ADAMI G., COVELLI S., 2021. *May a tailing impoundment from an abandoned Pb-Zn mining activity be an environmental issue for water resources? Evidences from long-term groundwater monitoring*. I Congresso Nazionale dei Giovani Geoscienziati - BeGeo Scientists 2021, Book of Abstracts p. 174, Napoli (Italy) 7-10 October 2021. Presenting author: NICOLÒ BARAGO.

3. KARLICEK D., ZINI L., TERRIBILI L., CALLIGARIS C., FINOCCHIARO F., **PAVONI E.**, DREOSSI G., 2021. *Geochemical characterization of the Timau Karst aquifer*. 90° Congresso della Società Geologica Italiana, Book of Abstracts p. 192, telematico, Trieste (Italy) 14-16 September 2021. Presenting author: DANIELE KARLICEK.

4. **PAVONI E.**, PETRANICH E., FONTOLAN G., SIGNORE S., COVELLI S., 2021. *Mercury in the water column of the Gulf of Trieste is still an environmental issue: the legacy of the Idrija mine twentyfive years after its closure*. 90° Congresso della Società Geologica Italiana, Book of Abstracts p. 279, telematico, Trieste (Italy) 14-16 September 2021. Presenting author: **ELENA PAVONI**.

5. **PAVONI E.**, CROSERA M., ADAMI G., COVELLI S., 2021. *Presenza e distribuzione delle Terre Rare nei sedimenti superficiali dell'Alto Adriatico*. Quarto Convegno dei Geologi Marini Italiani, Book of Abstracts p. 97, telematico, 25-26 February 2021. Presenting author: **ELENA PAVONI**.

6. **PAVONI E.**, CROSERA M., PETRANICH E., COVELLI S., FAGANELI J., ACQUAVITA A., OLIVERI P., ADAMI G., 2019. *Application of a chemometric approach to a preliminary geochemical characterisation of the Timavo/Reka River mouth*. XXVIII Congresso della Divisione di Chimica Analitica della Società Chimica Italiana, Book of Abstracts O5 EAC3 p. 162-163, Bari (Italy), 22-26 September 2019. Presenting author: **ELENA PAVONI**.

7. PETRANICH E., **PAVONI E.**, SIGNORE S., COVELLI S., 2019. *Mercury mobility in harbour sediments: evidence from selective sequential extraction and short-term microcosm resuspension experiments (northern Adriatic Sea, Italy)*. Congresso Nazionale SIMP-SGI-SOGEI Il tempo del pianeta Terra e il tempo dell'uomo: le geoscienze tra passato e futuro, Book of Abstracts p. 682, Parma (Italy), 16-19 September 2019. Presenting author: ELISA PETRANICH.

8. **PAVONI E.**, CROSERA M., ADAMI G., PETRANICH E., COVELLI S., FAGANELI J., 2019. *Mixing behaviour of trace elements at the mouth of the Isonzo/Soča River (Gulf of Trieste, northern Adriatic Sea*. XV International Estuarine Biogeochemistry Symposium, Book of Abstracts p. 38, Vigo (Spain), 4-5 June 2019. Presenting author: **ELENA PAVONI**.

9. **PAVONI E.**, CROSERA M., PETRANICH E., KLUN K., FAGANELI J., COVELLI S., ADAMI G., 2018. *Estuarine trace elements distribution: phase partitioning and role of salinity gradient in the river mouths of the Gulf of Trieste*. Convegno scientifico "I giovani e la Chimica in Friuli Venezia Giulia", Università degli Studi di Trieste e Università degli Studi di Udine, Udine (Italy), 9 November 2018. Presenting author: **ELENA PAVONI**.

10. **PAVONI E.**, CROSERA M., PETRANICH E., KLUN K., FAGANELI J., COVELLI S., ADAMI G., 2018. *Potentially harmful element (PHE) occurrence and phase partitioning in the river mouths of the Gulf of Trieste (northern Adriatic Sea)*. XXVII Congresso della Divisione di Chimica Analitica della Società Chimica Italiana, Book of Abstracts F2 EC p. 152, Bologna (Italy), 16-20 September 2018. Vincitore di uno dei premi per le migliori flash oral communication. Presenting author: **ELENA PAVONI**.

• Extended abstract

1. **PAVONI E.**, COLLE FONTANA M., CATTELAN R., ESBRÌ J.M., PETRANICH E., EMILI A., HIGUERAS P., COVELLI S., 2014. *Environmental issues related to abandoned zinc-lead mining operations in the Northeastern Italians Alps*. Energy and Environment Knowledge Week Congress – E2KW 2014, p. 163-165, Toledo (Spain), 30-31 October 2014. Presenting author: PABLO HIGUERAS.

• Posters

1. **Pavoni E.**, De Marchi A., Petranich E., Floreani F., Crosera M., Faganeli J., Covelli S., Adami G., 2021. *Trace elements in a stratified estuarine environment: behaviour along the water column and mobility at the sediment-water interface (Gulf of Trieste, northern Adriatic Sea)*. XXVII Congresso Nazionale della Società Chimica Italiana, La Chimica Guida lo Sviluppo Sostenibile, Book of Abstracts ANA PO014 p. 393, modalità telematica, 14-23 September 2021. Presenting author: Gianpiero Adami.

2. Magnano G.C., Marussi G., **Pavoni E.**, Adami G., Larese Filon, F., Crosera M., 2021. *Skin absorption of metals following exposure to road dust powder*. XXVII Congresso Nazionale della Società Chimica Italiana, La Chimica Guida lo Sviluppo Sostenibile, Book of Abstracts ANA PO098 p.483, modalità telematica, 14-23 September 2021. Presenting author: Greta Camilla Magnano.

3. Covelli S., Garcia-Ordiales E., Braidotti G., Petranich E., **Pavoni E.**, Sanz-Prada L., Roqueñi N., Loredo J., 2019. *Simulation of the effects of dredging on the mobility of mercury and arsenic in resuspended contaminated estuarine sediments (Asturias, Spain)*. XV International Estuarine Biogeochemistry Symposium, Book of Abstracts p. 53, Vigo (Spain), 4-5 June 2019. Presenting author: Stefano Covelli.

4. **Pavoni E.**, Petranich E., Crosera M., Klun K., Faganeli J., Adami G., Covelli S., 2018. *Potentially harmful elements (PHEs) distribution in the particulate, colloidal and dissolved fractions of estuarine waters (Gulf of Trieste, Northern Adriatic Sea)*. European Geosciences Union, General Assembly 2018 – EGU 2018, Geophysical Research Abstracts, Vol. 20, EGU2018-13958, Vienna (Austria), 8-13 April 2018. Presenting author: **Elena Pavoni**.

5. Covelli S., Acquavita A., Floreani F., Petranich E., **Pavoni E.**, 2018. *Gaseous elemental mercury concentration and diurnal evasional fluxes from the water-air interface in coastal environments of the northern Adriatic Sea*. Society of Environmental Toxicology and Chemistry Europe - SETAC Europe, Book of Abstracts MO 334 p. 213-214, Roma (Italy), 13-17 May 2018. Presenting author: Stefano Covelli.

6. Petranich E., Terribili L., Covelli S., Acquavita A., **Pavoni E.**, 2018. *Importance of a tidal flat-saltmarsh system as a source-sink of mercury in a contaminated coastal lagoon environment (northern Adriatic Sea)*. Society of Environmental Toxicology and Chemistry Europe - SETAC Europe, Book of Abstracts MO 346 p. 216, Roma (Italy), 13-17 May 2018. Presenting author: Elisa Petranich.

7. Petranich E., Croce S., Crosera M., Baracchini E., Pavoni E., Acquavita A., Faganeli J., Covelli S., Adami G., 2017. *Mobility of trace elements at the sediment-water interface in two tourist port areas of the Gulf of Trieste (northern Adriatic Sea)*. XXVI Congresso della Divisione di Chimica Analitica della Società Chimica Italiana, Book of Abstracts ANA-PO08 p. 245, Paestum, 10-14 September 2017. Presenting author: Elisa Petranich.

8. Petranich E., **Pavoni E.**, Lenaz D., Covelli S., Emili A., Cattelan, R., 2015. *Mobility of trace elements in drainage waters from a zinc – lead decommissioned mine (Northeastern Italian Alps)*. 22nd International Symposium on Environmental Biogeochemistry, Book of Abstracts p. 124, Piran (Slovenia), 28 September -2 October 2015. Presenting author: Elisa Petranich.

9. **Pavoni E.**, Petranich E., Crosera M., Adami G., Baracchini E., Rusalen M., Lenaz D., Emili A., Higueras P., Covelli S., 2015. *Bioaccumulation of trace metals in plants growing nearby a decommissioned Zn-Pb mine (Salafossa, Northeastern Italian Alps)*. XXV Congresso della Divisione di Chimica Analitica della Società Chimica Italiana, Book of Abstracts P128 p. 320, Trieste (Italy), 13-17 September 2015. Presenting author: **Elena Pavoni**.

10. **Pavoni E.,** Petranich E., Crosera M., Adami, G., Baracchini E., Lenaz D., Emili A., Higueras P., Covelli S., 2015. *Bioaccumulation of Thallium and other heavy metals in Biscutella laevigata nearby a decommissioned Zn-Pb mine (Salafossa, Northeastern Italian Alps)*. Il Pianeta Dinamico: sviluppi e prospettive a 100 anni da Wegener – Congresso congiunto SIMP-AIV-SoGeI-SGI, Book of Abstracts p. 430, Firenze (Italy), 2-4 September 2015. Presenting author: Elisa Petranich.

11. **Pavoni E.**, Covelli S., Emili A., Lenaz D., Petranich E., Crosera M., Adami G., Cattelan R., Higueras P., 2015. *Geochemical characterization of drainage waters after closure of sulphides extraction activity (Salafossa, Northeastern Italian Alps)*. Il Pianeta Dinamico: sviluppi e prospettive a 100 anni da Wegener – Congresso congiunto SIMP-AIV-SoGeI-SGI, Book of Abstracts p. 429, Firenze (Italy), 2-4 September 2015. Presenting author: Elisa Petranich.

Review activity for the following journals

- Marine Chemistry
- Environments
- Journal of Soils and Sediments

TEACHING ACTIVITY

Teaching activity for the BSc Degree in Tecniche della Prevenzione nell'Ambiente e nei Luoghi di Lavoro, Department of Medical Area, University of Udine.
Laboratory tutor at the Deparment of Chemical and Pharmaceutical Sciences (academic year 2018-2019).
Co-supervisor of 15 BSc and 4 MSc students.

• Teaching assignment

1. Teaching assignment (Environmental chemistry, CHIM/12 - 2 CFU, 20 h) for the BSc Degree in Tecniche della Prevenzione nell'Ambiente e nei Luoghi di Lavoro, Department of Medical Area, University of Udine.
First semester, academic year 2021-2022.

• BSc Degree

1. Maira De Cecco 2020-2021. *Elementi in tracce e Terre Rare: presenza e distribuzione in una sequenza sedimentaria del Golfo di Trieste*. Tesi di Laurea in Chimica Analitica, Corso di Laurea in Chimica, Università degli Studi di Trieste. Relatore: Prof. Matteo Crosera. Correlatori: Dott. **Elena Pavoni**, Dott. Giovanna Marussi.

2. Michele Revelant 2020-2021. *Distribuzione e mobilità di elementi potenzialmente tossici nei suoli dell'area mineraria di Raibl (Cave del Predil, Alpi Giulie)*. Tesi di Laurea in Chimica Analitica, Corso di Laurea in Chimica, Università degli Studi di Trieste. Relatore: Prof. Gianpiero Adami. Correlatori: Dott. **Elena Pavoni**, Dott. Nicolò Barago.

3. Francesca Gri Marizza 2020-2021. *Effetto delle variazioni di portata del fiume Isonzo sull'apporto di Mercurio associato al particellato in sospensione: risultati preliminari*. Tesi di Laurea in Geochimica, Corso di Laurea in Geologia, Università degli Studi di Trieste. Relatore: Prof. Stefano Covelli. Correlatore: Dott. **Elena Pavoni**.

4. Federico Tattoni 2019-2020. *Studio mineralogico di ceneri provenienti dal termovalorizzatore di Trieste tramite separazione mineralogica e analisi diffrattometriche a raggi-X*. Tesi di Laurea in Mineralogia, Corso di Laurea in Geologia, Università degli Studi di Trieste. Relatore: Prof. Francesco Princivalle. Correlatore: Dott. **Elena Pavoni**.

5. Andrea Pelos 2019-2020. *Studio dei metalli e delle Terre Rare nei sedimenti del Golfo di Venezia*. Tesi di Laurea in Chimica Analitica, Corso di Laurea in Chimica, Università degli Studi di Trieste. Relatore: Prof. Gianpiero Adami. Correlatori: Prof. Matteo Crosera, Dott. **Elena Pavoni**.

6. Francesca Riccio 2019-2020. *Distribuzione spaziale e temporale dei metalli in tracce e delle Terre Rare nei sedimenti della Laguna di Grado e Marano*. Tesi di Laurea in Chimica Analitica, Corso di Laurea in Chimica, Università degli Studi di Trieste. Relatore: Prof. Matteo Crosera. Correlatori: Prof. Gianpiero Adami, Dott. **Elena Pavoni**.

7. Lorenzo Grizzo 2019-2020. *Determinazione tramite ICP-MS di metalli in tracce e terre rare nei sedimenti superficiali dell'Alto Adriatico*. BSc Degree in Chimica Analitica, BSc Course in Chimica, University of Trieste. Supervisor: Prof. Gianpiero Adami. Co-supervisors: Prof. Matteo Crosera, Dott. **Elena Pavoni**.

8. Michelle Buoso 2019-2020. *Metalli in tracce nei sedimenti di un ambiente lagunare: presenza, distribuzione e variabilità storica*. BSc Degree in Chimica Analitica, BSc Course in Chimica, University of Trieste. Supervisor: Prof. Gianpiero Adami. Co-supervisors: Prof. Matteo Crosera, Dott. **Elena Pavoni**.

9. Luca Morano 2019-2020. *Impatto antropico determinato dall'uso degli elementi del gruppo delle Terre Rare*. BSc Degree in Chimica Analitica, BSc Course in Scienze e Tecnologie per l'Ambiente e la Natura – Curriculum Ambientale, University of Trieste Trieste. Supervisor: Prof. Matteo Crosera. Co-supervisor: Dott. **Elena Pavoni**.

10. Ilaria Jez 2018-2019. *Distribuzione delle concentrazioni dei metalli in tracce nei sedimenti superficiali dell'alto Adriatico*. BSc degree in Chimica Analitica, BSc Course in Chimica, University of Trieste. Supervisor: Prof. Gianpiero Adami. Co-supervisors: Prof. Mattero Crosera, Dott. **Elena Pavoni**.

11. Teresa Cernecca 2018-2019. *Variabilità storica delle concentrazioni di metalli in tracce nei sedimenti di un ambiente lagunare*. BSc degree in Chimica Analitica, BSc Course in Chimica, University of Trieste. Supervisor: Prof. Matteo Crosera. Co-supervisors: Prof. Gianpiero Adami, Dott. **Elena Pavoni**.

12. Cristiano Mastroianni 2018-2019. Mobilità di metalli in tracce potenzialmente tossici da residui di lavorazione di minerali sulfurei. BSc degree in Geochimica Ambientale, BSc Course in Geologia, University of Trieste. Supervisor: Prof. Stefano Covelli. Co-supervisors: Prof. Davide Lenaz, Dott. **Elena Pavoni**.

13. Susanna Mesghez 2018-2019. *Caratterizzazione mineralogica e geochimica dei sedimenti del Dosso di Santa Croce*. BSc degree in Tecniche di Monitoraggio Ambientale, Marino e Atmosferico, BSc Course in Scienze e Tecnologie per l'Ambiente e la Natura, University of Trieste. Supervisor: Prof. Stefano Cirilli. Co-supervisors: Prof. Davide Lenaz, Dott. **Elena Pavoni**.

14. Giulia Zaia 2016-2017. *Determinazione analitica di metalli potenzialmente tossici nel particellato in sospensione di ambienti estuarini*. BSc degree in Chimica Analitica, BSc Course in Chimica, University of Trieste. Supervisor: Prof. Gianpiero Adami. Co-supervisors: Dott. Matteo Crosera, Dott. **Elena Pavoni**.

15. Simone Visintin 2016-2017. *Evidenze micropaleontologiche e geochimiche del passaggio Cretacico-Paleogene nella zona del Monte San Michele (GO)*. BSc degree in Paleontologia, BSc Course in Geologia, University of Trieste. Supervisor: Dott. Romana Melis. Co-supervisor: Dott. Sara Biolchi, Dott. **Elena Pavoni**.

• MSc Degree

1. Cristiano Mastroianni 2020-2021. *Caratterizzazione geochimico-ambientale dell'area estrattiva dismessa del Monte Avanza (Alpi Carniche Occidentali)*. MSc degree in Geochimica Ambientale, MSc Course in Geoscienze, University of Trieste. Supervisor: Prof. Stefano Covelli, Co-supervisors: Dott. Nicolò Barago, Dott. **Elena Pavoni**.

2. Federico Vito Zotta 2020-2021. *Interazione tra residui minerari e acque sotterranee: evidenze sulla mobilità degli elementi potenzialmente tossici.* MSc degree in Geochimica Ambientale, MSc Course in Geoscienze, University of Trieste. Supervisor: Prof. Stefano Covelli, Co-supervisors: Dott. Nicolò Barago, Dott. **Elena Pavoni**.

3. De Marchi Anna 2019-2020. *Effetti dell'ipossia sulla mobilità di elementi in tracce lungo la colonna d'acqua e all'interfaccia acqua-sedimento in un ambiente estuarino antropizzato*. MSc degree in Geochimica Ambientale, MSc Course in Analisi e Gestione dell'Ambiente, University of Udine and University of Trieste. Supervisor: Prof. Stefano Covelli, Co-supervisors: Prof. Matteo Crosera, Dott. **Elena Pavoni**.

4. Giuseppe Guerra 2018-2019. *Elementi potenzialmente tossici in acque di sorgente nel settore occidentale delle Alpi Carniche: origine e mobilità.* MSc degree in Geochimica Ambientale, MSc Course in Geoscienze, University of Trieste. Supervisor: Prof. Stefano Covelli, Co-supervisors: Prof. Maurizio Ponton, Dott. Matteo Crosera, Dott. **Elena Pavoni**.

5. Silvia Pisana Reinotti 2017-2018. *Metalli in tracce e loro partizionamento in colonna d'acqua in un ambiente estuarino (Fiume Timavo, Golfo ti Trieste)*. MSc degree in Geochimica Ambientale, MSc Course in Scienze e Tecnologie per l'Ambiente e il Territorio, University of Udine and University of Trieste. Supervisor: Prof. Stefano Covelli, Co-supervisors: Dott. **Elena Pavoni**, Dott. Matteo Crosera.

6. Greta Braidotti 2017-2018. *Simulazione degli effetti della risospensione indotta dal dragaggio sulla mobilità dei metalli in tracce in sedimenti estuarini contaminati (Asturie, Spagna)*. MSc degree in Geochimica Ambientale, MSc Course in Scienze e Tecnologie per l'Ambiente e il Territorio, University of Udine and University of Trieste. Supervisor: Prof. Stefano Covelli, Co-supervisors: Dott. Efrén Garcìa Ordiales, Dott. **Elena Pavoni**.

• Academic year 2019-2020 2020-2021: Tutoring activity for the BSc Course of "Analytical Chemistry II" under the supervision of Prof. Matteo Crosera. University of Trieste, Department of Chemical and Pharmaceutical Sciences.

• Academic year 2018-2019: Tutoring activity for the BSc Course of "Analytical Chemistry II" for a total of 50 hours of work. University of Trieste, Department of Chemical and Pharmaceutical Sciences.

ADDITIONAL SKILLS

Mother language: Italian

Other languages	Understanding		Conversation		Writing
	Listening	Reading	Spoken interaction	Oral production	
English	B1	B2	B1	B1	B1

Informatical skills: Good use of computer and internet.
Programs: Word, Excel, PowerPoint, CorelDraw, AqQa, AquaChem, Geochemist's Workbench, GIS (ECDL), R.

Further informations: Basic knowledge of national environment legislation (Italian Legislative Decree 152/2006, according to EU Directive 2000/60/CE).
Notions of chemometrics and principal component analysis (PCA and MWPCA) (Software R).
Writing and drawing skills (artistic and technical) at school level.

Good orientation capabilities and basic knowledge of topography and cartography.

	Notions of climbing. Member of CAI (Club Alpino Italiano).
DRIVING LICENCE	Driving licence B Car owner

I authorise the use of my personal data, according to the Legislative Decree 30 June 2003, n. 196 "Codice in materia di protezione dei dati personali".

Place and date: Trieste, 22/03/2022