

CURRICULUM VITAE

Personal Data

Panagiotis ARAPITSAS

Researcher at Fondazione Edmund Mach

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Education Data

1996-2001: Diploma in Food technology – Enology and Beverage Technology, T.E.I of Athens, Greece (+ Socrates/Erasmus, University of Turin, Italy)

2003-2004: Master in Methods of Synthesis in Organic Chemistry, University of Florence, Italy

2005-2008: Ph.D. in Food Quality and Nutrition, University of Florence, Italy

Languages: Greek, Italian, English

Employment history

Researcher

Food Quality and Nutrition Department - Fondazione Edmund Mach, Italy
November 2014 – present

Post-Doc

Food Quality and Nutrition Department - Fondazione Edmund Mach, Italy
June 2010 – October 2014

Teaching

Culinary Art course, I.E.K of Athens, Greece
Modules of Food Knowledge, Food Safety and Nutrition
October 2009 – May 2010

Military service

Greek army
May 2008 – May 2009

Analyst

Department of Pharmaceutical Science, University of Florence, Italy
June 2004 - October 2004

Stage

Laboratory of Organic Chemistry, University of Gent, Belgium
February 2002 – June 2002

Analyst

Laboratory of Biotechnology and Analytical Chemistry, T.E.I. of Athens, Greece
February 2001 – February 2002

Enologist

Laboratory & Winery “Antica Contea Di Castelvevo-Araldica”, Italy
September 2000 – December 2000

Scientific Qualification

According to the Italian National Scientific Qualification:

Analytical Chemistry, Sector 03/A1 (2nd level) 2017-2023

Food Technology, Sector 07/F1 (2nd level) 2018-2024

Courses/schools

National school of analytical chemistry for PhD students

Organized by the 'Italian Chemistry Society' (Società Chimica Italiana) and the University of Rome 'La Sapienza', Italy

03/10/2005 – 07/10/2005

Course of molecular modeling in pharmaceutical science

Organized by the Department of Pharmaceutical Science, University of Florence, Italy

18/01/2006 – 01/02/2006

Integrated liquid separation and mass spectrometry: Advanced course for industrial scientists and graduate students

Organized by the Department of Analytical Chemistry of the University of Uppsala, Sweden

02/10/2006 – 13/10/2006

National school of analytical methods in mass spectrometry

Organized by the 'Italian Chemistry Society' (Società Chimica Italiana) and the University of Parma, Italy

21/05/2007 – 25/05/2007

Practical course on metabolomics bioinformatics for life scientists

Organized by the EMBO (European Bioinformatics Institute) at Cambridge, UK

25/02/2013 – 01/03/2013

Project management

QUALIFU

Development of a multifactorial index or a digital and functional fingerprint (Impronta digitale Funzionale - IDF) of the antioxidant and nutritional properties of Italian food. Influence of storage conditions on wine metabolic space.

2010-2014

Montalcino

Use of the anthocyanic profile for the authentication of Brunello di Montalcino wines. In collaboration with Brunello di Montalcino consorsium

2011-2013

Nomacorc

Evolution of the composition of white wines during post-bottling contact with oxygen. In collaboration with Nomacorc and MezzaCorona winery

2012-2013

CAVIT

Metabolomic study on the evolution of white wines during the storage

In collaboration with Cavit winery

2014-2017

PRIN ENOLOGIA

Tannic profile and metabolomic fingerprint of the principal red Italian wines.
In collaboration with the Universities of Bologna, Naples, Padua, Torino, Trento and Verona
2017- Present

Teaching Experience

TEI of Athens, Greece

Seminar about “Novel analytical chemistry methods in wine science – Wine Metabolomics” at the Master of Science in Wine and Beer Science of TEI of Athens (Oenology and Beverage Technology Department), April 2016 (3 hours), May 2017 (6 hours), May 2018 (6 hours).

Universidad de Concepción, Chile

Seminar about “Metabolomics” at the PhD students of the Departamento de Analisis Instrumental of the Facultad de Farmacia, Universidad de Concepción March 2017 (9 hours).

IEK of Athens, Greece

Teaching the modules of ‘Food Knowledge’, ‘Food Safety’ and ‘Dietology’ on the course ‘Culinary Art’ of IEK (Institute of Vocational Training) of Athens for the academic year of 2009/2010.

University of Florence, Italy

3 hours seminar (theory and practice) about “Electrochemistry” at the Master of Science in Food Technology of the University of Florence – Italy, March 2006 (3 hours).

Editorial Board Member

Scientific Reports

Conferences-Workshops committees

IVAS2015

Part of the organise committee

Metabolomics workshop (side event before IVAS2015)

Organiser

IWA2019

Part of the organise and scientific committee

Professional abilities

Instruments

GC-FID (Agilent HP) - HPLC/DAD (Agilent, Dionex, Hitachi)
ESI MS (Agilent HP) - Qtrap MS (Applied Biosystem) - TOF MS (Applied Biosystem), Xevo MS/MS (Waters), Synapt QTof (Waters) - NMR (Varian) - UV/Vis Spectrophotometer – IR - Accelerated Solvent Extraction - Electrochemistry apparatus

Publications

Journals

1. Arapitsas P, Antonopoulos A, Stefanou E and Dourtoglou VG. "Artificial aging of wines using oak chips" *Food Chemistry*, 86 (2004) 563-570.
2. Romani A, Menichetti S, Arapitsas P, Nativi C, Turchetti B and Buzzini P. "O-methylglucogalloyl esters: Synthesis and evaluation of their antimycotic activity" *Bioorganic & Medicinal Chemistry Letters* 15 (2005) 4000-4003.
3. Arapitsas P, Menichetti S, Vincieri FF, and Romani A. "Hydrolysable Tannins with the Hexahydroxydiphenoyl Unit and the m-Depsidic Link: HPLC-DAD-MS Identification and Model Synthesis" *Journal of Agricultural and Food Chemistry*, 50 (1) (2007) 48-55.
4. Arapitsas P and Turner C. "Pressurized Solvent Extraction and Monolithic Column-HPLC/DAD analysis of Anthocyanins in Red Cabbage" *Talanta*, 74 (2008) 1218-1223.
5. Arapitsas P, Sjöberg PJR and Turner L. "Characterization of anthocyanins in red cabbage using high resolution liquid chromatography coupled with photodiode array detection and electrospray ionization-linear ion trap mass spectrometry" *Food Chemistry*, 109 (2008) 219-226.
6. Arapitsas P. "Identification and quantification of polyphenolic compounds from okra seeds and skins" *Food Chemistry*, 110 (2008) 1041-1045.
7. Arapitsas P, Formentini L, Menichetti S, Romani A, Moroni F and Chiarugi A. "Mono-galloyl glucose derivatives are potent poly(ADP-ribose) glycohydrolase (PARG) inhibitors and reduce PARP-1-dependent cell death" *British Journal of Pharmacology*, 155 (2008) 1235-1249.
8. Buzzini P, Arapitsas P, Goretti M, Branda E, Turchetti B, Pinelli P, Ieri F and Romani A. "Antimicrobial activity of natural and synthetic hydrolyzable tannins" *Mini Review in Medicinal Chemistry*, 8 (2008) 1179-1187.
9. Theodoridis G, Gika H, Franceschi P, Caputi L, Arapitsas P, Scholz M, Masuero D, Wehrens R, Vrhovsek U, and Mattivi F. "LC-MS based global metabolite profiling of grape: solvent extraction protocol optimization" *Metabolomics*, 8 (2012) 175-185.
10. Arapitsas P; Scholz, M.; Vrhovsek, U.; Di Blasi, S.; Biondi Bartolini, A.; Masuero, D.; Perenzoni, D.; Rigo, A. and Mattivi, F. "A metabolomic approach to the study of the wine micro-oxygenation" *PLoS One*, 7:5 (2012) .
11. Arapitsas P. Review: "Hydrolyzable analysis in food" *Food Chemistry*, 135 (2012) 1708-1717.
12. Arapitsas P, Perenzoni D, Nicolini G and Mattivi F. "Study of Sangiovese wines pigments profile by UHPLC-MS/MS" *Journal of Agricultural and Food Chemistry*, 60:42 (2012) 10461-10471.
13. Arapitsas P, Turchetti B, Melani F, Tacconi D, Nativi C, Romani A, Menichetti S and Buzzini P. "In vitro synergistic anti-yeast activity between galloyl derivatives and amphotericin B" *Natural Product Journal*, 3 (2013) 131-139.
14. Sternad Lemut M, Trost K, Sivilotti P, Arapitsas P and Vrhovsek U. "Early vs. late leaf removal strategies for 'Pinot Noir' (*Vitis vinifera* L.): effect on colour-related phenolics in young wines following alcoholic fermentation" *Journal of the Science of Food and Agriculture*, 93 (2013) 3670-3681.

15. Shahaf N, Franceschi P, Rogachev I, Arapitsas P, Vrhovsek U and Wehrents R. “Constructing a Mass Measurement Error Surface to Improve Automatic Annotations in LCMS Based Metabolomics” *Rapid Communications in Mass Spectrometry*, 27 (2013) 2425-2431.
16. Flamini R, Mattivi F, De Rosso M, Arapitsas P and Bavaresco L. “Advanced knowledge of the principal classes of grape polyphenols: Anthocyanins, Stilbenes and Flavonols” *International Journal of Molecular Sciences*, 14 (2013) 19651-19669.
17. Arapitsas P, Speri G, Perenzoni D, Angeli A and Mattivi F. “The influence of storage on the “chemical age” of red wines” *Metabolomics*, 10 (2014), 816-832.
18. Ehrhardt C, Arapitsas P, Stefanini M, Flick G and Mattivi F. “Analysis of the phenolic composition of fungus resistant grape varieties cultivated in Italy and Germany using UHPLC-MS/MS” *Journal of Mass Spectrometry*, 49 (2014), 860–869.
19. Franceschi P, Mylonas R, Shahaf N, Scholz M, Arapitsas P, Masuero D, Weingart G, Carlin S, Vrhovsek U, Mattivi F and Wehrens R. ‘The Data Processing Workflow in Untargeted MS-Based Metabolomics Experiments’ *Frontiers in Bioengineering and Biotechnology, section Bioinformatics and Computational Biology*, 2 (2014) 72.
20. Arapitsas P, Oliveira J and Mattivi F. “Do white grapes really exist?” *Food Research International* 69 (2015) 21-25.
21. Arapitsas P, Della Corte A, Gika H, Narduzzi L, Mattivi F, Theodoridis G. “Studying the effect of storage conditions on the metabolite content of red wine using HILIC LC–MS based metabolomics” *Food Chemistry*, 197 (2016) 1331.
22. Arapitsas P, Ugliano M, Perenzoni D, Angeli A, Pangrazzi P, Mattivi F. “Wine metabolomics reveals new sulfonated products in bottled white wines, promoted by small amounts of oxygen” *Journal of Chromatography A*, 1429 (2016) 155.
23. Savoi S, Wong DC, Arapitsas P, Miculan M, Bucchetti B, Peterlunger E, Fait A, Mattivi F, Castellarin SD. “Transcriptome and metabolite profiling reveals that prolonged drought modulates the phenylpropanoid and terpenoid pathway in white grapes (*Vitis vinifera* L.).” *BMC Plant Biology* 16 (2016) 67.
24. Carvalho E, Franceschi P, Feller A, Herrera L, Palmieri L, Arapitsas P, Riccadonna S, Martens S. “Discovery of A-type procyanidin dimers in yellow raspberries by untargeted metabolomics and correlation based data analysis” *Metabolomics* 12 (2016) 144.
25. Oertel A, Matros A, Hartmann A, Arapitsas P, Dehmer KJ, Martens S, Mock HP. “Metabolite profiling of red and blue potatoes revealed cultivar and tissue specific patterns for anthocyanins and other polyphenols” *Planta* 246 (2017) 281.
26. Arapitsas P, Guella G, Mattivi F. “The impact of SO₂ on wine flavanols and indoles in relation to wine style and age” *Scientific Reports* 8 (2018) 858.

Book Chapters

1. Mattivi F, Arapitsas P, Biondi Bartolini A, Di Blasi S, Perenzoni D, Rigo A and Vrhovsek U. Chapter : “Il primo approccio metabolomico per lo studio della micro-ossigenazione” in *La ricerca applicata ai vini di qualità*. Edizioni dell’Università degli Studi di Firenze, 2012.

2. Mattivi F, Arapitsas P, Perenzoni D and Guella G. Chapter: "Influence of storage conditions on the composition of red wines" in Advances in Wine Research. ACS Books, 2015.
3. Arapitsas P, Mattivi F. "LC-MS Untargeted Protocol for the Analysis of Wine" in Metabolic Profiling: Methods and Protocols. Humana Press, 2018. ISBN 978-1-4939-7643-0

National divulgate journal

1. Arapitsas P, Oliveira J and Mattivi F. "Uva bianca: esiste davvero?" OICCE Times, 62, Primavera 2015, 27-29.
2. Arapitsas P, Ugliano M, Perenzoni D, Angeli A, Pangrazzi P, Mattivi F. "Verso l'uso intelligente della solforosa" OICCE Times, 65, Primavera 2016.
3. Arapitsas P, Guella G, Mattivi F. "Il destino della SO₂ nei vini". OICCE Times, 74, Primavera 2018.

Application note

Arapitsas P, Langridge J, Mattivi F and Astarita G. "A Facile Database Search Engine for Metabolite Identification and Biomarker Discovery in Metabolomics". Waters

Congresses

International Conference on Polyphenols (2004, 2006 and 2012)
 International Congress of Medicinal Plants (2005)
 International Congress on Food Technology (2006)
 International Symposium on Recent Advances in Food Analysis (2007)
 International Conference of the Metabolomics Society (2013 and 2016)
 Macrowine (2012, 2014, 2018)
 In Vino Analytica Scientia Symposium (2015, 2017, 2019)
 Max Rubner Conference (2011)
 Enoforum (2013, 2017, 2018, 2019)
 International Conference "Vine, wine, food and health (2018)

Greek National Conference of Master and Ph.D. Chemistry Student (2006 and 2007)
 Congresso nazionale della Societa' Chimica Italiana (2006)
 Congresso nazionale di chimica degli alimenti (2006)
 University of Uppsala Chemistry Conference UUCC (2006)
 Congresso Italiano di Scienza e tecnologia degli alimenti (2007)
 Workshop on Holistic Analytical Technologies (2012, 2014 and 2016)
 MS Food Day (2013)
 Challenges and advances in the annotation and de novo identification of small molecules of biological origin (2014)
 Informal Meeting of Mass Spectrometry (2016, 2019)

Participation with 22 short oral communication, 3 invited lecture and several posters in the above international and national events.

Autorizzo il trattamento dei miei dati personali presenti nel cv ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali" e del GDPR (Regolamento UE 2016/679). Autorizzo, inoltre, l'eventuale pubblicazione integrale del cv ai fini della normativa in materia di prevenzione della corruzione e per la trasparenza.