



UNIVERSITA' DEGLI STUDI DELL'INSUBRIA

Dipartimento di Scienza e Alta Tecnologia

CURRICULUM VITAE

Dr. Damiano Monticelli

Dipartimento di Scienza e Alta tecnologia

Università degli Studi dell'Insubria

Via Valleggio 11

22100 Como – Italy

Phone: +390312386427 office
+390312386451 laboratory
Fax: +390312386119
email: damiano.monticelli@uninsubria.it

Personal information

Date of birth: March 18th 1974

Place of birth: Milano

Nationality: Italian

Current position

Assistant professor (Ricercatore Universitario) since 2004

Academic training

2013 Visiting professor

University of the Balearic Island

Palma de Mallorca, Spain

2007 Research Fellow

Leibniz-Institut für Analytische Wissenschaften

Dortmund, Germany

2003 PhD degree in chemistry

University of Insubria

Como, Italy

2001 – 2002 Honorary Research Assistant

University of Liverpool

Liverpool, United Kingdom

1998 Master degree in chemistry cum laude

University of Milan

Milan, Italy



Teaching experience

As a faculty member, Dr. Monticelli was assigned since 2004 with courses in the BSc Environmental Sciences degree and in the MSc Chemical Sciences degree. Course subjects include basic analytical chemistry, advanced instrumental analytical chemistry and environmental chemistry. Dr. Monticelli organised several field stages for the students of the BSc Environmental Sciences degree.

Academic year	Degree	Course	Credits
2003 – 2004	MSc Chemical Sciences	Advanced Analytical Chemistry	4
	BSc Environmental Sciences	Analytical Chemistry Laboratory	6
2004 – 2005	MSc Chemical Sciences	Advanced Analytical Chemistry	4
	BSc Environmental Sciences	Analytical Chemistry Laboratory Environmental Chemistry	6
2005 – 2006	MSc Chemical Sciences	Advanced Analytical Chemistry	4
	BSc Environmental Sciences	Analytical Chemistry Laboratory	6
2006 – 2007	MSc Chemical Sciences	Advanced Analytical Chemistry	4
	BSc Environmental Sciences	Analytical Chemistry Laboratory	6
2007 – 2008	MSc Chemical Sciences	Advanced Analytical Chemistry	4
	BSc Environmental Sciences	Analytical Chemistry Laboratory	6
2008 – 2009	MSc Chemical Sciences	Advanced Analytical Chemistry	4
	BSc Environmental Sciences	Analytical Chemistry Laboratory	6
2009 – 2010	MSc Chemical Sciences	Advanced Analytical Chemistry	4
	BSc Environmental Sciences	Analytical Chemistry Laboratory	6
2010 – 2011	MSc Chemical Sciences	Electroanalysis	7
2011 – 2012	MSc Chemical Sciences	Electroanalysis	7
2012 – 2013	BSc Chemical Sciences	Environmental Analytical Chemistry	3
	MSc Chemical Sciences	Electroanalysis	7
2013 – 2014	BSc Chemical Sciences	Environmental Analytical Chemistry	3
2014 – 2015	BSc Chemical Sciences	Environmental Analytical Chemistry	3
	MSc Chemical Sciences	Electroanalysis	7
2015 – 2016	BSc Chemical Sciences	Environmental Analytical Chemistry	3
	MSc Chemical Sciences	Electroanalysis	7
	MSc Environmental Sciences	Analytical Chemistry Laboratory	3
2016 – 2017	BSc Chemical Sciences	Environmental Analytical Chemistry	3
	MSc Chemical Sciences	Electroanalysis	7
	MSc Environmental Sciences	Analytical Chemistry Laboratory	3



Supervised doctoral thesis

Dr D. Monticelli supervised two doctoral thesis:

2012 – 2015 S. Caprara, Optimization and development of new voltammetric methods for the determination of iron in seawater

2007 – 2010 A. Castelletti, Validazione del protocollo analitico di equilibratura competitiva dei leganti accoppiata a stripping catodico per la speciazione di elementi in traccia [Validation of the analytical protocol for the speciation analysis of trace elements by competitive ligand equilibration coupled to cathodic stripping]

Research activity

The setup of instrumental methods for the determination and speciation of trace elements in both natural and manmade materials, combining different analytical techniques is the main research topic. Dr. D. Monticelli authored or coauthored 47 papers (as of December 2016), 42 of which in ISI catalogue journals, and more than seventy communications in national and international conferences. His h-index is 10, total number of citations 294, the sum of the Impact Factors (IF) of his papers is 102.

The setup of new instrumental methods and their optimisation is achieved by critically assessing all of the preanalytical and analytical steps, i.e. choice of the analytical method, sampling, sampling storage, pretreatment, detection, statistical evaluation and method validation. Determining trace levels of analytes clearly requires the definition of strict protocols enforcing clean procedures. Dr. Monticelli gained expertise in the field of electroanalytical techniques (anodic and cathodic stripping), spectroscopic methods (Electrothermal Atomic Absorption Spectroscopy and Total Reflection X-Ray Fluorescence) and mass spectrometric (Inductively Coupled Plasma – Mass Spectrometry). The latter was employed with both liquid introduction and solid sampling by laser ablation (LA-ICP-MS).

The setup of procedures for the speciation analysis of trace elements is the second active field of research. These studies enable the form of trace elements to be determined defining their inorganic and organic reactivity in natural waters. The competitive ligand equilibration with cathodic stripping voltammetric detection of the labile fraction (CLE-CSV) is used for this aim. The figures of merit of the method were firstly assessed: all of the steps were carefully assessed and critical points highlighted. As a result, accuracy and precision of the procedure were, for the first time, measured. The method was subsequently applied to the detection of copper speciation in remote areas, like Alpine lakes, ice streams and open ocean waters. An effort was made to understand the molecular bases for the cathodic stripping voltammetric procedure to further increase performances.



UNIVERSITA' DEGLI STUDI DELL'INSUBRIA

Dipartimento di Scienza e Alta Tecnologia

Recent projects

2017 – 2020 INSIDE project: Individual air pollution exposure, extracellular vesicles Signaling and hypertensive disorder DEvelopment in pregnancy, founded by the Italian Ministry of University and Research (PRIN project, call 2015, protocol 20152T74ZL)

Role: researcher, University of Insubria unit

2013 – 2015 Chemical Sensors and instrumental techniques hyphenated with mass spectrometry for the control of food safety, founded by the Italian Ministry of University and Research (PRIN project, call 2010-2011, project 2010AXENJ8_006)

Role: leader of the University of Insubria research unit

2012 New technologies (ICT) for a sustainable and integrated management of natural resources in Lebanon (AID 9145), founded by the Italian International Cooperation

Role: teaching

2010 – 2011 Italian cooperation re-training program for former Iraqi defence-related bio-chem specialists, founded by the Italian International Cooperation

Role: teaching and project management

2008 – 2010 Programma Nazionale di Ricerche in Antartide Studio e caratterizzazione di microcostituenti chimici con proprietà complessanti forti nell'ambiente marino dell' Antartide, in relazione al ciclo stagionale di formazione/scioglimento del pack-ice [Italian program of Antarctic Research. Characterisation of strongly complexing species in the Antarctic marine ecosystem: seasonal trends in relation to pack ice thawing]

Role: project management and research activities

Field activities

- 2001 – present several sampling campaigns in the Italian Alps, in particular glacial streams, mine affected areas and lakes
- March 2004: one week cruise in the Mediterranean Sea onboard Oceanographic Ship “G. Dallaporta”
- August 2003: one week cruise in the Mediterranean Sea onboard Oceanographic Ship “G. Dallaporta” (IMTEC project)
- March 11th – April 2nd 2002: three week cruise in the Bay of Biscay onboard Research Vessel “Pelagia” (IRONAGES project)



- **Publications in scientific journals**

- J1 On the effect of catalyst status in the quantitative determination of platinum in Pt-Sn/MgO materials, S. Recchia, D. Monticelli, A. Pozzi, L. Rampazzi, C. Dossi, *Fresenius Journal of Analytical Chemistry* 369 (2001), 403-406
- J2 A calibration curve at 2000 meters (a.s.l.): alpine valleys as field laboratories for teaching environmental monitoring to undergraduate students, C. Dossi, D. Monticelli, A. Pozzi, S. Recchia, L. Vezzoli, *Annali di Chimica*, 92 (2002), 407-416
- J3 Trace determination of Ni and Cd in standard matrixes for ISO textile leaching tests, A. Pozzi, D. Monticelli, S. Recchia, A. Farina, C. Greci, C. Dossi, *Annali di Chimica*, 92 (2002), 485-489
- J4 A new microwave-assisted approach to the chemical analysis of mortars, L. Rampazzi, D. Monticelli, R. Verga, L. Toniolo, *Annali di Chimica*, 93 (2003) 315-320
- J5 Ultra trace determination of Pt and Rh in wastewater and gullypot sediments from a low polluted area, A. Pozzi, S. Recchia, D. Monticelli, C. Dossi, L. Rampazzi, P. Curi, *Annali di Chimica*, 93 (2003), 181-186
- J6 The Marmolada glacier: an investigation of natural weathering and anthropic pressure through chemical analyses of melting water and ice, A. Viganò, C. Dossi, U. Mattana, S. Martin, D. Monticelli, A. Pozzi, *Geografia Fisica e Dinamica Quaternaria*, 26 (2003), 71-75
- J7 Copper speciation in glacial stream waters of Rutor glacier (Aosta Valley, Italy), D. Monticelli, C. M. G. van den Berg, A. Pozzi, C. Dossi, *Australian Journal of Chemistry* 57 (2004), 945-949
- J8 Analisi chimica di ghiaccio e acqua sulla Marmolada, C. Dossi, A. Viganò, S. Martin, D. Monticelli, A. Pozzi, U. Mattana, *Neve e Valanghe*, 52 (2004), 42-47
- J9 Lead and copper speciation in remote mountain lakes, A. Ploger, E. Fisher, H.P. Nirmaier, L.M. Laglera, D. Monticelli, C.M.G. van den Berg, *Limnology & Oceanography* 50 (2005), 995-1010
- J10 Differential pulse voltammetric determination of tin in the presence of noble metals, D. Monticelli, R. Psaro, A. Pozzi, C. Dossi, S. Recchia, *Analytical and Bioanalytical Chemistry* 383(1) (2005), 115-121
- J11 A chemometric approach to the investigation of major and minor ion chemistry in Lake Como (Lombardia, northern Italy), B. Giussani, C. Dossi, D. Monticelli, A. Pozzi, S. Recchia, *Annali di Chimica* 96 (5-6) (2006), 339-346
- J12 An investigation of water and ice chemistry in a fast-retreating glacier in the Dolomites (NE Italy): the Fradusta Glacier, C. Dossi, A. Viganò, S. Martin, D. Monticelli, A. Pozzi, *Geografia Fisica e Dinamica Quaternaria*, 29, 1 (2006), 113-119
- J13 La chimica analitica ambientale per lo studio interdisciplinare dell'ambiente montano, C. Dossi, A. Pozzi, S. Recchia, L. Rampazzi, B. Giussani, D. Monticelli, *SLM Sopra il livello del mare*, 26 (2006), 10-15 ISSN: 1592 792X
- J14 Fluid-controlled crustal metasomatism within a high-pressure subducted mélange (Mt. Hochwart, Eastern Italian Alps), S. Tumiatì, G. Godard, S. Martin, U. Klötzli, D. Monticelli, *Lithos*, 94 (2007), 148-167



- J15 Release and speciation of uranium in low-ionic strength groundwaters at an abandoned uranium mine in Val Vedello (Orobic Alps – Italy) by Adsorptive Cathodic Stripping Voltammetry (AdCSV), C. Dossi, G. Carugati, A. Credaro, R. Gambillara, S. Martin, D. Monticelli, A. Pozzi, *International Journal of Environmental Analytical Chemistry*, 87 (5) (2007), 361-373
- J16 Optimization and validation of an automated voltammetric stripping technique for ultratrace metal analysis, D. Monticelli, E. Ciceri, C. Dossi, *Analytica Chimica Acta*, 594 (2007), 192-198
- J17 Determination of uranium content in water using cathodic stripping voltammetry and gamma-spectrometry, E. Andreotti, A. Credaro, C. Dossi, A. Giuliani, D. Monticelli, M. Pellicciari, S. Sangiorgio, *Journal of Radioanalytical and Nuclear Chemistry*, 277 (2008), 413-417
- J18 Three-way principal component analysis of chemical data from Lake Como watershed, B. Giussani, D. Monticelli, R. Gambillara, A. Pozzi, C. Dossi, *Microchemical Journal*, 88 (2008), 160 – 166
- J19 Environmental factors controlling the precipitation of Cu-bearing hydrotalcite-like compounds from mine waters. The case of the “Eve verda” spring (Aosta Valley, Italy), S. Tumiati, G. Godard, N. Masciocchi, S. Martin, D. Monticelli *European Journal of Mineralogy*, 20 (2008), 73 – 94
- J20 Contaminanti nel Lario. Dinamica degli elementi in traccia nel bacino comasco, C. Dossi, D. Monticelli, B. Giussani, *La Chimica e l'Industria*, 10 (2008), 101 – 105
- J21 Tree ring microanalysis by LA–ICP–MS for environmental monitoring: validation or refutation? Two case histories, D. Monticelli, A. Di Iorio, E. Ciceri, A. Castelletti, C. Dossi, *Microchimica Acta*, 164 (2009), 139 – 148
- J22 Role of laser ablation–inductively coupled plasma–mass spectrometry in cultural heritage research: A review, B. Giussani, D. Monticelli, L. Rampazzi, *Analytica Chimica Acta*, 635 (2009), 6 – 21
- J23 Design and performances of a cyclonic flux cell for laser ablation, D. Monticelli, E. L. Gurevich, R. Hergenröder, *Journal of Analytical Atomic Spectrometry*, 24 (2009), 328 – 335
- J24 Design and development of a low cost, high performance UV digester prototype: application to the determination of trace elements by stripping voltammetry, D. Monticelli, G. Carugati, A. Castelletti, S. Recchia, C. Dossi, *Microchemical Journal*, 95 (2010), 158 – 163
- J25 Assessment of accuracy and precision in speciation analysis by competitive ligand equilibration–cathodic stripping voltammetry (CLE–CSV) and application to Antarctic samples, D. Monticelli, C. Dossi, A. Castelletti, *Analytica Chimica Acta*, 675 (2010), 116 – 124
- J26 A novel Total reflection X Ray Fluorescence procedure for the direct determination of trace elements in petrochemical products, A. Cinosi, N. Andriollo, G. Pepponi, D. Monticelli, *Analytical and Bioanalytical Chemistry*, 399 (2011), 927 – 933



- J27 Interpreting complex trace element profiles in sediment cores from a multi-basin deep lake: the western branch of Lake Como, D. Monticelli, A. Pozzi, E. Ciceri, B. Giussani, *International Journal of Environmental Analytical Chemistry*, 91 (2011), 213 – 229
- J28 Dispersed copper oxide: a multifaceted tool in catalysis, N. Scotti, D. Monticelli, F. Zaccheria, *Inorganica Chimica Acta*, 280 (2012), 194 – 200
- J29 An electroanalytical approach to the understanding of copper exportation in glaciated catchments, D. Monticelli, A. Pozzi, A. Credaro, C. Dossi, *Electroanalysis*, 24 (2012), 807 – 812
- J30 Filling the Gap: Chemistry of 3,5-Bis(trifluoromethyl)-1H-pyrazoles, Journal of Fluorine Chemistry, A. Maspero, G.B. Giovenzana, D. Monticelli, S. Tagliapietra, G. Palmisano, A. Penoni, *Journal of Fluorine Chemistry*, 139 (2012), 53 – 57
- J31 Atmospheric pressure vapour phase decomposition: a proof of principle, A. Cinosi, N. Andriollo, F. Tibaldi, D. Monticelli, *Talanta*, 101 (2012), 148 – 150
- J32 Investigation of tectonically affected groundwater systems through a multidisciplinary approach, R. Gambillara, S. Terrana, B. Giussani, D. Monticelli, S. Roncoroni, S. Martin, *Applied Geochemistry*, 33 (2013), 13 – 24
- J33 Probing the binding site of Abl Tyrosine Kinase using in situ click chemistry, C. Peruzzotti, S. Borrelli, M. Ventura, R. Pantano, G. Fumagalli, M. Christodoulou, D. Monticelli, M. Luzzani, A. L. Fallacara, C. Tintori, M. Botta, D. Passarella, *ACS Medicinal Chemistry Letters*, 4 (2013), 274 – 277
- J34 Quantification of iron in seawater at the low picomolar range based on optimization of bromate ammonia dihydroxynaphtalene system by catalytic adsorptive cathodic stripping voltammetry, L. M. Laglera, J. Santos-Encheandia, S. Caprara, D. Monticelli, *Analytical Chemistry*, 85 (2013), 2486 – 2492
- J35 Miniaturization in voltammetry: ultratrace element analysis and speciation with twenty-fold sample size reduction, D. Monticelli, L. M. Laglera, S. Caprara, *Talanta*, 128 (2014), 273 – 277
- J36 Cathodic pseudopolarography: a new tool for the identification and quantification of cysteine, cystine and other low molecular weight thiols in seawater, L. M. Laglera, J. Downes, A. Tovar- Sánchez, D. Monticelli, *Analytica Chimica Acta*, 836 (2014), 24-33
- J37 Anodic Stripping Tin Titration: a novel method for the voltammetric determination of platinum at trace levels, B. Giussani, S. Roncoroni, A. Nemenyi, V. Dal Santo, D. Monticelli, S. Recchia, *Analytical Chemistry*, 86 (2014), 6654-6659
- J38 Lifetime Response of Contemporary Versus Resurrected *Daphnia galeata* Sars (Crustacea, Cladocera) to Cu(II) Chronic Exposure, R. Piscia, M. Colombini, B. Ponti, R. Bettinetti, D. Monticelli, V. Rossi, M. Manca, *Bulletin of Environmental Contamination and Toxicology*, 94 (2015), 46-51
- J39 Occupational exposure to arsenic and cadmium in thin-film solar cell production, A. Spinazzè, A. Cattaneo, D. Monticelli, S. Rovelli, S. Recchia, S. Fustinoni, D. M. Cavallo, *The Annals of Occupational Hygiene*, 59 (2015), 572-585



- J40 Ultrasensitive and fast voltammetric determination of iron in seawater by atmospheric oxygen catalysis in 500 μ l samples, S. Caprara, L. M. Laglera, D. Monticelli, *Analytical Chemistry*, 87 (2015), 6357-6363
- J41 Voltammetric tools for trace element speciation in freshwaters: methodologies, outcomes and future perspectives, D. Monticelli, S. Caprara, *Environmental Chemistry*, 12 (2015), 683-705
- J42 Exploiting Chemistry to Improve Performance of Screen-Printed, Bismuth Film Electrodes (SP-BiFE), C. Dossi, D. Monticelli, A. Pozzi, S. Recchia, *Biosensors*, 6 (2016), 38
- J43 Towards a zero-blank, preconcentration-free voltammetric method for iron analysis at picomolar concentrations in unbuffered seawater, L. M. Laglera, S. Caprara, D. Monticelli, *Talanta*, 150 (2016), 449-454
- J44 Evaluation of the two-dimensional performances of low activity planar catalysts: development and validation of a true scanning reactor, M. Marelli, A. Nemenyi, V. Dal Santo, R. Psaro, L. Ostinelli, D. Monticelli, C. Dossi, S. Recchia, *ACS Combinatorial Science*, 18 (2016), 15-21
- J45 Understanding microwave vessel contamination by chloride species, S. Recchia, D. Spanu, D. Bianchi, C. Dossi, A. Pozzi, D. Monticelli, *Talanta*, 159 (2016), 29-33
- J46 A compilation of iron speciation data for open oceanic waters, S. Caprara, K. N. Buck, L. Gerringa, M. Rijkenberg, D. Monticelli, *Frontiers in Marine Science*, 3 (2016), 221
- J47 Efficient and ecofriendly route for the solvent-free synthesis of piperonal and aromatic aldehydes using Au/CeO₂ catalyst, C. Lucarelli, A. Lolli, A. Giugni, L. Grazia, S. Albonetti, D. Monticelli, A. Vaccari, *Applied catalysis B: Environmental*, 203 (2017), 314-323



Participation to conferences

- C1 XX Congresso Nazionale della Società Chimica Italiana, Rimini (Italy), June 2000
- C2 Convegno Nazionale 'Terzo millennio: il futuro della chimica analitica nel controllo alimentare ed ambientale', Roma (Italy), February 2001
- C3 Convegno Nazionale 'Attualità ed interdisciplinarietà della chimica analitica', Roma (Italy), February 2002
- C4 ISA 2002 Le spettroscopie nel controllo ambientale, Val Masino (Italy), April 2002
- C5 XVII Congresso Nazionale di Chimica Analitica, Viareggio (Italy), June 2002
- C6 XXI Congresso Nazionale della Società Chimica Italiana, Torino (Italy), June 2003
- C7 Speciazione e biodisponibilità dei metalli in ecosistemi acquatici, Parma (Italy), October 2003
- C8 ISA2004 – Incontro di Spettroscopia Analitica 'Sviluppi della spettroscopia analitica per lo studio dell'ambiente, dei beni culturali e dei materiali innovativi', Sestri Levante (Italy), April 2004
- C9 XVIII Congresso Nazionale di Chimica Analitica, Parma (Italy), September 2004
- C10 XIX Congresso Nazionale di Chimica Analitica, Pula (Italy), September 2005
- C11 XXII Congresso Nazionale della Società Chimica Italiana, Firenze (Italy), September 2006
- C12 European Winter Conference on Plasma Spectrochemistry, Taormina (Italy), February 2007
- C13 EUROanalysisXIV Antwerp (Belgium), September 2007
- C14 XX Congresso Nazionale di Chimica Analitica, S. Martino al Cimino (Italy), September 2007
- C15 4th International Conference on Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences, Munchen (Germany), May 2008
- C16 XXI Convegno nazionale della Divisione di Chimica Analitica della Società Chimica Italiana, Arcavacata di Rende (Italy), September 2008
- C17 European Winter Conference on Plasma Spectrochemistry, Graz (Austria), February 2009
- C18 XII Convegno Nazionale Chimica degli Ambienti Polari, Venezia (Italy), June 2009
- C19 12th Workshop on Progress in Analytical Methodologies for Trace Metal Speciation, Mainz (Germany), September 2009
- C20 3rd EuCheMS Chemistry Congress, Nürnberg (Germany), August 2010
- C21 XXII Convegno nazionale della Divisione di Chimica Analitica della Società Chimica Italiana, Como (Italy), September 2010
- C22 European Winter Conference on Plasma Spectrochemistry, Zaragoza (Spagna), February 2011
- C23 EUROanalysis 16, Beograd (Serbia), September 2011
- C24 25th Conference of Spectrometry, Schaffhausen (Swiss), September 2011
- C25 XXII Congresso Nazionale della Divisione di Chimica Analitica della Società Chimica Italiana, Biodola, Isola d'Elba (Italy), September 2012
- C26 COST workshop Voltammetry and geotraces, Šibenik (Croatia), October 2012
- C27 The BNASS / TraceSpec Tandem Conference, Aberdeen, Scotland, 31st August - 4th September 2014
- C28 Organic Ligands - A Key Control on Trace Metal Biogeochemistry in the Ocean An Open Workshop and Symposium organized by SCOR WG 139, Šibenik, Croatia, 7-11 April 2015
- C29 XXV Congresso della Divisione di Chimica Analitica della Società Chimica Italiana, Trieste, 13 - 17 September 2015



UNIVERSITA' DEGLI STUDI DELL'INSUBRIA

Dipartimento di Scienza e Alta Tecnologia

C30 XXVI Congresso della Divisione di Chimica Analitica della Società Chimica Italiana, Giardini Naxos (ME), 18 – 22 settembre 2016



Selected presentations

- P1 Determinazione voltammetrica dello Sn in catalizzatori a base di metalli nobili, S. Recchia, D. Monticelli, A. Pozzi, C. Dossi, XX Congresso Nazionale della Società Chimica Italiana, Rimini (Italy), June 2000
- P2 Chemical characterisation of ancient and restoration mortars, C. Dossi, D. Monticelli, A. Pozzi, L. Rampazzi, L. Toniolo, R. Verga, 3rd International Congress on "Science and Technology for the safeguard of Cultural Heritage in the Mediterranean Basin", Alcalà de Henares (Spain), July 2001
- P3 Studio multivariato delle interferenze da metalli nobili sulla scarica voltammetrica dello stagno: determinazione indiretta del platino in traccia, S. Recchia, S. Costenaro, D. Monticelli, A. Pozzi, C. Dossi, R. Psaro, XVI Congresso Nazionale di Chimica Analitica, Portonovo (Italy), September 2001
- P4 Metodologie elettroanalitiche per la determinazione di metalli nobili in traccia in matrici ambientali: il caso di platino e rodio, C. Dossi, P. Curi, D. Monticelli, A. Pozzi, L. Rampazzi, S. Recchia, Convegno Nazionale 'Attualità ed interdisciplinarietà della chimica analitica', Roma (Italy), February 2002
- P5 Chemometric approach to the chemical characterisation of ancient mortars, C. Dossi, D. Monticelli, A. Pozzi, L. Rampazzi, L. Toniolo, R. Verga, 33rd International symposium on archaeometry, Amsterdam (The Netherlands), April 2002
- P6 Determinazione della capacità di complessazione dello ione rame in torrenti glaciali: il caso del torrente Rutor, D. Monticelli, C. M. G. van den Berg, A. Pozzi, S. Martin, C. Dossi, XVII Congresso Nazionale di Chimica Analitica, Viareggio (Italy), June 2002
- P7 Indagine chimico-analitica sull'area delle ex miniere di uranio della Val Vedello, Valtellina (SO), C. Dossi, D. Monticelli, G. Carugati, B. Giussani, A. Pozzi, L. Rampazzi, S. Recchia, XXI Congresso Nazionale della Società Chimica Italiana, Torino (Italy), June 2003
- P8 I beni culturali come record di inquinamento, L. Rampazzi, D. Monticelli, A. Pozzi, B. Rizzo, VIII Congresso Nazionale di Chimica dell'Ambiente e dei Beni Culturali, Colle Val d'Elsa (Italy), June 2004
- P9 Distribution of $\delta^{18}O$ and trace elements in the Lake Como basin: preliminary results, R. Gambillara, B. Giussani, D. Monticelli, S. Bernasconi, A. Pozzi, C. Dossi, 32nd International Geological Congress, Firenze (Italy), August 2004
- P10 Characterisation of the eva verda in the St.-Marcel valley, Aosta (Italian western Alps), Ciceri E., Gambillara R., Martin S., Masciocchi N., Monticelli D., Tumiatì S., 32nd International Geological Congress, Firenze (Italy), August 2004
- P11 Chemical features of the springs and correlations with faults in north-western area of Como lake basin (northern Italy), R. Gambillara, S. Terrana, D. Monticelli, B. Giussani, European Geosciences Union General Assembly, Vienna (Austria), April 2005, vol 7, pp. 6957-6959



- P12 Automazione di tecniche voltammetriche di stripping per l'analisi di metalli in traccia, D. Monticelli, E. Ciceri, A. Pozzi, C. Dossi, XIX Congresso Nazionale di Chimica Analitica, Pula (Italy), September 2005
- P13 Solving problems in the scaling-down BCR three-step sequential extraction procedure, E. Ciceri, B. Giussani, D. Monticelli, S. Recchia, L. Rampazzi, 10th EuCheMS-DCE International Conference on Chemistry in the Environment: our choice, our life. Research, Education and Professional, Rimini (Italy), September 2005, pp. 89-90
- P14 Determinazione di elementi in traccia in carote di sedimenti lacustri tramite ICP-MS, C. Dossi, D. Monticelli, E. Ciceri, B. Giussani, A. Pozzi, S. Recchia, Incontri di Spettroscopia Analitica, ISA2006, Giovinazzo (Italy), April 2006, p. 37
- P15 Analisi di anelli di accrescimento di Larix Decidua tramite LA-ICP-MS per la valutazione dell'impatto di attività estrattive, D. Monticelli, A. Di Iorio, F. Riso, C. Dossi, XXII Congresso Nazionale della Società Chimica Italiana, Firenze (Italy), September 2006, p. 79
- P16 Un nuovo metodo di stripping catodico per la determinazione dello ione uranile a livello di tracce, D. Monticelli, A. Credano, A. Pozzi, C. Dossi, XXII Congresso Nazionale della Società Chimica Italiana, Firenze (Italy), September 2006, p. 90
- P17 Two and three way Principal Component Analysis of environmental data from Lake Como basin and watershed, B. Giussani, D. Monticelli, A. Pozzi, C. Dossi, E. Ciceri, CMA4CH 2006, Mediterranean Meeting, Multivariate Analysis and Chemometrics for Cultural Heritage and Environment, Nemi, (Italy), October 2006, pp. 25-26
- P18 Tree ring analysis by LA-ICP-MS for environmental monitoring: validation or refutation?, D. Monticelli, A. Di Iorio, E. Ciceri, B. Giussani, C. Dossi, 2007 European Winter Conference on Plasma Spectrochemistry, Taormina (Italy), February 2007
- P19 A study in selectivity variations of WCMP slurries related to pH, η -potential and dilutions with de-ionized water, D. M. Gianni, S. Ardizzone, G. Cappelletti, A. Maspero, D. Monticelli, G. Spinolo, N. Masciocchi, Material Research Society Spring Meeting, San Francisco (USA), April 2007
- P20 A new molecular based approach for Cathodic Stripping Voltammetry of trace metals: relation between detection capabilities and ligand structure, D. Monticelli, B. Giussani, R. Todeschini, C. Dossi, EUROanalysisXIV Antwerp (Belgium), September 2007
- P21 Optimization of an analytical protocol for the determination of trace metals in fumarolic condensates: the case of "La Fossa" crater, Volcano island, Italy, F. Capecchiacci, G. Carugati, D. Monticelli, A. Pozzi, O. Vaselli, EUROanalysisXIV Antwerp (Belgium), September 2007



- P22 Utilizzo di tecniche chemiometriche per lo studio e l'ottimizzazione di metodiche voltammetriche per l'analisi di metalli in traccia, B. Giussani, D. Monticelli, S. Recchia, C. Dossi, XX Congresso Nazionale di Chimica Analitica, S. Martino al Cimino (Italy), September 2007
- P23 Detection and characterisation of strong complexing species in natural waters, D. Monticelli, C. Dossi, R. Biesuz, 4th International Conference on Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences, Munchen (Germany), May 2008
- P24 Design and performances of a cyclonic flux cell for laser ablation, E. L. Gurevich, D. Monticelli, R. Hergenröder, Nordic Conference on Plasma Spectrochemistry, Loen (Norway), June 2008
- P25 Contributi fluviali alla contaminazione da elementi in traccia del primo bacino del lago di Como, C. Dossi, B. Giussani, D. Monticelli, ISA 2008 Incontro di spettroscopia analitica, Ferrara (Italy), June 2008
- P26 Understanding the molecular bases of Cathodic Stripping Voltammetry: a novel QSPR strategy, B. Giussani, D. Monticelli, R. Todeschini, C. Dossi, 11th Conference on Chemometrics in Analytical Chemistry, Montpellier (France), July 2008
- P27 Progetto per la validazione del grado di complessazione dei metalli in acque ambientali, G. Alberti, M. Pesavento, R. Biesuz, D. Monticelli, C. Dossi, XXI Convegno nazionale della Divisione di Chimica Analitica della Società Chimica Italiana, Arcavacata di Rende (Italy), September 2008
- P28 Progettazione e validazione di un sistema di digestione UV ad alta efficienza per l'analisi di ioni metallici tramite tecniche voltammetriche, A. Castelletti, D. Monticelli, G. Carugati, C. Dossi, XXI Convegno nazionale della Divisione di Chimica Analitica della Società Chimica Italiana, Arcavacata di Rende (Italy), September 2008
- P29 Laser ablation of biological tissues: size distribution and chemical speciation of particles produced by ns and fs pulses, D. Monticelli, C. Dossi, E. L. Gurevich, R. Hergenröder, European Winter Conference on Plasma Spectrochemistry, Graz (Austria), February 2009
- P30 Investigation of environmental data from Lake Como Basin and watershed (Italy) by multivariate data analysis methods, B. Giussani, D. Monticelli, S. Roncoroni, A. Pozzi, C. Dossi, 12th EuCheMS International Conference on Chemistry and the Environment, Stockholm (Sweden), June 2009
- P31 Assessment of accuracy and precision in speciation analysis by Competitive Ligand Equilibration with Cathodic Stripping Voltammetric detection, C. Dossi, A. Castelletti, A. Pozzi, D. Monticelli, XXIII Congresso Nazionale della Società Chimica Italiana, Sorrento (Italy) July 2009
- P32 Copper exportation from glacierised catchments, D. Monticelli, A. Pozzi, C. Dossi, 12th Workshop on Progress in Analytical Methodologies for Trace Metal Speciation, Mainz (Germany), September 2009



- P33 Assessment of accuracy and precision in speciation analysis by CLE–CSV: application to Antarctic samples, A. Castelletti, C. Dossi, D. Monticelli, 12th Workshop on Progress in Analytical Methodologies for Trace Metal Speciation, Mainz (Germany), September 2009
- P34 Modifications of organic and inorganic materials induced by interaction with ultrashort laser pulses, E. L. Gurevich, R. Hergenröder, D. Monticelli, 10th International Conference on Laser Ablation COLA 2009, Singapore, November 2009
- P35 Accuracy and precision in speciation analysis: the case of Competitive Ligand Equilibration coupled to Cathodic Stripping Voltammetry detection of the labile fraction, D. Monticelli, C. Dossi, A. Castelletti, 3rd EuCheMS Chemistry Congress, Nürnberg (Germany), September 2010
- P36 Evaluation and optimization of ultrapure acid production, A. Castelletti, D. Monticelli, D. Civati, C. Dossi, 3rd EuCheMS Chemistry Congress, Nürnberg (Germany), September 2010
- P37 Groundwater contamination by trace elements in a urban landfill site in Northern Italy: plume expansion and seasonal trends, D. Monticelli, D. Civati, A. Castelletti, C. Dossi, European Winter Conference on Plasma Spectrochemistry, Zaragoza (Spain), February 2011
- P38 A viscous film sample chamber for Laser Ablation Inductively Coupled Plasma – Mass Spectrometry, D. Monticelli, D. Civati, R. Hergenröder, E. L. Gurevich, S. Recchia, EUROanalysis 16, Beograd (Serbia), September 2011
- P39 A novel Total reflection X Ray Fluorescence procedure for the direct determination of trace elements in petrochemical products, D. Monticelli, A. Cinosi, G. Peponi, N. Andriollo, 25th Conference of Spectrometry, Schaffhausen (Swiss), September 2011
- P40 Tolerance of *Daphnia* from Lago d'Orta to copper pollution: a comparison between present and past, M. Colombini, R. Piscia, B. Ponti, R. Bettinetti, D. Monticelli, M. Manca, 9th International Symposium on Cladocera, Verbania (Italy), October 2011
- P41 Automation of ultratrace analysis of iron by adsorptive stripping voltammetry, D. Monticelli, S. Caprara, L. M. Laglera, XXII Congresso Nazionale della Divisione di Chimica Analitica della Società Chimica Italiana, Biodola, Isola d'Elba (Italy), September 2012
- P42 Optimising voltammetric procedures: small volumes, fast analysis and reliable data?, D. Monticelli, "Voltammetry and GEOTRACES" ESF COST 801 Meeting, Šibenik (Croatia), October 2012
- P43 New insights and performance enhancement of the determination of total iron in seawater by catalytic cathodic voltammetry of its complexes with dihydroxynaphthalene, L. M. Laglera, J. Santos-Echeandía, S. Caprara, D. Monticelli, "Voltammetry and GEOTRACES" ESF COST 801 Meeting, Šibenik (Croatia), October 2012