



Cátia Sofia Faria Martins



19/06/1988

Contact



Barcelos



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Volatile compounds

Teamwork

Gas Chromatography

Enzymes

Mass spectrometry

Beer

Sample preparation

Madeira wine

Metabolomics

Yeasts

High pressure

Team management

Biochemistry

Science

Biotechnology

Microbiology

Languages



Awards

*Award Rotary Club de Aveiro -
Américo Reboredo (2011)*

Attributed to the best finalist student of
the 2nd cycle courses in the Food field



Organization

▪ Olimpíadas Química Júnior 2009

▪ Workshop SPME 2010

▪ Main organizer of the Summer Course
Verão 2011, under the Association
BEST Aveiro

▪ Workshop SPME 2013

Professional experience

04/2018 – Present

Research Scholarship, ref. BI/DQ/6069/2018

University of Aveiro

Collaboration with Sogrape Vinhos in Project SOGRAPE (CV 1/2018)

12/2008 – 11/2009

Research Integration Scholarship, ref. BII – UA/QOPNA

University of Aveiro

Scientific research on the effect of high-pressure on enzyme activity

Education and formation

03/2012 – 02/2018

PhD in Biochemistry

Level 8 QRQ

University of Aveiro

Thesis theme: Yeasts and beers volatile metabolomic profiling: advances in lager beer
aroma comprehension

09/2009 – 12/2011

Master in Biotechnology, Food field

Level 7 QRQ

University of Aveiro

Dissertation theme: Strategies for reduction of ethyl carbamate in Madeira wines

09/2006 – 07/2009

1st Cycle in Biotechnology

Level 6 QRQ

University of Aveiro

Project Theme: High-pressure effect on enzyme activity

Publications

Book chapters

1. Martins C., Brandão T., Almeida A., Rocha S. M. *Saccharomyces* spp. role in brewing process and its serial repitching impact, 2016, In: Food and Beverage Consumption and Health, editor William H. Salazar, Nova Science Publishers, Inc, New York, Cap. 5, pp. 213-256, ISBN: 978-1-63485-704-8 (eBook).

2. Coimbra M. A., Rocha S. M., Martins C., Barros A. S. Methodologies for improved quality control assessment of food products, 2017, In: Advances in Food Diagnostics, 2nd edition, editors Toldrá F. & Nollet L., Blackwell Publishing, Iowa, USA., Cap. 2, pp. 13-61, DOI:10.1002/9781119105916.ch2.

3. Martins C., Brandão T., Almeida A., Rocha S. M., Como desvendar o aroma de uma cerveja?, 2017 In: Bioquímica e bem-estar, editor Manuel A. Coimbra, Edições Afrontamento, Lda., Porto, Cap. 12, pp. 186-202, ISBN: 978-972-36-1560-9.

4. Martins C., Almeida A., Rocha S. M., Recent advances and challenges for beer volatile characterization, 2017, In: Recent Advances in Analytical Techniques, editors Atta-ur-Rahman, Sibel A. Ozkan, Rida Ahmed, Bentham Science Publishers, Sharjah, U. A. E., Cap. 5, pp. 141-199, ISBN: 978-1-68108-448-0 (eBook).

Publications in international journals

1. Rocha, S. M., Salvador, Â. C., Martins C., Barbosa, C., Santos, M., Petronilho, S., Microextração em fase sólida e cromatografia de gás: Uma combinação de elevado potencial, Scientia Chromatographica, 2013, 5, 4, 284-300.

2. Martins C., Brandão T., Almeida A., Rocha S. M., Insights on the beer volatile profile: Optimization of solid-phase microextraction procedure taking advantage of the comprehensive two-dimensional gas chromatography structured separation, Journal of Separation Science, 2015, 38, 12, 2140-2148, DOI: 10.1002/jssc.201401388.

3. Martins C., Brandão T., Almeida A., Rocha S. M., Metabolomics strategy for the mapping of volatile exometabolome from *Saccharomyces* spp. widely used in the food industry based on comprehensive two-dimensional gas chromatography, Journal of Separation Science, 2017, 40, 2228–2237. DOI:10.1002/jssc.201601296.

4. Martins C., Brandão T., Almeida A., Rocha S. M. Unveiling the lager beer volatile terpenic compounds, Food Research International, 2018, 114, 199-207. DOI:10.1016/j.foodres.2018.07.048.

Volunteering



- Member of BEST Aveiro: 03/2010 – 10/2012
- Team Fund Raising
- President of General Meeting: 2010-2011

mf24
AVEIRO

- Co-presenter and volunteer in event mf24 Aveiro, September 2012

Social media



www.linkedin.com/in/catiarmartins



www.researchgate.net/profile/Catia_Martins5



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Interests



Communications

Oral

1. Martins C., Almeida A., Brandão T., Rocha S. M., Insights on the volatile beer profile through HS-SPME/GC×GC-ToFMS: optimization of SPME procedure taking advantage of the GC×GC structured separations, ExTech 2014 - 15th International Symposium on Advances in Extraction Technologies: Sample Preparation for the Omics Age, Chania, Greece, 25-28 May, 2014, L20.
2. Martins C., Brandão T., Almeida A., Rocha S. M., GC×GC-ToFMS a novel and powerful tool to establish the beer volatile profiling, 4th International Young Scientist Symposium on Malting, Brewing and Distilling, Ghent, Belgium, 28-30 October, 2014, L 4.1, page 36.
3. Martins C., Insights on *Saccharomyces* strains volatile exometabolome through multidimensional gas chromatography, 7th Biochemistry day, Aveiro, Portugal, 29 April, 2015.
4. Martins C., New approach for beer volatile profiling: optimization of SPME procedure taking into account GC×GC structured separation, Workshop x-Chroma 2015, Aveiro, Portugal, 3 June, 2015.
5. Martins C., Brandão T., Almeida A., Rocha S. M., *Saccharomyces* spp. metabolomics: Toward a platform based on advanced gas chromatography, XVI Latin-American Congress on Chromatography (XVICOLACRO) & 9th National Meeting on Chromatography (9ENC), Lisboa, Portugal, 5-9 January, 2016, OC-38, page 123.
6. Martins C., Beer volatile profiling: how can we made?, Jornadas Técnicas da Associação Portuguesa de Técnicos de Cerveja e Malte, Bragança, Portugal, 7th July, 2017.
7. Martins C., Brandão T., Almeida A., Rocha S. M. BeerOmics: a novel approach for understanding beer aroma properties, ISPROF 2017 – 3rd International Symposium on Profiling, Caparica, Portugal, 4-7 September, 2017, O05B, 127-128. (not presenter)
8. Martins C., Brandão T., Almeida A., Rocha S. M., BeerOmics: how can advanced gas chromatography help to understand beer aroma properties?, 10^o Encontro Nacional de Cromatografia, Bragança, Portugal, 4-6 December 2017, OC12, p. 29.

Award Tecnocroma – Best oral communication

9. Martins C., Brandão T., Almeida A., Rocha S. M., BeerOmics: from small metabolites to understand beer aroma properties, 14^o Encontro de Química dos Alimentos, Viana do Castelo, Portugal, 6-9 November 2018, OC21, p. 41.

Panel Communications

1. Gomes, I. R., Pinto, A. A., Santos, M., Salvador, Â. C., Oliveira, M. F., Martins C. F., Marques, C. F., Medde, R., Saraiva, J. A., The combined effect of high pressure and temperature on V_{max} and K_M of the enzyme horseradish peroxidase, MicroBiotec09, Vilamoura, 28-30 November 2009, Ref. 305, 273. (not presenter)
2. Martins C., Saraiva, J. A., Effect of High Pressure on the enzymatic hydrolysis of carboxymethyl cellulose, 2^a Edição do Portuguese Young Chemists Meeting (2PYChem), Aveiro, 21-23 April 2010, P60.
3. Perestrelo, R., Martins C., Barros, A. S., Câmara, J. S., Rocha, S. M., Development of novel and rapid methodologies to in-deep search traceability parameters, processing markers, and contaminants in food products: The case-study of Madeira wine, Research Day UA, Aveiro, 8th June 2011, P63.
4. Martins C., Perestrelo, R., Câmara, J. S., Rocha, S. M., Contributes to the definition of a strategy to the reduction of ethyl carbamate level in Madeira wine, XXII Encontro Nacional da Sociedade Portuguesa de Química, Braga, 3-6 July 2011.
5. Martins C., Perestrelo, R., Câmara, J. S., Rocha, S. M., Strategies to reduce the ethyl carbamate level (a contaminant) in Madeira wine, 11th International Nutrition & Diagnostics Conference, Brno, Czech Republic, 28-31 August 2011, P23, 74. (not presenter)
6. Martins C., Perestrelo R., Câmara JS, Rocha SM, Profiling the Madeira wine volatile fatty acids: evaluation of aging effect, 11^o Encontro de Química dos Alimentos, Bragança, 16-19 September, 2012, CP57.
7. Martins C., Brandão T., Almeida A., Rocha S. M., Unravelling the performance and volatile exometabolome of two *Saccharomyces* spp. strains widely used in food industry, Research Day UA, Aveiro, 15th June 2016, P13.
8. Martins C., Almeida A., Brandão T., Rocha S. M., A novel tool to establish volatile molecular biomarkers to evaluate yeasts performance through beer fermentation: *S. cerevisiae* and *S. pastorianus*, European Brewery Convention - 34th Luxembourg, 26-30 May 2013, PO45, 59.
9. Martins C., Brandão T., Almeida A., Rocha S. M., Novel insights on *Saccharomyces* spp. exometabolome through comprehensive two-dimensional gas chromatography, X IVAS - 10th Edition of the In Vino Analytica Scientia Symposium: Analytical Chemistry for Wine, Brandy and Spirits, Salamanca, Spain, 17-20 July, 2017, OMIC9, 267. (not presenter)
10. Martins, C., Salvador, Â. C., Martins, C., Santos, S. A. O., Vilela, C., Mimica-Dukic, N., Silvestre, A. J. D., Rocha, S. M., "Holistic strategy using HPLC-QqQ-MS and GC-qMS towards the screening of bioactive compounds from *Salicornia ramosissima*", 10^o Encontro Nacional de Cromatografia, Bragança, Portugal, 4-6 December 2017, PC-116, 184.