Alessandra Biancolillo

Personal Information

Place of Birth
Rome

Date of Birth
25/09/1988

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Via Vetoio, I-67100, Coppito, L'Aquila, Italy

Synopsis of the scientific production

Scientific Publications (Indexed in Scopus)	Citations	H-index
69	913	19

Scopus 29th June 2021

Education & Employment

1st August 2019-current	**Fixed-term researcher (RTDa)** at the Department of Physical and Chemical Sciences, University of L'Aquila, Italy.
February 2019-July 2019	**Post-doc Researcher** at the Department of Chemistry, University of Rome "La Sapienza".
May 2019-July 2019	**Post-doc Researcher** (*ingénieur de recherche*) at ITAP, Irstea, Montpellier SupAgro, Univ Montpellier, Montpellier, France.
June 2018-January 2019	**Collaborator** with the Catholic University of the Sacred Heart working on the international project called SPRINTT (Sarcopenia and Physical fRailty IN older people: multi-componenT Treatment strategies)
June 2018-September 2018	**Post-doc Researcher** (*ingénieur de recherche*) at ITAP, Irstea, Montpellier SupAgro, Univ Montpellier, Montpellier, France.
May 2017-April 2018	**Post-doc Researcher** at the Department of Chemistry, University of Rome "La Sapienza".
December 2016 - February 2017	**Research Associate** at the Department of Chemistry, University of Rome "La Sapienza".
November 2016	**PhD degree** **PhD** in *spectroscopy and chemometrics*, University of Copenhagen, Department of Food Science, Faculty of Life Sciences (Rolighedsvej 30, DK-1958 Frederiksberg C, Denmark). Title of the thesis: "*Method development in the area of multi-block analysis focused on food analysis*"
PhD Supervisors	Tormod Næs, Rasmus Bro and Ingrid Måge
Thesis' project	**Multi-block analysis in the field of food science** Joint project between the University of Copenhagen (Department of Food Science, Faculty of Life Sciences, University of Copenhagen, Rolighedsvej 30, DK-1958 Frederiksberg C, Denmark) and the Norwegian institute for research on food and fishery (NOFIMA) (Nofima AS, Osloveien 1, P.O. Box 210, N-1431 Ås, Norway)

Topic of the PhD thesis

The PhD thesis is centered on method-development and method-testing in the multi-block field, with a specific focus on food analysis. The novel approaches are conceived to be suitable from both the prediction and the interpretation point of view.
The proposed methods have been compared with other well-known methodologies used in the same field; all the discussed methods have been applied to simulated and real data.
Three approaches have been proposed: one is a classification method obtained combining an existing multi-block regression method (Sequential and Orthogonalized-PLS) with the Linear Discriminant Analysis. The second is a multi-block regression methodology suitable for handling multi-way data sets and the third is multi-way and multi-block classifier. The main peculiarity of the last two is that they can handle multi-way data sets avoiding unfolding. All the methods have demonstrated to be particularly suitable from the interpretation point of view.
Moreover, how to implement variable selection procedures in the creation of multi-block models has been investigated. Different procedures combining various multi-block and variable selection methods have been tested and discussed.

MSc

2011- 2013

MSc in Analytical Chemistry, University of Rome "La Sapienza" - Rome, Italy
Thesis: '*Multiplatform instrumental characterization coupled to chemometric data fusion protocols for the authentication of beer samples*'

Thesis' Topic

Aim of the MSc research was to characterize and authenticate a high value-added artisanal beer brewed in central Italy ("Reale") using a multi-instrument fingerprinting coupled to chemometrics. To do so, samples of "Reale" and of other competing and/or commercial beers have been collected and analyzed using thermogravimetry, UV-Visible spectrophotometry and mid- and near-infrared spectroscopies. Chemometric discriminant and modelling classification methods were applied at first on the individual data matrices and in a second stage to the whole set of data - testing different data fusion protocols – to build reliable traceability models.

Degree Date

17/07/2013

MSc Degree Score

110/110

BSc

2007-2011 **BSc in Environmental Analytical Chemistry,** University of Rome "La Sapienza" - Rome, Italy
Thesis: 'Spectroscopic methods coupled to mathematical processing for the analysis of food dyes in mixtures.

2002-2007 **High school diploma** (*maturità classica*), highschool *(Liceo)* G. De Sanctis – Rome, Italy (final mark: 100/100)

School & Courses

September 2014	Course: **Multi-way analysis** (8 ECTS) Copenhagen University, Department of Food Science, Faculty of Life Sciences, University of Copenhagen, Rolighedsvej 30, DK-1958 Frederiksberg C, Denmark
January-June 2014	Course: **Applied Linear Algebra** (10 ECTS) NMBU Norwegian University of Life Science, Campus Ås, Universitetstunet 3, 1430 Ås, Akershus, Norway
April 2014	Course: **Advanced MATLAB for Multivariate Data Analysis** (3 ECTS) Copenhagen University, Department of Food Science, Faculty of Life Sciences, University of Copenhagen, Rolighedsvej 30, DK-1958 Frederiksberg C, Denmark.
January-June 2014	Course: **Statistical Data Analysis** (10 ECTS) NMBU Norwegian University of Life Science, Campus Ås, Universitetstunet 3, 1430 Ås, Akershus, Norway.
December 2013	Course: **Responsible Conduct of Research** (1 ECTS) Copenhagen University, Department of Food Science, Faculty of Life Sciences, University of Copenhagen, Rolighedsvej 30, DK-1958 Frederiksberg C, Denmark.
March-May 2013	PhD course: **"Basic MATLAB programming for chemometrics"** University of Rome "La Sapienza"- Rome, Italy.
April 2013	School: "**Chemometric methods for process monitoring school**" University of Modena e Reggio Emilia.
May 2013	School: "**Multi-way/set/level/block school**" in Rome
July 2009	School: "**Scuola di Metodologie Analitiche**" ("**Analytical Methodologies**"), Italian National Research Council (CNR) in Montelibretti – Rome, Italy.
2007	Course: "**Matematica in Moto**" ("**Mathematics in motion**") University of Rome "La Sapienza" - Rome, Italy.

Teaching Activity

March 2021-June 2021	***Professor** for the course: Chemometrics for the MSc in Chemistry (University of L'Aquila)*
March 2021-June 2021	***Professor** for the course: Analytical chemistry + laboratory for the BSc in Chemistry (University of L'Aquila)*
October 2019-February 2020	***Professor** for the course: Analytical chemistry + laboratory for the BSc in Chemistry (University of L'Aquila)*
October 2019-February 2020	***Professor** for the course: Analytical chemistry + laboratory for the BSc in Environmental Sciences (University of L'Aquila)*
2020-2021	***Supervisor** of one MSc thesis and two BSc theses (University of L'Aquila)*
April 2019	***Teacher** for part of the chemometric course* at the Hanoi University of Pharmacy
September 2017	***Teacher** at the Summer School on image analysis and hyperspectral imaging*
December 2016-present	Master and Bachelor thesis support-University of Rome «La Sapienza», Chemistry department.
December2014-February 2016	Master Thesis support-University of Copenhagen, Food Science department.
February 2013- June 2013	Laboratory/teaching assistant (Qualitative and Quantitative Analytical Chemistry; Instrumental Analytical Methods).
2007-2013	Private teaching/tutoring in Italian, Mathematics, Physics, Latin, Natural Sciences for high school and university.

Editorial Activity

2021	Associate Editor in Frontiers in Analytical Science – Chemometrics
2021	Guest Editor for Molecules
2020	Editorial Board Member of AppliedChem
2020	Guest Associate Editor in Frontiers in Analytical Sciences
2020	Guest Editor for Applied Sciences (two special issues)
2019	Guest Editor for Molecules
2019	Section Board Member for Applied Sciences
2019	Topic Editor for Applied Sciences

Research Activity

Main fields of interest

- Exploratory Data Analysis
- Regression models
- Multi-block, data fusion
- Classification
- Variable Selection
- Spectroscopy

Papers & Book Chapters (indexed in Scopus)

Publication	First, Last or Corresponding Author
69. Are standard sample measurements still needed to transfer multivariate calibration models between near-infrared spectrometers? The answer is not always (2021) TrAC - Trends in Analytical Chemistry, 143, 116331	No
68. Spectroscopic fingerprinting and chemometrics for the discrimination of Italian Emmer landraces (2021) Chemometrics and Intelligent Laboratory Systems, 215, 104348	No
67. HS-SPME/GC–MS volatile fraction determination and chemometrics for the discrimination of typical Italian Pecorino cheeses (2021) Microchemical Journal, 165, 106133	Yes
66. ICP-OES analysis coupled with chemometrics for the characterization and the discrimination of high added value Italian Emmer samples (2021) Journal of Food Composition and Analysis, 98, 103842.	Yes
65. FRUITNIR-GUI: A graphical user interface for correcting external influences in multi-batch near infrared experiments related to fruit quality prediction (2021) Postharvest Biology and Technology, 175, 111414	No
64. Application of Spectroscopic Techniques to Evaluate Heat Treatments in Milk and Dairy Products: Overview of the Last Decade (2021) Food and Bioprocess Technology, 14	No
63. Effects of thermal treatments on durum wheat pasta flavour during production process: A modelling approach to provide added-value to pasta dried at low temperatures (2021) Talanta, 225, 121955.	Yes
62. Recent trends in multi-block data analysis in chemometrics for multi-source data integration (2021) TrAC - Trends in Analytical Chemistry, 137, 116206	No
61. Multi-block classification of chocolate and cocoa samples into sensory poles (2021) Food Chemistry, 340, 127904.	Yes
60. Sequential data fusion techniques for the authentication of the P.G.I. senise (“crusco”) bell pepper (2021) Applied Sciences, 11, 1709.	Yes
59. Improved prediction of fuel properties with near-infrared spectroscopy using a complementary sequential fusion of scatter correction techniques (2021) Talanta, 223, 121693.	No
58. Sequential fusion of information from two portable spectrometers for improved prediction of moisture and soluble solids content in pear fruit (2021) Talanta, 223, 121733.	No
57. Application of spectroscopy in food analysis (2021) Applied Sciences, 11, 3860	Yes
56.Authentication of rice (Oryza sativa l.) using near infrared spectroscopy combined with different chemometric classification strategies (2021) Applied Sciences, 11, 362.	Yes
55. Fourier-transform infrared spectroscopy of skeletal muscle tissue: Expanding biomarkers in primary mitochondrial myopathies (2020) Genes, 11,1522.	No
54. New data preprocessing trends based on ensemble of multiple preprocessing techniques (2020) TrAC - Trends in Analytical Chemistry, 132, 116045.	No

53. MBA-GUI: A chemometric graphical user interface for multi-block data visualisation, regression, classification, variable selection and automated pre-processing (2020) Chemometrics and Intelligent Laboratory Systems, 205, 104139.	No
52. Emerging techniques for differentiation of fresh and frozen-thawed seafoods: Highlighting the potential of spectroscopic techniques (2020) Molecules, 25 (19), 4472.	Yes
51. Monitoring thermal and non-thermal treatments during processing of muscle foods: A comprehensive review of recent technological advances (2020) Applied Sciences (Switzerland), 10 (19), 6764.	No
50. A novel multi-marker discovery approach identifies new serum biomarkers for Parkinson's disease in older people: an EXosomes in PArkiNson Disease (EXPAND) ancillary study (2020) GeroScience, 42 (5), pp. 1323-1334.	No
49. Circulating Mitochondrial-Derived Vesicles, Inflammatory Biomarkers and Amino Acids in Older Adults With Physical Frailty and Sarcopenia: A Preliminary BIOSPHERE Multi-Marker Study Using Sequential and Orthogonalized Covariance Selection – Linear Discriminant Analysis (2020) Frontiers in Cell and Developmental Biology, 8, 564417.	No
48. Chemometric strategies for spectroscopy-based food authentication (2020) Applied Sciences, 10 (18), 6544.	Yes
47. Authentication of the Geographical Origin of "Vallerano" Chestnut by Near Infrared Spectroscopy Coupled with Chemometrics (2020) Food Analytical Methods, 13 (9), pp. 1782-1790.	Yes
46. Grappa and Italian spirits: Multi-platform investigation based on GC–MS, MIR and NIR spectroscopies for the authentication of the Geographical Indication (2020) Microchemical Journal, 157, 104896.	Yes
45. Application of novel techniques for monitoring quality changes in meat and fish products during traditional processing processes: Reconciling novelty and tradition (2020) Processes, 8, 988.	Yes
44. Fraud in animal origin food products: Advances in emerging spectroscopic detection methods over the past five years (2020) Foods, 9, 1069.	No
43. Classification of honey applying high performance liquid chromatography, near-infrared spectroscopy and chemometrics (2020) Chemometrics and Intelligent Laboratory Systems, 202, 104037.	Yes
42. Authentication of Sorrento walnuts by NIR spectroscopy coupled with different chemometric classification strategies (2020) Applied Sciences (Switzerland), 10, 4003.	Yes
41. The "development of metabolic and functional markers of dementia in older people" (ODINO) study: Rationale, design and methods (2020) Journal of Personalized Medicine, 10.	No
40. A note on spectral data simulation (2020) Chemometrics and Intelligent Laboratory Systems, 200, art. no. 103979.	No
39. Geographical Classification of Italian Saffron (Crocus sativus L.) by Multi-Block Treatments of UV-Vis and IR Spectroscopic Data (2020) Molecules, 25 (10), art. no. 2332.	Yes
38. Sequential preprocessing through ORThogonalization (SPORT) and its application to near infrared spectroscopy (2020) Chemometrics and Intelligent Laboratory Systems, 199, art. no. 103975.	Yes
37. Identification and quantification of turmeric adulteration in egg-pasta by near infrared spectroscopy and chemometrics (2020) Applied Sciences (Switzerland), 10 (8), art. no. 2647.	Yes
36. Authentication of PDO saffron of L'Aquila (Crocus sativus L.) by HPLC-DAD coupled with a discriminant multi-way approach (2020) Food Control, 110, art. no. 107022.	Yes

35. Multi-block classification of Italian semolina based on Near Infrared Spectroscopy (NIR) analysis and alveographic indices (2020) Food Chemistry, 309, art. no. 125677.	Yes
34. Retention modelling of phenoxy acid herbicides in reversed-phase HPLC under gradient elution (2020) Molecules, 25 (6), art. no. 1262.	Yes
33. Geographical discrimination of red garlic (Allium sativum L.) using fast and non-invasive Attenuated Total Reflectance-Fourier Transformed Infrared (ATR-FTIR) spectroscopy combined with chemometrics (2020) Journal of Food Composition and Analysis, 86, 103351.	Yes
32. Authentication of Grappa (Italian grape marc spirit) by Mid and Near Infrared spectroscopies coupled with chemometrics (2020) Vibrational Spectroscopy, 107, 103040.	Yes
31. Parallel pre-processing through orthogonalization (PORTO) and its application to near-infrared spectroscopy (2020) Chemometrics and Intelligent Laboratory Systems, 104190	No
30. SO-CovSel: A novel method for variable selection in a multiblock framework (2020) Journal of Chemometrics, 34, e3120.	Yes
29. Chemometrics and thermal analytical investigation of ancient human bones through the estimation of activation energy values of main degradation processes (2020) Current Analytical Chemistry, 16, pp. 580-592.	Yes
28. Authentication of P.G.I. Gragnano pasta by near infrared (NIR) spectroscopy and chemometrics (2020) Microchemical Journal, 152, 104339.	Yes
27. A Specific Urinary Amino Acid Profile Characterizes People with Kidney Stones (2020) Disease Markers, 2020, 8848225.	No
26. Identification of biomarkers for physical frailty and sarcopenia through a new multi-marker approach: results from the BIOSPHERE study (2020) GeroScience.	No
25. Gut microbial, inflammatory and metabolic signatures in older people with physical frailty and sarcopenia: Results from the BIOSPHERE study (2020) Nutrients, 12, 65.	No
24. Identification of a circulating amino acid signature in frail older persons with type 2 diabetes mellitus: Results from the metabofrail study (2020) Nutrients, 12, 199.	No
23. The “Metabolic biomarkers of frailty in older people with type 2 diabetes mellitus” (MetaboFrail) study: Rationale, design and methods (2020) Experimental Gerontology, 129, 110782.	No
22. Circulating amino acid signature in older people with Parkinson's disease: A metabolic complement to the EXosomes in PArkiNson Disease (EXPAND) study (2019) Experimental Gerontology, 128, art. no. 110766.	No
21. Flavour fingerprint for the differentiation of Grappa from other Italian distillates by GC-MS and chemometrics (2019) Food Control, 105, pp. 123-130.	Yes
20. Authentication of “Avola almonds” by near infrared (NIR) spectroscopy and chemometrics (2019) Journal of Food Composition and Analysis, 82, art. no. 103235.	Yes
19. Inflammatory signatures in older persons with physical frailty and sarcopenia: The frailty “cytokinome” at its core (2019) Experimental Gerontology, 122, pp. 129-138.	No
18. Near infrared (NIR) spectroscopy-based classification for the authentication of Darjeeling black tea (2019) Food Control, 100, pp. 292-299.	Yes
17. Determination of insect infestation on stored rice by near infrared (NIR) spectroscopy (2019) Microchemical Journal, 145, pp. 252-258.	Yes
16. Ancient human bones studied and compared by near infrared spectroscopy, thermogravimetry and chemometrics (2019) Journal of Near Infrared Spectroscopy, 27 (1), pp. 6-14.	Yes

15. The Sequential and Orthogonalized PLS Regression for Multiblock Regression: Theory, Examples, and Extensions (2019) Data Handling in Science and Technology, 31, pp. 157-177.	Yes
14. Data Fusion Strategies in Food Analysis (2019) Data Handling in Science and Technology, 31, pp. 271-310.	Yes
13. Prediction of viscosity index and pour point in ester lubricants using quantitative structure-property relationship (QSPR) (2018) Chemometrics and Intelligent Laboratory Systems, 183, pp. 59-78.	Yes
12. A distinct pattern of circulating amino acids characterizes older persons with physical frailty and sarcopenia: Results from the BIOSPHERE study (2018) Nutrients, 10, 1691.	No
11. Chemometric methods for spectroscopy-based pharmaceutical analysis (2018) Frontiers in Chemistry, 6 (NOV), 576.	Yes
10. Simultaneous quantification of caffeine and chlorogenic acid in coffee green beans and varietal classification of the samples by HPLC-DAD coupled with chemometrics (2018) Environmental Science and Pollution Research, 25 (29), pp. 28748-28759.	No
9. Authentication of an Italian PDO hazelnut ("Nocciola Romana") by NIR spectroscopy (2018) Environmental Science and Pollution Research, 25, pp. 28780-28786.	Yes
8. The "BIOmarkers associated with Sarcopenia and PHysical frailty in ElderRly pErsons" (BIOSPHERE) study: Rationale, design and methods (2018) European Journal of Internal Medicine, 56, pp. 19-25.	No
7. Chemometrics Applied to Plant Spectral Analysis (2018) Comprehensive Analytical Chemistry, 80, pp. 69-104.	Yes
6. Chemometric Methods for Classification and Feature Selection (2018) Comprehensive Analytical Chemistry, 82, pp. 265-299.	No
5. Mining online community data: The nature of ideas in online communities (2017) Food Quality and Preference, 62, pp. 246-256.	No
4. Extension of SO-PLS to multi-way arrays: SO-N-PLS (2017) Chemometrics and Intelligent Laboratory Systems, 164, pp. 113-126.	Yes
3. Variable selection in multi-block regression (2016) Chemometrics and Intelligent Laboratory Systems, 156, pp. 89-101.	Yes
2. Combining SO-PLS and linear discriminant analysis for multi-block classification (2015) Chemometrics and Intelligent Laboratory Systems, 141, pp. 58-67.	Yes
1. Data-fusion for multiplatform characterization of an italian craft beer aimed at its authentication (2014) Analytica Chimica Acta, 820, pp. 23-31.	Yes
Total Citations: 913; H Index: 19 (29/06/2021)	

Papers & Chapters

(not indexed in Scopus)

Published		First Last or corresponding author
2021	**Chemometric Classification Methods in Omic Data Analysis** In: Alejandro Cifuentes (Ed.), Comprehensive Foodomics, Elsevier, pp.269-276.	Yes
2020	**Mitochondrial Signatures in Circulating Extracellular Vesicles of Older Adults with Parkinson's Disease: Results from the EXosomes in PArkiNson's Disease (EXPAND) Study.** Journal of Clinical Medicine, 9, 504. https://doi.org/10.3390/jcm9020504	No
2018	**Discriminant analysis and classification of chromatographic data**. In: L. Komsta, Y. Vander Heyden, J. Sherma (Eds.), Chemometrics in chromatography, CRC press, Boca Raton, FL. ISBN 9781498772532 Pages 267-284.	Yes

Participation to National and International Projects

2018 – current	CHAMAN Project (Agropolis foundation project, #1505-003)
2018-2019	SPRINTT (Sarcopenia and Physical fRailty IN older people: multi-componenT Treatment strategies)
2017-2018	BIOSPHERE (BIOmarkers associated with Sarcopenia and PHysical frailty in ElderRly pErsons)

Organization of Schools and Conferences

- Part of the organizing committee for the **Chemometrics in Analytical Chemistry (CAC)** which will be held in Courmayeur in June 2022.
- Part of the organizing committee for the **MiniArtic** which will be held in Civita di Bagnoregio in November 2019.
- Part of the organizing committee for the **Summer School on image analysis and hyperspectral imaging** held in Rome on September 2017.
- Part of the organizing committee for cycle of seminars **("PhD Powered Innovation")** held in NOFIMA centers in 2016

Talks
(oral presentations) in conferences

June 2021	**ASMDA conference** – Athens, Greece
November 2020	**TMS webinar** – L'Aquila, Italy
June 2019	**Convegno Giovani Ricercatori** – Rome, Italy
June 2019	**Colloquium Chemoemtricum Mediterraneum** – Minorca, Spain
April 2019	**AnalytiX-2019** – Singapore, Singapore *(Invited Speaker)*
February 2019	**Italian chemometrics workshop**, Bergamo, Italy
December 2018	**FDT2018**, Genoa, Italy
September 2018	**XXVII Congresso della Divisione di Chimica Analitica**, Bologna, Italy
June 2018	**Chemometrics in Analytical Chemistry** (CAC), Halifax, Canada
May 2018	**Tecniche Chemiometriche e Strumentali di supporto all'Analisi Sensoriale e all'Agricoltura di Precisione**, Campus di Fisciano (SA), Italy
April 2018	**Artic Analysis II**, Fludir, Island
November 2017	**MiniArtic Conference**, Valencia, Spain
September 2017	**XXVI Congresso Nazionale della Società Chimica Italiana**, Paestum, Italy
June 2017	**IX Colloquium Chemiometricum Mediterraneum**, Arles, France
April 2017	**TIC 2017**, Newcastle, Australia *(Invited Speaker)*
March 2017	**AnalytiX-2017**, Fukuoka, Japan *(Invited Speaker)*
February 2017	**Italian chemometrics workshop**, Vietri sul mare, Italy
January 2017	**Chemometric based spectroscopy**, Hanoi, Vietnam
November 2016	**MiniArtic Conference**, Groningen, Netherlands
November 2015	**MiniArtic Conference**, Ås, Norway

May 2015	**Pecha Kucha**, Son, Norway
March 2015	**Rop meeting**, Ås, Norway
February 2015	**Italian chemometrics workshop**, Rome, Italy
December 2014	**ODIN: A day of 100 Projects**, Copenhagen, Denmark
May 2014	**PLS-2014**, Paris, France
March 2014	**Artic Analysis**, Ilulissat, Greenland
October 2013	**Multi-block discriminant Analysis**, Ås, Norway

Seminars

(oral presentations)

March 2016	PhD-students seminar in Nofima Ås, Ås, Norway
March 2016	PhD-students seminar in Nofima Sunndalsøra, Sunndalsøra, Norway
March 2016	PhD-students seminar in Nofima Bergen, Bergen, Norway
March 2016	PhD-students seminar in Nofima Stavanger, Stavanger, Norway
April 2016	PhD-students seminar in Nofima Trømso, Norway

Posters

September 2019	XXVIII Congresso della Divisione di Chimica Analitica, Bari, Italy (One poster contribution)
September 2018	XXVII Congresso della Divisione di Chimica Analitica, Bologna, Italy (One poster contribution)
September 2017	XXVI Congresso Nazionale della Società Chimica Italiana, Paestum, Italy (Three poster contributions)
June 2014	6th Convegno Giovani Chimici, Rome, Italy
June 2012	5th Convegno Giovani Chimici, Rome, Italy

Prizes & Grants

July 2019	**Grant** supporting the participation to the XXVIII Congress of the Analytical Chemical Division awarded by the Analytical Division of the Italian Chemical Society.
June 2019	**Best Oral Presentation Prize** at the Colloquium Chemometricum Mediterraneum
May 2019	**Grant** supporting the participation to the Colloquium Chemometricum Mediterraneum awarded by the Italian Chemometric Society (Società Italiana di Chemiometria)
September 2018	**Grant** supporting the participation to the XXVII Congress of the Analytical Division (XXVII Congresso della Divisione di Chimica Analitica) awarded by the Analytical Division of the Italian Chemical Society
June 2018	**Grant** supporting the participation to the Chemometrics in Analytical Chemistry (CAC) Conference, awarded by the Italian Chemometric Society (Società Italiana di Chemiometria)
September 2017	**Grant** supporting the participation to the XXVI Congress of the Italian Chemical Society (XXVI Congresso Nazionale della Società Chimica Italiana) awarded by the Analytical Division of the Italian Chemical Society

Computer Skills

MATLAB programming language	Good knowledge
PLS toolbox	Good knowledge
LaTeX document markup language	Good knowledge
UNIX operating system	Good knowledge
Microsoft Office	Good knowledge

Technical Skills and Competences

- Experience with handling chemicals and instruments for chemical analysis
- High level of experience in spectroscopy
- High level experience in data handling
- Extensive knowledge of chemometric tools for qualitative and quantitative analysis

Languages

English	Professional working proficiency Certificates in English Language Skills (CELS) Working/studying experience abroad
French	Basic Skills – Reading/Listening comprehension
Norwegian	Basic skills – Reading/Listening/Speaking and Writing
Italian	Mother Language