

PERSONAL INFORMATION**Pierluigi Barbieri**

📍 1, Via Licio Giorgieri, c/o University of Trieste, DSCF - 34127, Italy

☎ +39 040 5583995 📠 +39 338 2313384

✉ barbierp@units.it

🌐 <https://dscf.units.it/en/node/1064>

Male | 23/11/1967 | Italy

Enterprise	University	EPR
<input type="checkbox"/> Mid-Management Level	<input checked="" type="checkbox"/> Associate Professor	<input type="checkbox"/> Level III Researcher and Technologist

WORK EXPERIENCE

October 2014 –current

Associate Professor of Environmental Chemistry (MUR habilitation to Full Professor SSC 03/A1 11/2020-11/2029)
 Università degli Studi di Trieste – Department of Chemical and Pharmaceutical Sciences (DSCF)
 • Teaching Analytical Chemistry, Environmental Chemistry, Risk Assessment – Head of Human-Environment Interactions Lab. Scientific support to Public Authorities and Private Companies and Organizations
 Accademia – Research and Development

November 1999 – Sept. 2014

Researcher (Ricercatore Universitario)
 Università degli Studi di Trieste – Department of Chemical and Pharmaceutical Sciences (DSCF)
 • Investigator in Analytical Chemistry Res. Group and Principal Investigator in Environmental Chemistry Res. Group (from 2006). Teaching Analytical Chemistry and Environmental Chemistry, Courses. Scientific and Technological Consultant
 Accademia – Research and Development

March 2010 –October 2016

Co-Founder and Chief Scientific Officer
 ARCO-SolutionS s.r.l. academic spin off of DSCF (www.arcosolutions.eu)
 • Strategic planning; scientific supervision; field operations.
 Environmental consultancies, R&D (Air quality and Odour experts; Instrument development)

November 2017 – to current

President (2017-2021; 2021-2025)
 Ordine Regionale dei Chimici e dei Fisici del Friuli Venezia Giulia (<https://www.indicepa.gov.it/ipa-portale/consultazione/indirizzo-sede/ricerca-ente/scheda-ente/21565>)
 • Legal representative – coordinating Steering Board
 Professional Order - Public authority

EDUCATION AND TRAINING

April – September 2001

Marie Curie Research Training Network Post Doc Trainee
 National Institute of Chemistry, Ljubljana (Slovenia)
 • Artificial Neural Networks – QSAR – Risk Assessment of Chemicals

January 1996 - February 1999

Dottore di Ricerca in Scienze Merceologiche
 Università degli Studi di Trieste / Vrije Universiteit Brussel (Belgium)
 • Chemometrics – Environmental Analytical Chemistry

November 1986 – July 1994

Laurea quinquennale in Chimica
 Università degli Studi di Trieste
 • Maths, Physics, General-, Inorganic-, Physical-, Organic-, Biological- and Analytical- Chemistry

PERSONAL SKILLS

Mother tongue(s)	Italian
Other language(s)	English (fluent); French (basic)
Job-related skills	Analytical chemistry; pollutant and biohazard field monitoring planning and sampling; chemometrics and artificial neural networks; technology assessment; teamwork
Digital skills	Office; MatLab, R computing and visualization environments; Team productivity tools
Other skills	Experience in operations in SARS CoV 2 contaminated HCU and in BSL3 laboratory

ADDITIONAL INFORMATION

SCOPUS: <https://www.scopus.com/authid/detail.uri?authorId=7006755861>

ORCID: <https://orcid.org/0000-0001-8847-6916Scopus>

ResearchGate: <https://www.researchgate.net/profile/Pierluigi-Barbieri>

Google Scholar: <https://scholar.google.com/citations?user=kKRiPmwAAAAJ&hl=en>

Selected Publications (2016-2021)

Zupin, L., Licen, S., Milani, M., Clemente, L., Martello, L., Semeraro, S., Fontana, F., Ruscio, M., Miani, A., Crovella, S., Barbieri, P. Evaluation of residual infectivity after SARS-CoV-2 aerosol transmission in a controlled laboratory setting (2021) *International Journal of Environmental Research and Public Health*, 18 (21), art. no. 11172, . Cited 1 time. DOI: 10.3390/ijerph182111172

Barbieri, P., Zupin, L., Licen, S., Torboli, V., Semeraro, S., Cozzutto, S., Palmisani, J., Di Gilio, A., de Gennaro, G., Fontana, F., Omiciuolo, C., Pallavicini, A., Ruscio, M., Crovella, S. Molecular detection of SARS-CoV-2 from indoor air samples in environmental monitoring needs adequate temporal coverage and infectivity assessment (2021) *Environmental Research*, 198, art. no. 111200, Cited 9 times. DOI: 10.1016/j.envres.2021.111200

Licen, S., Franzon, M., Rodani, T., Barbieri, P. SOMEnv: An R package for mining environmental monitoring datasets by Self-Organizing Map and k-means algorithms with a graphical user interface (2021) *Microchemical Journal*, 165, art. no. 106181, . Cited 1 time. DOI: 10.1016/j.microc.2021.106181

Gilio, A.D., Palmisani, J., Ventrella, G., Facchini, L., Catino, A., Varesano, N., Pizzutillo, P., Galetta, D., Borelli, M., Barbieri, P., Licen, S., Gennaro, G.D. Breath analysis: comparison among methodological approaches for breath sampling (2020) *Molecules*, 25 (24), art. no. 5823, . Cited 5 times. DOI: 10.3390/molecules25245823

Setti, L., Passarini, F., De Gennaro, G., Barbieri, P., Licen, S., Perrone, M.G., Piazzalunga, A., Borelli, M., Palmisani, J., Di Gilio, A., Rizzo, E., Colao, A., Piscitelli, P., Miani, A. Potential role of particulate matter in the spreading of COVID-19 in Northern Italy: First observational study based on initial epidemic diffusion (2020) *BMJ Open*, 10 (9), art. no. e039338, . Cited 101 times. DOI: 10.1136/bmjopen-2020-039338

Setti, L., Passarini, F., De Gennaro, G., Barbieri, P., Perrone, M.G., Borelli, M., Palmisani, J., Di Gilio, A., Torboli, V., Fontana, F., Clemente, L., Pallavicini, A., Ruscio, M., Piscitelli, P., Miani, A. SARS-Cov-2RNA found on particulate matter of Bergamo in Northern Italy: First evidence (2020) *Environmental Research*, 188, art. no. 109754, . Cited 199 times. DOI: 10.1016/j.envres.2020.109754

Setti, L., Passarini, F., De Gennaro, G., Barbieri, P., Pallavicini, A., Ruscio, M., Piscitelli, P., Colao, A., Miani, A. Searching for SARS-COV-2 on particulate matter: A possible early indicator of COVID-19 epidemic recurrence (2020) *International Journal of Environmental Research and Public Health*, 17 (9), art. no. 2986, . Cited 88 times. DOI: 10.3390/ijerph17092986

Setti, L., Passarini, F., De Gennaro, G., Barbieri, P., Perrone, M.G., Borelli, M., Palmisani, J., Di Gilio, A., Piscitelli, P., Miani, A. Airborne transmission route of covid-19: Why 2 meters/6 feet of inter-personal distance could not be enough (2020) *International Journal of Environmental Research and Public Health*, 17 (8), art. no. 2932, . Cited 270 times. DOI: 10.3390/ijerph17082932

Licen, S., Di Gilio, A., Palmisani, J., Petraccone, S., de Gennaro, G., Barbieri, P. Pattern recognition and anomaly detection by self-organizing maps in a multi month e-nose survey at an industrial site (2020) *Sensors (Switzerland)*, 20 (7), art. no. 1887, Cited 5 times. DOI: 10.3390/s20071887

Licen, S., Cozzutto, S., Barbieri, P. Assessment and comparison of multi-annual size profiles of particulate matter monitored at an urban-industrial site by an optical particle counter with a chemometric approach (2020) *Aerosol and Air Quality Research*, 20 (4), pp. 800-809. Cited 1 time. DOI: 10.4209/aaqr.2019.08.0414

Licen, S., Cozzutto, S., Barbieri, G., Crosera, M., Adami, G., Barbieri, P. Characterization of variability of air particulate matter size profiles recorded by optical particle counters near a complex emissive source by use of Self-Organizing Map algorithm (2019) *Chemometrics and Intelligent Laboratory Systems*, 190, pp. 48-54. Cited 4 times. DOI: 10.1016/j.chemolab.2019.05.008

Giungato, P., Renna, M., Rana, R., Licen, S., Barbieri, P. Characterization of dried and freeze-dried sea fennel (*Crithmum maritimum* L.) samples with headspace gas-chromatography/mass spectrometry and evaluation of an electronic nose discrimination potential (2019) *Food Research International*, 115, pp. 65-72. Cited 15 times. DOI: 10.1016/j.foodres.2018.07.067

Licen, S., Barbieri, G., Fabbris, A., Briguglio, S.C., Pillon, A., Stel, F., Barbieri, P. Odor control map: Self organizing map built from electronic nose signals and integrated by different instrumental and sensorial data to obtain an assessment tool for real environmental scenarios (2018) *Sensors and Actuators, B: Chemical*, 263, pp. 476-485. Cited 29 times. DOI: 10.1016/j.snb.2018.02.144

Giungato, P., Barbieri, P., Cozzutto, S., Licen, S. Sustainable domestic burning of residual biomasses from the Friuli Venezia Giulia region (2018) *Journal of Cleaner Production*, 172, pp. 3841-3850. Cited 13 times. DOI: 10.1016/j.jclepro.2017.05.190

Licen, S., Pettarin, N., Barbieri, G., Barbieri, P. On odour tolerability criteria from odorant instrumental monitoring (2018) *Chemical Engineering Transactions*, 68, pp. 157-162. Cited 4 times. DOI: 10.3303/CET1868027

Fellet, G., Poščić, F., Licen, S., Marchiol, L., Musetti, R., Tolloi, A., Barbieri, P., Zerbi, G. PAHs accumulation on leaves of six evergreen urban shrubs: A field experiment (2016) *Atmospheric Pollution Research*, 7 (5), pp. 915-924. Cited 22 times. DOI: 10.1016/j.apr.2016.05.007

Malev, O., Contin, M., Licen, S., Barbieri, P., De Nobili, M. Bioaccumulation of polycyclic aromatic hydrocarbons and survival of earthworms (*Eisenia andrei*) exposed to biochar amended soils (2016) *Environmental Science and Pollution Research*, 23 (4), pp. 3491-3502. Cited 27 times. DOI: 10.1007/s11356-015-5568-2

Giungato, P., de Gennaro, G., Barbieri, P., Briguglio, S., Amodio, M., de Gennaro, L., Lasigna, F. Improving recognition of odors in a waste management plant by using electronic noses with different technologies, gas chromatography–mass spectrometry/olfactometry and dynamic olfactometry (2016) *Journal of Cleaner Production*, 133, pp. 1395-1402. Cited 34 times. DOI: 10.1016/j.jclepro.2016.05.148



Trieste, February, 14th 2022