

Elisabete Valente da Costa

Curriculum vitae

UNIVERSIDADE DE AVEIRO

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Elisabete da Costa

Ph.D. in Sustainable Chemistry

Research line: Marine lipidomics

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URL: <http://www.researcherid.com/rid/N-3254-2018>

Elisabete da Costa is pursuing a Posdoctoral fellow within framework of the project GENIALG – Genetic diversity exploitation for innovative macro-alga biorefinery (ANR-15-MRSE-0015) funded by European Union's Horizon 2020 Framework Programme. She is graduated in Industrial Chemistry from the University of Coimbra. She has received her Master's grant in 2008 at the University of Aveiro and, the Ph.D. grant in Sustainable Chemistry in 2018, at the University of Aveiro in collaboration with ALGAplus Company, entitled *High added value products from macroalgae: lipids as bioactive compounds*.

She has started career at the Portucel Soporcel Group in 2000 and get expertise in Infrared Spectroscopy and Hyphenated Chromatographic techniques and in chemical analysis of wood, pulp and paper constituents. The new stage in the scientific career started in 2010 after moving to University of Aveiro (CICECO/QOPNA/Centre of Mass Spectrometry) and engaged the application of advanced mass spectrometry for the elucidation of biomacromolecules. The most current research interests include the biochemical composition of marine organisms, particularly the lipidomic signature of algae fostering their valorisation to create opportunity for high-value products and their potential applications:

🌿 *Lipidomic studies of macroalgae (by using chromatographic and mass spectrometry approaches);*

🌿 *Evaluation of the biological functionality of algae lipids as added-value compounds with particular interest in therapeutic and nutraceutical features;*

🌿 *New eco-friendly methodologies in the extraction of bioactive compounds;*

🌿 *Valorisation of other components such as polysaccharides, proteins, pigments, and minerals, fostering the integral valorisation of biomass.*

She published thirteen original papers, delivered ten invited oral communications, ten poster communications in several national and international scientific meetings and has been member and

researcher in national projects and several workshops promoting Mass Spectrometry, Chemistry and the Valorisation of Macroalgae as a sustainable resource. She has won 4 prizes, was scientific adviser of 1 B.Sc. and 2 M.Sc. students, was referee of 3 papers from international journals and has experience in the execution and planning of research projects.

1-Personal details

Elisabete Valente da Costa

Nationality: Portuguese (Faro)

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2-Education

2.1. Ph.D. Degree

2018 - Ph.D. in Sustainable Chemistry.

Thesis title: *High-value added products from macroalgae: lipids as bioactive compounds*

Degree granting institution: Departamento de Química, Universidade de Aveiro

Cooperation: ALGAplus Company, Produção e Comercialização de Algas e seus Derivados

Final grade: Approved with distinction

Supervision: Professor Dr. Maria do Rosário Domingues and Dr. Maria Helena Abreu

Number of curricular years: 4

2.2 Master's Degree (pre-Bologna)

2008 – Master in Instrumental Methods and Analytical Quality Control

Thesis title: *Study of ellagic acid profile in the kraft process of pulp from Eucalyptus globulus*

Degree granting institution: Departamento de Química, Universidade de Aveiro

Final grade: Final average of 16

Supervision: Professor Dr. Valdemar I. Esteves and professor Dr. Dmitry V. Evtuguin

Number of curricular years: 2

2.3 First-Degree (pre-Bologna)

2000 - Industrial Chemistry, Processes and industrial synthesis

Thesis title: *Study of the electroreduction reaction of hydrogen peroxide in alkaline solution on a surface of polycrystalline gold*

Degree granting institution: Departamento de Química, Faculdade de Ciências e Tecnologia, Universidade de Coimbra

Final grade: Final average of 13.

Supervisor: Professor Dr. Carlos Paliteiro

Number of curricular years: 4

3-Work Experience/Previous activity

2010/2013

Research grant and member: FCT/ QOPNA/ UA: PTDC/QUI-QUI/100044/2008

Study of structural modifications induced by thermal and oxidative degradation in oligo and polysaccharides by advanced mass spectrometry.

2004/2007

Researcher at RAIZ, Instituto de Investigação da Floresta e do Papel (The Navigator Company)

Responsible for the development, validation and implementation of methodologies for the analysis of extractables (lipophilic compounds such as sterols, fatty acid and tannins) and other organic and inorganic constituents of wood, pulp and paper, by using FTIR and NIR infrared spectroscopy techniques, chromatography (GC-MS, HPLC) and capillary electrophoresis.

2003/2004

Head of laboratory and quality control of accredited laboratory (EN17025) at RAIZ, Instituto de Investigação da Floresta e do Papel (The Navigator Company)

Responsible for programming and management of laboratory activities, preparation of internal and external audits, and laboratory proceedings in the analysis of pulp, paper, water and effluents.

2002/2004

Trainee researcher at RAIZ, Instituto de Investigação da Floresta e do Papel (The Navigator Company)

Implementation of analytical strategies to identify contaminants and deposits related to pulp and papermaking through infrared spectroscopy (FTIR and NIR) and chromatography (HPLC and GC-MS).

2000/2002

Trainee as laboratory technician, Portucel Cacia gPS (The Navigator Company).

4-Research interest

4.1. Domain of specialization

- Instrumental analysis and biochemical characterization of distinct matrices with emphasis on mass spectrometry and chromatography technologies (ESI-MSⁿ, Q-TOF, Q Exactive Orbitrap, MALDI-TOF, GC-MS, LC-MS, LC-MS/MS, HPLC, and TLC) and FTIR and NIR spectroscopy.
- Lipidomics: identification, structural characterization at molecular level, and semi-quantitation of different lipid classes (polar lipids) and other lipophilic compounds (pigments, triacylglycerols, sterols, fatty acid derivatives, and tannins). Application and development of analytical methods for specific lipid isolation from different matrices, structural characterization and biological activity.
- Glycomics: molecular characterization of oligosaccharides and oxidative modifications after industrial processing and the valorisation of residues for new applications.

4.2. Current research interests

- **Lipidomics of algae and plants:** study of algae lipid profile and bioprospection with emphasis on their valorisation as functional ingredient.
- **Lipids as bioactive compounds:** Study and evaluation of the bioactive such as anti-inflammatory, anti-proliferative, antioxidant, among other activities, and possible biotechnological applications.
- **Lipid extraction and partial extraction methodologies** supported by new sustainable techniques of extraction (green chemistry).

Other Interests:

- **Marine lipidomics** (micro- to macrophytes and animal organisms)
- **Plant lipidomics**
- **Biochemical** composition, isolation and characterization of biomolecules from renewable resources and industrial residues fostering their valorisation and novel applications.

5-Published works

5.1. Thesis/Dissertation

- 1 – **Ph.D. Thesis** entitled *High-value added products from macroalgae: lipids as bioactive compounds*.
- 2 - **Master's Thesis** entitled: *Perfil do ácido elágico na produção de pasta kraft*.

5.2. Book Chapters, International Editorial (by invitation)

- 1 - **Elisabete da Costa**, Elisabete Maciel, Pedro Domingues, Miguel Leal, Ricardo Calado, Ana Lillebø, Maria H. Abreu, Maria Rosário Domingues. **Chapter 15. Mass spectrometry analysis of polar lipid components in seaweed, in the international book** "Seaweed Bioactives: Extraction and Characterization Techniques" (ISBN: 987-1-138-19753-4), CRC Press - "Functional Foods and Nutraceuticals Series". (under revision)

5.3. International peer-reviewed journal publications (12)

- 1 - **Elisabete da Costa**, Ana S. P. Moreira, Fernando M. Nunes, Manuel A. Coimbra, Dmitry V. Evtuguin, M. Rosário Domingues, ***Differentiation of isomeric pentose disaccharides by electrospray ionization tandem mass spectrometry and discriminant analysis***, Rapid Communication in Mass Spectrometry, 26, 1–8, 2012. (I.F. 1.998)
- 2 - Sónia O. Prozil, Elisabete V. Costa, Dmitry V. Evtuguin, Luísa P. Cruz Lopes, M. Rosário M. Domingues, ***Structural characterization of polysaccharides isolated from grape stalks of Vitis vinifera L.***, Carbohydrate Research, 356, 252-259, 2012. (I.F. 2.096)
- 3 - Olga Ershova, Elisabete V. da Costa, António J. S. Fernandes, M. Rosário Domingues, Dmitry V. Evtuguin, Herbert Sixta, ***Effect of urea on cellulose degradation under conditions of alkaline pulping***, Cellulose, 19, 2195-2204, 2012. (I.F. 3.417)
- 4 - Ana S. P. Moreira, **Elisabete da Costa**, Dmitry V. Evtuguin, Manuel A. Coimbra, Fernando M. Nunes, and M. Rosario M. Domingues, ***Neutral and acidic products derived from hydroxyl radical-induced oxidation of arabinotriose assessed by electrospray ionisation mass spectrometry***. Journal of Mass Spectrometry, 49 (4), 2014. (I.F. 2.381)
- 5 - **Elisabete da Costa**, Diana L. D. Lima, Dmitry V. Evtuguin, Valdemar I. Esteves, ***Development and application of a capillary electrophoresis method for the determination of ellagic acid in E. globulus wood and in filtrates from E. globulus kraft pulp***, Wood Science and Technology.48 (1), 99–108, 2014. (I.F. 1.509)
- 6 - Elisabete da Costa, Tânia Melo, Ana S.P. Moreira, Eliana Alves, Pedro Domingues, Ricardo Calado, Maria H. Abreu, Maria Rosário Domingues, ***Decoding bioactive polar lipid profile of***

the macroalgae Codium tomentosum from a sustainable IMTA system using a lipidomic approach. Algal Research. 12, 388–397, 2015. (I.F. 4.694)

7 - Elisabete da Costa, Joana Silva, Sofia Hoffman Mendonça, Maria H. Abreu, Maria Rosário Domingues et al., ***Lipidomic approach towards deciphering glycolipids from microalgae as a reservoir of bioactive lipids***, Marine Drugs, 14, 2016. (I.F. 3.637)

8 - Joana Simões, Ana S.P. Moreira, **Elisabete da Costa**, Dmitry Evtugin, Pedro Domingues, Fernando M. Nunes, Manuel A. Coimbra, M. Rosário M. Domingues, ***Oxidation of amylose and amylopectin by hydroxyl radicals assessed by electrospray ionisation mass spectrometry***, Carbohydrate Polymers 148,290–299, 2016. (I.F. 4.800)

9 - Elisabete da Costa, Tânia Melo, Ana S. P. Moreira, Carina Bernardo, Luisa Helguero, Isabel Ferreira, Maria Teresa Cruz, Andreia M. Rego, Pedro Domingues, Ricardo Calado, Maria H. Abreu and Maria Rosário Domingues, ***Valorization of lipids from Gracilaria sp. through lipidomics and decoding of antiproliferative and anti-inflammatory Activity***. Marine Drugs, 15(3), 62, 2017. (I.F. 3.637)

10 - Felisa Rey, **Elisabete da Costa**, Ana M. Campos, Paulo Cartaxana, Elisabete Maciel, Pedro Domingues, M. Rosário M. Domingues, Ricardo Calado & Sónia Cruz. ***Kleptoplasty does not promote major shifts in the lipidome of macroalgal chloroplasts sequestered by the sacoglossan sea slug Elysia viridis***, Scientific Reports, 7, Article number: 11502, 2017. (I.F. 4.259)

11 – **Elisabete da Costa**, Vitor Azevedo, Tânia Melo, Andreia M. Rego, Pedro Domingues, Dmitry V. Evtugin, Ricardo Calado, Maria H. Abreu and Maria Rosário Domingues, ***High-Resolution lipidomics of the early life stages of the red seaweed Porphyra dioica***, "Phytochemicals: Biosynthesis, Metabolism and Biological Activities". Molecules, 17, 23, 2018. (I.F. 2.861)

12 – Eliana Alves, Felisa Rey, Elisabete da Costa, Ana S. P. Moreira, Luísa Pato, Luís Pato, Maria do Rosário M. Domingues, Pedro Domingues, ***Olive (Olea europaea L. cv. Galega vulgar) Seed Oil: a first Insight into the major lipid composition of a promising agro-industrial by-product at two ripeness stages***, European Journal of Lipid Science and Technology, 1700381, 2018. (I.F. 2.145)

13 – Elisabete Maciel, Ana Lillebø, Pedro Domingues, Elisabete da Costa, Ricardo Calado, M Rosário M Domingues, ***Polar lipidome profiling of Salicornia ramosissima and Halimione portulacoides and the relevance of lipidomics for the valorization of halophytes*** Phytochemistry, 94-101153, 2018. (I.F. 3.186)

National publications (1)

14 - Elisabete da Costa, José Luís Amaral, *Identificação de contaminantes em produtos papeleiros*, Revista Pasta e Papel, 34, 34- 37, 2004.

5.4. Publications in conferences (1)

1 - Elisabete da Costa, Natércia Santos, José Luís Amaral, E., Santos N.F., Amaral J.L., Velho J. Lopes Velho, ***A espectroscopia FT-IR aplicada ao estudo de papéis revestidos: resultados preliminares***, 2006, CIADICYP, Chile 2006 Chile.

5.5. International peer-reviewed publications – submitted papers (2)

1 - Elisabete Maciel, Ana Lillebø, Pedro Domingues, **Elisabete da Costa**, Ricardo Calado, Rosário Domingues, ***Polar lipidome profiling of Salicornia ramosissima and Halimione portulacoides and its relevance for the smart valorization of halophytes***, Food chemistry.

2 - Celestina Lopes, **Elisabete da Costa**, Elisabete Maciel, Eliana Alves, Sónia Mendo, Rosário Domingues, ***Alteration of the fatty acid profile of Bacillus licheniformis I89 in response to changes in growth condition***, Journal of Applied Microbiology.

5.6. Communications in scientific meetings

Oral communications (11)

1 - Elisabete V. da Costa, Ana S. P. Moreira, Maria R. Domingues, Dmitry V. Evtuguin, ***Oxidation of xylooligosaccharide models by chlorine dioxide***, International conference GLUPOR, 9th September 2011. UTAD, Vila Real, Portugal.

2 - Elisabete V. da Costa, Ana S. P. Moreira, Maria R. Domingues, Dmitry V. Evtuguin, ***Understanding bleaching process during pulp and paper industrial process***, First Workshop of mass spectrometry analysis of carbohydrates, 18th April 2012. Universidade de Aveiro, Portugal.

3 - Elisabete V. da Costa, Ana S. P. Moreira, Maria R. Domingues, Dmitry V. Evtuguin, ***Mass spectrometry assessment of xylo-oligosaccharides oxidation by hydroxyl radicals: understanding pulp bleaching degradation of xylans***. Conferências em Química, 15th May 2013. Universidade de Aveiro, Portugal.

4 - Elisabete V. da Costa, Ana S. P. Moreira, Maria R. Domingues, Dmitry V. Evtuguin, ***Formation of chromogenic structures from xylan by chlorine dioxide as revealed from model experiments***, Chromophore seminar of bleached chemical pulps 15-16th November 2013. Universidade de Aveiro, Portugal.

5 - **Elisabete da Costa**, Tânia Melo, Ana S.P. Moreira, Eliana Alves, Pedro Domingues, Ricardo Calado, Maria H. Abreu, Maria Rosário Domingues, ***Deciphering the lipidomic profile of the seaweed Codium tomentosum toward the bioprospection of bioactive phytochemicals***. 4th Workshop in Lipidomics. May 2015. Universidade de Aveiro, Portugal.

6 - Elisabete da Costa, **Potential application of *Gracilaria* spp. and *Ulva* spp. in food and cosmetics**. Closing of projects CIGArRA e ALGADOURADA, 10th December 2015. CIEMAR, Ílhavo, Portugal.

7 - Elisabete da Costa, Rosário Domingues, **Bioprospection of glycolipids from macroalgae using mass spectrometry - based approaches**, Workshop of carbohydrates, 8th May 2016, Universidade de Aveiro, Portugal.

8 - Elisabete da Costa, Andreia Rego, Helena Abreu, Rosário Domingues, **Deciphering the lipidome of the seaweed *Gracilaria* sp. from a land-based IMTA system in the lagoon of Aveiro**, International seaweeds symposium, 23st June 2016. Copenhagen, Denmark.

9 - Elisabete da Costa, Helena Abreu, Rosário Domingues, **High added value products from macroalgae: Lipids as bioactive compounds**. First Scientific Meeting of the Doctoral Programme in Sustainable Chemistry, 26th September 2016. Universidade de Aveiro, Portugal.

10 - Elisabete Da Costa, Tânia Melo, Elisabete Maciel, Ana Lillebø, Ricardo Calado, Pedro Domigues, Helena Abreu, Rosário Domingues, **How to use lipidomic tools in red and green seaweeds signature and bioprospection? *Codium tomentosum* and *Gracilaria* sp. as showcases**. The 5th International Seaweed Conference, 27-28th September 2016. Aveiro, Portugal.

11 - Patrícia Diaz Rosales, Catarina Guedes, Helena Peres, Isabel Azevedo, Elisabete da Costa, Rosário Domingues, Isabel Sousa-Pinto et al, **From zebrafish to meagre: use of macroalgae as functional feeds**. The 5th International Seaweed Conference, 27-28th September 2016. Aveiro, Portugal.

“Poster” communications (10)

1 - Elisabete da Costa, José Luís Amaral, **Aplicação da espectroscopia de infravermelho na identificação de contaminantes**, XIX Encontro TECNCELPA. 2005. Tomar, Portugal.

2 - Elisabete Costa, Dmitry V. Evtuguin, Maria R. Domingues. **Study of xylooligosaccharides oxidation toward understanding bleaching pulp and paper industrial process**, 26th International Carbohydrate Symposium (ICS 2012), 22-27th July 2012. Madrid, Spain.

3 - Elisabete da Costa, Ana S. P. Moreira, Maria R. Domingues, Dmitry V. Evtuguin. **Mimicking bleaching reactions in cellulosic pulp: oxidation of xylo-oligosaccharides by alkaline hydrogen peroxide**, 3PYChem, 9-11th May 2012. Porto, Portugal.

4 - Elisabete da Costa, Ana S.P. Moreira, Manuel A. Coimbra, Dmitry V. Evtuguin and M. Rosário Domingues, M. R., **Mass spectrometry assessment of xylooligosaccharides oxidation by hydroxyl radicals: understanding pulp bleaching degradation of xylans**. XXIII Encontro

Nacional da SPQ, 12-14th June 2013. Universidade de Aveiro, Portugal.

5 - Rosário Domingues, Ana S.P. Moreira, **Elisabete da Costa**, Dmitry V. Evtuguin, Fernando Nunes, Manuel Coimbra, ***Hydroxyl radical-induced oxidation of arabinotriose to mimic the effect of roasting on coffee arabinogalactan side chains***, Second international congress on Cocoa Coffee and Tea, 9-11th October 2013. Italia.

6 - **Elisabete V. Costa**, Tânia Melo, Ana S.P. Moreira Melo T, Andreia Rego, Rui Pereira R, Helena Abreu, Rosário Domingues, ***Unravelling the lipidome of the seaweed Gracilaria sp. From the IMTA system in the lagoon of Aveiro as a source of bioactive polar lipids***, Research Day, 15th June 2016. Aveiro, Portugal.

7 - **Elisabete V. Costa**, Tânia Melo, Ana S.P. Moreira Melo T, Andreia Rego, Rui Pereira R, Helena Abreu, Rosário Domingues, ***Deciphering the lipidome of the seaweed Gracilaria sp. from a land-based IMTA system in the lagoon of Aveiro***, 22nd International Seaweeds Symposium, 23st June 2016. Copenhagen, Denmark.

8 - **Elisabete Da Costa**, Tânia Melo, Elisabete Maciel, Ana Lillebø, Ricardo Calado, Pedro Domigues, Helena Abreu, Rosário Domingues, ***How to use lipidomic tools in red and green seaweeds signature and bioprospection? Codium tomentosum and Gracilaria sp. as showcases***, Seagriculture, 5th International Seaweed Conference held in Aveiro, Portugal, 27-28th September, 2016.

9 - Patrícia Diaz Rosales, Catarina Guedes, Helena Peres, Isabel Azevedo, **Elisabete da Costa**, Rosário Domingues, Isabel Sousa-Pinto et al. ***From zebrafish to meagre: use of macroalgae as functional feeds***, The 5th International Seaweed Conference, 27-28th of September, 2016. Aveiro, Portugal.

10 - Mariana Reis, Elisabete da Costa, Helena Abreu, Rosário Domingues, ***Perfil de ácidos gordos da alga Grateloupia turuturu cultivada em IMTA***, IX Biochemistry day, 31st March 2017, Universidade de Aveiro, Portugal.

6-Academic activity

6.1 Participation in R&D projects (2)

1 - FCT/ QOPNA/ UA: PTDC/QUI-QUI/100044/2008

Researcher and member.

Study of structural modifications induced by thermal and oxidative degradation in oligo and polysaccharides by advanced mass spectrometry

Financial support: FCT.

Partners: Universidade de Aveiro

Approved "The scientific objectives were fully achieved, and published in high quality SCI journals. The results of this project are outstanding in both quality and quantity of results, which explains that the scientific outputs have overcome the ones expected at the beginning. This project has also contributed to training young researchers and the formation of graduate students (2 PhD and 1 MSc)."

2 - 2014-2019 PTDC/CVT-WEL/5207/2014

Member (ongoing)

From zebrafish to meagre: use of macro- and microalgae as functional feed

Goal: This project is a multi-disciplinary research aiming the characterization of micro- and macroalgae biochemical profile and bioactivities to be used as functional ingredients in balanced diets for meagre.

Financial support: Horizonte 2020 and FCT.

Partners: Faculdade de Ciências da Universidade do Porto, REQUIMTE, Departamento de Química da Universidade de Aveiro, CIIMAR.

Participation in other Research Projects:

- Differentiation of isomeric pentose disaccharides by electrospray ionization tandem mass spectrometry.
- Effect of urea on cellulose degradation under conditions of alkaline pulping. Structural characterization of polysaccharides isolated from grape stalks of *Vitis vinifera* L.
- Characterization of Rhamnolipid congeners in surfactant produced by *Pseudomonas aeruginosa* by mass spectrometry

6.2. Scientific adviser in supervision of students

1 – Adviser in the supervision of the Master's student Vítor Manuel Madureira Azevedo, entitled ***Estudo lipídico de macroalgas vermelhas como fonte de compostos bioativos***. Master degree in Biochemistry, Departamento de Química, Universidade de Aveiro, 18th July 2016.

2 – Collaboration in the supervision of the first-degree student Laura Figueira García in ***Cultivation of Palmaria palmata and evaluation of its chemical composition*** - Trabajo Fin de Título para la obtención del título de Grado en Ciencias del Mar de la Universidad de Las Palmas de Gran Canaria, June 2017.

3 - Adviser in the supervision of the Master's student Mariana Reis, entitled ***Caracterização da composição e propriedades bioativas da alga Grateloupia turuturu***. Master's degree in Biochemistry, Departamento de Química, Universidade de Aveiro, 18th July 2018.

7-Dissemination actions

7.1. Organization and trainer in practical specialization course (2)

1 - Member of the organizing committee and trainer in the practical specialization course entitled ***Practical Courses on Mass Spectrometry - Advanced Course in Lipidomics***, included in Curricular program Cursos Avançados em Bioquímica I, Doctoral Program in Biochemistry, 5-7th December 2016. Universidade de Aveiro.

2 - Member of the organizing committee and trainer in the practical specialization course entitled ***Practical Courses on Mass Spectrometry - Advanced Course in Lipidomics***, 2nd edition, included in Curricular program Cursos Avançados em Bioquímica I, Doctoral Program in Biochemistry, 26-28th February 2018. Universidade de Aveiro.

7.2. Organization committee of scientific events and conferences (15)

1 - Member of the organization of the ***I Workshop Mass Spectrometry and Carbohydrates***, 18th April 2012. Universidade de Aveiro (150 applicants).

2 - Member of the organization of the seminar in ***Chromophore seminar of bleached chemical pulps***, 15-16th November 2013. Universidade de Aveiro (90 applicants).

3 - Member of the organization of the ***III Workshop Mass Spectrometry and Carbohydrates***, 22nd April 2014. Universidade de Aveiro (100 applicants).

4 - Member of the organization of the ***IV Workshop in Mass spectrometry and carbohydrates***, 13th May 2015. Universidade de Aveiro (100 applicants).

5 - Member of the organization and monitor of ***Olimpíadas de Química Júnior***, 11th April 2015.

Universidade de Aveiro (120 applicants).

6 - Member of the organization of the **V Workshop in lipidomics**, 13th May 2016, Universidade de Aveiro (150 applicants).

7 - Member of the organization and monitor in **Olimpíadas de Química Júnior**, 30th April 2016. Universidade de Aveiro (120 applicants).

8 - Member of the organization and monitor in the **Biorefinery and valorisation of macroalgae, Sea and Aveiro Lagoon**, Techdays, 15-17th September 2016. Parque de Exposições de Aveiro (200 applicants).

9 - Member of the organization of the **VI Workshop in lipidomics**, 17th April 2017. Universidade de Aveiro (100 applicants).

10 - Member of the organization of the **V Workshop in Immunology**, 25th May 2017. Universidade de Aveiro (150 applicants).

11 - Member of the organization and monitor in **A Química é fascinante**, lab experiences for students, OpenCampus, 12th May 2017. Universidade de Aveiro (30 applicants).

12 - Member of the organization and monitor in the Stand of **Biorefinery and valorisation of macroalgae**, Materials 2017 (ID.: 422-403), Showcase on Materials 2017, Conference. 11th April 2017. Universidade de Aveiro (100 applicants).

13 - Member of the organization and monitor in the Stand of **Biorefinery and valorisation of macroalgae, Sea and Aveiro Lagoon**, Techdays, 12-14th October 2017. Parque de Exposições de Aveiro (400 applicants).

14 - Member of the Organizing committee of the One Year meeting GENIALG, General assembly and progress meeting, 6-8th February 2018. Universidade de Aveiro (50 applicants).

15 - Member of the organization of the VII Workshop in lipidomics, 28th February 2018. Universidade de Aveiro (120 applicants).

Member of the organization and monitor in the Stand of **Biorefinery and valorisation of algae, Sea and Aveiro Lagoon**, Open Campus, 22-24th march 2018. UAveiro (400 applicants).

7.3. Organization committee of international conferences (1)

1 - Member of the organization of the “XIII Congresso da Sociedade Ibérica de Citometria”, 9-11th May 2013. Universidade de Aveiro (270 applicants).

7.4. Ph.D. program representation (1)

1 – Representative of the students from the Ph.D. in Sustainable Chemistry, elected in plenary of students and approved by the coordinator of doctoral program. In functions until 2018.

7.5. Referee of international journals (3)

Has issued opinions on scientific articles for international journals such as:

- 1 - Molecules
- 2 - Algal Research
- 3 - Grasas e Aceites

8-Prizes and Awards received (4)

1 - Best Poster Award: ***Hydroxyl radical-induced oxidation of arabinotriose, a model of coffee arabinogalactan side chains***. Award attributed during the 2nd International Congress on Cocoa Coffee and Tea, 2013. Naples, Italy.

2 - Best oral communication: ***High added value products from macroalgae: Lipids as bioactive compounds***. First scientific meeting of the Doctoral Programme in Sustainable Chemistry, 26th September 2016. Universidade de Aveiro, Portugal.

3 - Second best showcase, ***Biorefinery and valorization of macroalgae***, conference of *Materiais 2017* VIII Congresso da Sociedade Portuguesa dos Materiais, 9-12th April 2017. Universidade de Aveiro, Portugal.

4 - Dynamic Ph.D. student, Núcleo de Estudantes de Química, Departamento de Química UA, 9th June 2017. Universidade de Aveiro, Portugal.

9-Informatic skills

- 1 – User of software Office (Word, Excel, PowerPoint);
- 2 – User of technical software:

- X-calibur™ (GC–MS, ESI–MS e ESI–MS/MS analysis),
- MassLynx™ (MS data analysis),
- MassHunter™ (GC–MS analysis),
- ChromQuest™ (HPLC analysis),

- GCMSsolution™ (GC–MS analysis),
- OPUS (FTIR e NIR analysis),
- ACD/ChemSketch™ e ChemDraw™ (chemical drawing), GraphPad Prism™ (statistics),
- Unscrambler™ (multivariate data analysis).

10-Languages

- Portuguese: very good reading, writing, and conversation
- English: good reading, writing, and conversation
- French: good reading, writing, and conversation
- Spanish: good reading and conversation, and basic writing.

Aveiro, 1st September 2018

Elisabete Valente da Costa
