

## Curriculum Vitae

**Maria Paulina Estorninho Neves da Mata**

**Born:** 23<sup>rd</sup> August 1955 - Envendos – Portugal

**Home address:** Rua Actor Isidoro, 3 C - 3<sup>o</sup> Esq., 1900 - 014 Lisboa, Portugal

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**Work address:** Departamento de Química – Faculdade de Ciências e Tecnologia – Universidade Nova de Lisboa (NOVA FCT) e REQUIMTE (Rede de Química e Tecnologia) / LAQV (Laboratório Associado para a Química Verde), Quinta da Torre, 2829 - 516 Monte de Caparica

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### Academic Qualifications:

**1989**

Ph.D. in Organic Chemistry (Computational Organic Chemistry), Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Lisboa, Portugal.

Dissertation “Computational Organic Chemistry – Identification and Specification of Stereogenic Units”

Supervisors: Prof. Ana Lobo NOVA FCT and Prof. Peter Johnson – University of Leeds, UK

**1984**

M.Sc. in Technological Organic Chemistry (curricular component), Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Portugal.

**1978**

Graduated in Chemical Engineering, Instituto Superior Técnico, Lisboa, Portugal.

### Professional Experience:

**2022 - ...**

Retired Assistant Professor having a Collaboration Contract with NOVA FCT

**2010 - 2022**

Proposal and Coordination of the MSc in Gastronomic Sciences. NOVA FCT and ISA/UTL.

**2009 / 2010**

Proposal and Coordination of the Post Graduate Course in Gastronomic Sciences. NOVA FCT and ISA/UTL.

**2005 -**

Member of the Advisory Subcommittee of the Chemical Nomenclature and Structure Representation Division (VIII) da IUPAC.

**2001 - ...**

Researcher at REQUIMTE (Rede de Química e Tecnologia / Network of Chemistry and Technology) / LAQV (Laboratório Associado para a Química Verde / Associated Laboratory for Green Chemistry)

**1990 / 1991**

Post-Doc at the Maxwell Institute for Computer Applications in Molecular Sciences– School of Chemistry-University of Leeds

**1989 - 2022**

Assistant Professor of the Department of Chemistry, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa.

**1979 / 1989**

Teaching Assistant of the Department of Chemistry, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa.

**Teaching Experience:**

Dissertation Advisor of 3 PhD Thesis (concluded), 1 PhD Thesis (ongoing), 46 MSc Dissertations (concluded), 4 MSc Dissertations (ongoing).

General Organic Chemistry, Advanced Organic Chemistry, Organic Synthesis, Stereochemistry and Computational Chemistry to Chemistry students, Environmental Sciences students and Conservation and Restoration students.

Food Chemistry, Development of New Food Products and Molecular Gastronomy to Gastronomic Sciences students.

Teachers Training for the Introduction of Experimental Science Teaching in Primary Schools.

Workshops in Molecular Gastronomy and New Cooking Techniques for professional cooks.

**Research Interests:**

Computational Chemistry, Stereochemistry, Chemical Education, History of Technology, Molecular Gastronomy.

Which resulted in 7 books, 3 book chapter, 35 publications in international journals with peer review, 6 publications in national journals with peer review, 18 publications in conference proceedings, 51 publications in the general or specialized press, 185 oral communications in different contexts, 68 poster communications in scientific meetings.

**Stereochemistry**

Development of the stereochemistry perception module of the LHASA software (Logic and Heuristics Applied to Synthetic Analysis) – PhD work supervised by Prof. Ana Lobo - NOVA FCT and Prof. Peter Johnson – University of Leeds, UK. LHASA is an expert system to assist organic synthesis

planning developed by Prof. E. J. Corey (Nobel Prize of Chemistry 1990), at Harvard University, USA, with collaboration of University of Leeds, UK and University of Nijmegen, The Netherlands. The module developed was integrated in the commercial version of LHASA.

In the context of the work done in LHASA, an exhaustive analysis of the Cahn, Ingold and Prelog System for the specification of chirality in organic molecules was performed which revealed some limitations of this nomenclature system. A new version was proposed. This improved proposal for the Cahn, Ingold and Prelog Sequence Rules was adopted by IUPAC and published in Nomenclature of Organic Chemistry – IUPAC Recommendations and Preferred Names 2013.

### **Drug Design**

In 1990/1991 joined the group of Professor A. P Johnson at the School of Chemistry, University of Leeds, UK as a post-doctoral fellow and worked in the development of an expert system for rational drug design – SPROUT.

### **History of Technology**

In collaboration with Departamento de Ciências Sociais Aplicadas of NOVA FCT undertook research on History of Technology. In this context was co-supervisor of a MSc dissertation (Origins of the Plastics Transformation Industry in Portugal) and a PhD thesis (A Technology Transfer Case Study – The Introduction of Vinyl Polichloride Industry in Portugal by CIRES).

### **Science Education and Dissemination**

Since 1996, integrated the Ciência Viva Programme, has worked with primary school teachers on the introduction of experimental science teaching for children. In 2000, a collaboration with Instituto Superior de Psicologia Aplicada was established for the study of the processes for the acquisition of scientific knowledge and attitudes by children.

Since 2001, in collaboration with Ciência Viva, has been involved in activities aimed at improving the public understanding of science. In particular “A Cozinha é um Laboratório” (Your Kitchen is a Laboratory) which uses food related themes and molecular gastronomy for the introduction of scientific knowledge. Two books were published on this subject.

Has also collaborated in projects aiming to improve scientific education of blind people and people with visual disabilities.

### **Molecular Gastronomy and Food Products Development**

Since 2005, working particularly in the development of technological applications of Molecular Gastronomy (applications for haute cuisine and development new products for the food industry and to deal with dietary restrictions).

Member of the team of the ALGA4FOOD project - «Algae in Gastronomy - Development of innovative conservation and utilization techniques», which aims to disseminate and value the benefits of the edible macroalgae of the Portuguese coast. Project «MAR-01.03.01-FEAMP-0016 – Alga4Food» (2017-2020) with financial support by the European Maritime and Fisheries Fund and co-financed by the Operational Program MAR2020 in the field of Sustainable Development of

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Aquaculture in the domains of Innovation, Advice and Productive Investment - Innovation and Knowledge Action.

## **Publications:**

### **Books**

P. Gabriel, J. P. Noronha (coord.), P. Mata (coord.), "Algas, Onde o Mar Começa", deliverable for the project Alga4Food: Algas na Gastronomia - Desenvolvimento de técnicas inovadoras de conservação e utilização, Janeiro 2020

<https://alga4food.wixsite.com/page/gastronomia>

P. Gabriel, J. P. Noronha (coord.), P. Mata (coord.), "Algas, O Mar à Mesa", deliverable for the project Alga4Food: Algas na Gastronomia - Desenvolvimento de técnicas inovadoras de conservação e utilização, Junho 2019

<https://alga4food.wixsite.com/page/gastronomia>

G. Abrantes, P. Mata, "Cozinha Modernista. História, Ingredientes e Receitas da Cozinha do Século XXI", SENAC, Rio de Janeiro 2019

M. Guerreiro, P. Mata, "A Cozinha é um Laboratório", NOVA.FCT Editorial, Lisboa 2017

M. Guerreiro, P. Mata, "A Cozinha é um Laboratório", Fonte da Palavra, Lisboa, 2009 (1ª ed), 2010 (2ª ed), 2010 (3ª ed)

P. Mata, "Aprender Ciência de forma divertida e saborosa – Sugestões de experiências para fazer em família", Ciência Viva, 2009

([https://webstorage.cienciaviva.pt/public/pt.cienciaviva.io/recursos/files/livropt\\_pollen\\_6909506425c470.pdf](https://webstorage.cienciaviva.pt/public/pt.cienciaviva.io/recursos/files/livropt_pollen_6909506425c470.pdf))

P. Mata, "The fun-flavoured way to learn science", Ciência Viva, 2009

C. Bettencourt, P. Mata, "Mais Cientistas de Palmo e Meio – Partilha de uma Experiência", Cadernos PEPT, 19, Programa Educação Para Todos, Ministério da Educação, Lisboa, 1998

P. Mata, "Uma Comparação Crítica da Inserção Curricular da Química no Sistema de Ensino Secundário em Portugal e outros Países da Europa Ocidental - O Caso da Química Orgânica", LNETI, Lisboa, 1985

### **Book Chapters**

F. Danalache, P. Mata, V. D. Alves, M. Moldão-Martins . Enzyme-Assisted Extraction of Fruit Juices ( Chapter 10), In: Fruit Juices: Extraction, Composition, Quality, and Analysis (Ed. G. Rajauria and B.K. Tiwari), Academic Press, Elsevier, USA, pages 183-200, 2018.

M. Gomes da Silva, M. Pereira, R. Franco Tavares, M. Dionísio, L. Ferreira, P. Branco, C. Costa, A. Lourenço, A. Pereira, P. Mata, F. Pina, J. Sotomayor, J. Lima, M. Vilarigues, M. M. Marques, Química: uma Ciência Experimental, in Experiências de Inovação Didática no Ensino Superior, Ministério da Educação e Ciência, 2015

E. Callapez, P. Mata, "Na Sala de Jantar com a Química", Cadernos Didáticos de Ciências – Volume 1", Ministério da Educação, Lisboa, 2001.

**Publications in International Journals with Peer Review**

- B. Moreira-Leite, R. Antunes, J. Cotas, N. Martins, N. Costa, J.P. Noronha, P. Mata, M. Diniz. "Modified Atmosphere Packaging (MAP) for Seaweeds Conservation: Impact on physicochemical characteristics and microbiological activity", *Foods* 2023, 12, 2736. DOI: 10.3390/foods12142736
- A. Salgado, B. Moreira-Leite, A. Afonso, P. Infante, P. Mata, "Chocolates enriched with seaweed: Sensory profiling and consumer segmentation", *International Journal of Gastronomy and Food Science*, 2023, 33, 100747, DOI: 10.1016/j.ijgfs.2023.100747
- J. Campinho, P. Sousa, P. Mata, "The influence of music on the perception of taste", *International Journal of Gastronomy and Food Science*, 2023, 31, 100669, DOI: 10.1016/j.ijgfs.2023.100669
- B. M. Campos, E. Ramalho, I. Marmelo, J. P. Noronha, M. Malfeito-Ferreira, P. Mata, M. S. Diniz, "Proximate Composition, Physicochemical and Microbiological Characterization of Edible Seaweeds Available in the Portuguese Market", *Front. Biosci. (Elite Ed)* 2022, 14(4), 26; DOI: 10.31083/j.fbe1404026
- A. R. Leal, L. Siqueira-Oliveira, J. N. Costa, C. A. Nascimento-Alves, P. Mata, P. H. M. Sousa, "In vitro bioaccessibility of antioxidant compounds from structured fruits developed with gellan gum and agar", *Revista Ciência Agronômica*, 2022, 53, e20207744, DOI: 10.5935/1806-6690.20220005
- J. Milinovic, A. L. Fernando, B. Campos, B. Leite, P. Mata, M. Diniz, J. Sardinha, J. P. Noronha, "Nutritional Benefits of Edible Macroalgae from the Central Portuguese Coast: Inclusion of Low Calorie "Sea Vegetables" in Human Diet", *International Journal of Environmental Sciences & Natural Resources*, 2021, 28 (5), DOI: 10.19080/IJESNR.2021.28.556250
- J. N. Costa, L. G. L. Nascimento, A. R. Leal, F. Danalache, B. S. Moreira-Leite, R. W. Figueiredo, P. Mata, V. D. Alves, P. H. M. Sousa, "Effect of agar and gellan gum on structured guava (*Psidium guajava* L.): rheological behavior and gastrointestinal digestion in vitro", *Food Bioscience*, 2021, 42, 101165, DOI:10.1016/j.fbio.2021.101165
- J. Milinovic, P. Mata, M. Diniz, J. P. Noronha, "Umami taste in edible seaweeds: The current comprehension and perception", *International Journal of Gastronomy and Food Science*, 2021, 23, 100301, DOI:10.1016/j.ijgfs.2020.100301
- A. R. Leal, L. Siqueira-Oliveira, L. M. Farias, C. A. Nascimento-Alves, J. N. Costa, P. Mata, P. H. M. Sousa, "Elaboration of mixed structured fruit formulations with agar and gellan gum: Texture, physicochemical, and sensory properties", *International Journal of Gastronomy and Food Science*, 2021, 23, 100294, DOI:10.1016/j.ijgfs.2020.100294
- J. Milinovic, B. Campos, P. Mata, M. Diniz, J. P. Noronha, "Umami free amino acids in edible green, red, and brown seaweeds from the Portuguese seashore", *Journal of Applied Phycology*, 32 (5), 3331-3339, 2020, DOI:10.1007/s10811-020-02169-2
- J. N. Costa, S. A. Brito, D. C. Rodrigues, L. G. L. Nascimento, R. W. Figueiredo, P. Mata, P. H. M. Sousa, "Sensory Characteristics of Structured Guava (*Psidium Guajava*): Comparison of Optimized Descriptive Profile, CATA and Sensory Acceptance Methods", *Food Science and Technology* 2020, 40, 496-502 DOI: 10.1590/fst.25819
- J. Milinovic, P. Mata, M. Diniz, J. P. Noronha, "Edible Macroalgae: Beneficial Resource of Iodine", *American Journal of Biomedical Science & Research*, 2020, 8(4), 290-292, DOI: 10.34297/AJBSR.2020.08.001288.
- J. N. Costa, A. R. Leal, L. G. L. Nascimento, D. C. Rodrigues, C.R. Muniz, R. W. Figueiredo, P. Mata, J. P. Noronha, P. H. M. Sousa, "Texture, microstructure and volatile profile of structured guava using agar and gellan gum", *International Journal of Gastronomy and Food Science* 2020, 20, 100207, DOI:10.1016/j.ijgfs.2020.100207
- J. N. Costa, L. G. L. Nascimento, A. R. Leal, P. Mata, C.A.N. Alves, A. A. L. Araújo-Filho, P. H. M. Sousa, "Effect of hydrocolloid concentration on bioactive compounds, bioaccessibility and instrumental texture of guava (*Psidium guajava* L.)", *Research, Society and Development*, 2020, 9, (5), e95953246, DOI: 10.33448/rsd-v9i5.3246
- S.Oliveira, P. Fradinho, P. Mata, B. Moreira-Leite, A. Raymundo, "Exploring innovation in a traditional sweet pastry: Pastel de Nata, *International Journal of Gastronomy and Food Science*", 2019, 17, 100160. DOI:10.1016/j.ijgfs.2019.100160

F. Danalache, C. Y. Carvalho, L. Brito, P. Mata, M. Moldão-Martins, V. D. Alves, "Effect of thermal and high hydrostatic pressure treatments on mango bars shelf-life under refrigeration", *Journal of Food Engineering*, 2017, 212, 113-120 DOI: 10.1016/j.jfoodeng.2017.05.009

S.Ramos, P. Fradinho, P. Mata, A. Raymundo, "Assessing gelling properties of chia (*Salvia hispanica* L.) flour through rheological characterization", *Journal of the Science of Food and Agriculture*, 2017, 97 (6), 1753–1760 DOI:10.1002/jsfa.7971

F. Danalache, C. Y. Carvalho, V. D. Alves, M. Moldão-Martins, P. Mata, "Optimisation of gellan gum edible coating for ready-to-eat mango (*Mangifera indica* L.) bars", *International Journal of Biological Macromolecules*, 2016, 84 43–53, DOI:10.1016/j.ijbiomac.2015.11.079

F. Danalache, S. Beirão-da-Costa, P. Mata, V. D. Alves, M. Moldão-Martins, "Texture, microstructure and consumer preference of mango bars jellified with gellan gum", *LWT - Food Science and Technology*, 2015, 62, 584–591, DOI:10.1016/j.lwt.2014.12.040

F. Danalache, P. Mata, M. Moldão-Martins, V. D. Alves, "Novel mango bars using gellan gum as gelling agent: Rheological and microstructural studies", *LWT - Food Science and Technology*, 2015, 62, 576 – 583, DOI: 10.1016/j.lwt.2014.09.037

F. Pereira, J. C. Ponte-e-Sousa, R. P. S. Fartaria, V. D. B. Bonifácio, P.Mata, J. Aires-de-Sousa, A. M. Lobo; "Sonified Infrared Spectra and their Interpretation by Blind and Visually Impaired Students", *Journal of Chemical Education*, 2013, 90 (8), 1028–1031, DOI: 10.1021/ed4000124

P. Mata, "The Kitchen is a Laboratory: Experimental Science Activities Based on Food and Cooking", *LUMAT - Research and Practice in Math, Science and Technology Education*, 2013, 1(2), 31-39

R. P. S. Fartaria; F. Pereira; V. D. B. Bonifácio; P. Mata; J. Aires-de-Sousa; A. M. Lobo; 'NavMol 2.0 : A Molecular Structure Navigator/Editor for Blind and Visually Impaired Users', *European Journal of Organic Chemistry*, 2013 (8), 1415-1419, DOI: 10.1002/ejoc.201201458

F. Pereira, J. Aires-de-Sousa, V. D. B. Bonifácio, P. Mata, A. M. Lobo; "MOLinsight: A Web Portal for the Processing of Molecular Structures by Blind Students", *Journal of Chemical Education*, 2011, 88(3), 361-362, DOI: 10.1021/ed100723v

P. Mata, A. M. Lobo, "The Cahn, Ingold and Prelog System: eliminating ambiguity in the comparison of diastereomorphic and enantiomorphic ligands", *Tetrahedron: Asymmetry*, 2005, 16 (13), 2215-2223, DOI: 10.1016/J.TETASY.2005.05.037

P. Mata, "Comment on "Response to the Comment on Exhaustive Generation of Organic Isomers. 5. Unsaturated Optical and Geometrical Stereoisomers and a New CIP Subrule", *Journal of Chemical Information and Computer Sciences*, 2000, 40, 1072-1073. DOI:10.1021/ci990065p

P. Mata, "The CIP System Again: Respecting Hierarchies Is Always a Must", *Journal of Chemical Information and Computer Sciences*, 1999, 39, 1117-1118, DOI: 10.1021/ci990090v

P. Mata, V. J. Gillet, A. P. Johnson, J. Lampreia, G.J. Myatt, S. Sike, A. L. Stebbings, "SPROUT: 3D Structure Generation Using Templates", *Journal of Chemical Information and Computer Sciences*, 1995, 35, 479-493, DOI: 10.1021/ci00025a016

P. Mata, R. Nachbar, "Comparison of Constitutional Properties in the CIP System - The CIP Sequence Rule 1", *Tetrahedron: Asymmetry*, 1995, 6 (3), 693-696, DOI: 10.1016/0957-4166(95)00064-v

P. Mata, A. M. Lobo, C. Marshall, A. P. Johnson, "Implementation of the Cahn-Ingold-Prelog System for Stereochemical Perception in the LHASA Program", *Journal of Chemical Information and Computer Sciences*, 1994, 34, 491-504, DOI: 10.1021/ci00019a004

V. J. Gillet, W. Newell, P. Mata, G. Myatt, S. Sike, Z. Zsoldos, A. P. Johnson, "SPROUT: Recent Developments in the de novo Design of Molecules", *Journal of Chemical Information and Computer Sciences*, 1994, 34, 207-217, DOI: 10.1021/ci00017a027

V. J. Gillet, A. P. Johnson, W. R. Newell, P. Mata, S. Sike, "SPROUT - A Program for the de novo Construction of Bioactive Molecules", *Journal of Molecular Graphics*, 1993, 11, 272, DOI:10.1016/0263-7855(93)80041-o

- V. Gillet, A. P. Johnson, P. Mata, S. Sike, P. Williams, "SPROUT - A Program for Structure Generation", *Journal of Computer - Aided Molecular Design*, 1993, 7, 127-153, DOI: 10.1007/BF00126441
- P. Mata, A. M. Lobo, C. Marshall, A. P. Johnson, "The CIP Sequence Rules: Analysis and Proposal for a Revision", *Tetrahedron: Asymmetry*, 1993, 4 (4), 657-668, DOI: 10.1016/s0957-4166(00)80173-1
- V. Gillet, A. P. Johnson, P. Mata, S. Sike, "Automated Structure Design in 3D", *Tetrahedron Computer Methodology*, 1990, 3 (6c), 681-696, DOI: 10.1016/0898-5529(90)90167-7

#### **Publications in National Journals with Peer Review**

- P. Mata, "A Linguagem da Química Orgânica: R ou S? Tem mesmo a certeza que conhece o Sistema de Cahn – Ingold – Prelog?", *Química – Boletim da Sociedade Portuguesa de Química*, 2012, 126, 57-65
- F. Pereira, J. A. Sousa, P. Mata, A. M. Lobo, "Desenvolvimentos no Ensino da Química a Cegos e Grandes Ambliopes", *Química – Boletim da Sociedade Portuguesa de Química*, 2009, 112, 7-15
- P. Mata, C. Bettencourt, M. J. Lino, M. Sousa Paiva, "Cientistas de Palmo e Meio – Uma Brincadeira Muito Séria", *Análise Psicológica*, 2004, XXII (1), 169-174
- P. Mata, "Estudo de Polímeros Semi-Sintéticos e Sintéticos: Uma viagem no tempo com paragem em marcos importantes da história do desenvolvimento de polímeros", *Química – Boletim da Sociedade Portuguesa de Química*, 2001, 83, 60-64
- P. Mata, "Design Racional de Fármacos", *Química – Boletim da Sociedade Portuguesa de Química*, 1996, 63, 18-24
- P. Mata, "Computadores no Ensino", *Análise Psicológica*, 1989, VII (1-3), 471-480

#### **Publications in Conference Proceedings**

- R. Mota, P. Mata, R. Bonacho, "Floating dish, a sustainable, interactive and fine dining concept", *Food Experiencing, Designing Sustainable and Social Practices. Proceedings of the 2nd International Conference on Food Design and Food Studies*, (Ed. R. Bonacho. M.J. Pires, E.C. Lamy), Taylor & Francis - CRC Press, Londres, 130-136, 2020. DOI:10.1201/9781003046097-21
- J. Sato, B. Moreira-Leite, P. Mata, "Development of Dishes Free from the Main Food Allergens – a Case Study", *Food Experiencing, Designing Sustainable and Social Practices. Proceedings of the 2nd International Conference on Food Design and Food Studies*, (Ed. R. Bonacho. M.J. Pires, E.C. Lamy), Taylor & Francis - CRC Press, Londres, 98-103, 2020. DOI:10.1201/9781003046097-16
- B. Campos, M. Diniz, J. P. Noronha, A. Henriques, P. Mata, "Seaweeds: an Ingredient for a Novel Approach for Artisanal Dairy Products", *Food Experiencing, Designing Sustainable and Social Practices. Proceedings of the 2nd International Conference on Food Design and Food Studies*, (Ed. R. Bonacho. M.J. Pires, E.C. Lamy), Taylor & Francis - CRC Press, Londres, 67-72, 2020. DOI:10.1201/9781003046097-11
- B. Moreira-Leite, J. P. Noronha, P. Mata, "Introduction of Seaweeds in Desserts: The design of a sea lettuce ice cream", *Food Experiencing, Designing Sustainable and Social Practices. Proceedings of the 2nd International Conference on Food Design and Food Studies*, (Ed. R. Bonacho. M.J. Pires, E.C. Lamy), Taylor & Francis - CRC Press, Londres, 73-79, 2020. DOI: 10.1201/9781003046097-12
- B. Moreira-Leite, B. Campos, P. Gabriel, M. Diniz, J.P. Noronha, P. Mata, "Introducing Macroalgae from the Portuguese Coast in the Diet of Consumers: Challenges and Strategies", *Menu, Journal of Food and Hospitality Research*, 2019, 8, 38
- B. Moreira-Leite, B. Campos, P. Mata, J. P. Noronha, M. Diniz, "Are seaweeds the food of the future? Challenges for its conservation and introduction in the Portuguese diet", *Annals of Medicine*, 2019, 51: sup1, 169, DOI:10.1080/07853890.2018.1562018
- M. Santos, P. Gabriel, P. Mata, P. Fradinho, A. Raymundo, "Threading tradition—a path for innovation with methylcellulose threads", *Experiencing Food, Designing Dialogues – Proceedings of the 1st International*

- Conference on Food Design and Food Studies, (Ed. R. Bonacho, A. Pinheiro de Sousa, C. Viegas, J.P. Martins, M.J. Pires, S. V. Estêvão), CRC Press, 65-68, 2018
- R. Mota, P. Mata, H. Vilaseca, R. Bonacho, M. Carvalho, "Designing for the senses through food design and psychophysiology", *Experiencing Food, Designing Dialogues – Proceedings of the 1st International Conference on Food Design and Food Studies*, (Ed. R. Bonacho, A. Pinheiro de Sousa, C. Viegas, J.P. Martins, M.J. Pires, S. V. Estêvão), CRC Press, 59-64, 2018
- P. Gabriel, P. Mata, "Edible affinities: How memories shape our food", *Experiencing Food, Designing Dialogues – Proceedings of the 1st International Conference on Food Design and Food Studies*, (Ed. R. Bonacho, A. Pinheiro de Sousa, C. Viegas, J.P. Martins, M.J. Pires, S. V. Estêvão), CRC Press, 69-72, 2018
- M. D. R. Gomes da Silva, M. M. M. A. Pereira, R. Franco, M. Dionisio, L. M. Ferreira, P. C. D. S. Branco, M. C. O. Costa, A. M. F. D. C. Lourenço, M. A. S. Pereira, M. P. E. N. D. Mata, J. C. D. S. B. Sotomayor, J.C. Lima, M. Vilarigues & N. Basílio, "Chemistry an Experimental Science", *EDULEARN17 Proceedings . Barcelona*, 2248-2556, 2017
- A. Raymundo, P. Mata, F. Botelho, P. Fradinho, R. Tomás, "Gluten free bread - Mixes para pão isento de glúten com base em combinações de farinhas obtidas de subprodutos e hidrocoloides", p.26, *Catálogo de Tecnologias "Food I&DT"*, Rede Inovar e Alimentaria & Horexpo, Lisboa, 2013
- P. Mata, "Principles of chemistry, physics and microbiology in everyday life", *International Conference "Science, Innovation and Gender" – Proceedings*, 35-38, Vilnius, 2013
- F. A. Danalache, P. Mata, M. Moldão-Martins, V. D. Alves, "Viscoelastic studies of fresh mango puree texturized with gellan gum", *Proceedings of 6th Central European Congress on Food-CEFood Congress*, Institute of Food Technology, Novi Sad (Serbia), 2012
- J. Moura, J. Viegas, S. Dias, C. Prista, C. Loureiro Dias, M. Guerreiro, P. Mata, "Cooking in the 21st Century: The role of hydrocolloids in the changing of processes and attitudes", *Proceedings from 4th Iberian Meeting on Colloids and Interfaces*, E.F. Marques and M.J. Sotomayor (Eds) 257-264, Porto, 2011
- F. Pereira, J. Aires-de-Sousa, P. Mata, A. M. Lobo, "As Tecnologias de Informação e Comunicação (TIC) para o Ensino de Química Orgânica a Cegos e Grandes Amblíopes", *Actas do III Encontro de Educação em Ciências*, 16-19, Aveiro, 2009
- P. Mata, A. Noronha, A. Gomes da Costa, M. Guerreiro, M. C. Loureiro-Dias, "Science can be Tasty", *Proceedings of the EURO FOOD CHEM XIV – vol 1 – 65 - 67*, Paris, 2007
- V. J. Gillet, P. Mata, G. Myatt, W. R. Newell, S. Sike, Z. Zsoldos, A. P. Johnson, "Programs for de novo Structure Generation and Estimation of Synthetic Accessibility", *Abstracts of Papers of the American Chemical Society*, 1994, 207, 99
- V. Gillet, A. P. Johnson, P. Mata, S. Sike, "Automated Structure Design in 3D", *Abstracts of Papers of the American Chemical Society*, 1991, 202, 48

## **Other Activities**

### **2007/2010**

Partner of Cooking.Lab, founded in 2007, R&D company based in INOVISA (ISA) and whose business involved the development of technological applications of Molecular Gastronomy and provide services in this area (training, consulting and entertainment events).

### **2004/2008**

Wrote regularly in the press on topics related to cooking and science (*Diário de Notícias* (one of the main national newspapers) from 2004 to 2007; *Intermagazine - Professional Journal of Hospitality and Catering* 2005-2008).



## **Participation in TV Programs**

(Participation related with Molecular Gastronomy)

- AB Ciência (a series of 13 science dissemination programs) - RTP1 - January to April 2008.
- 2010 Magazine de Ciência e Tecnologia (2 programs) - RTP 2 - March 2007
- 4 x Ciência (RTP N) - July 2006.

## **Awards**

Tribute for the Services Rendered to the Portuguese Cuisine and Gastronomy, Editions of the Taste / National Cooks' Congress, Lisbon, July 2014.

Named one of the 20 Most Influential Personalities of Gastronomy in Portugal by Jornal Público, 2013

BES Innovation Award - Agro-Industrial (Pasta Olive Oil - work done by Cooking.Lab), Lisbon 2008

1er Prix («Exploration»), « 3èmes Rencontres Sciences, Art & Cuisine – Jeu de Surface », (organized by [www.sciencesetgastronomie.com](http://www.sciencesetgastronomie.com) and supported by Hervé This (AgroParisTech), Paris 2008

1er Prix (« Cocktail »), «2èmes Rencontres Sciences, Art & Cuisine – Couleur à la Carte organized by [www.sciencesetgastronomie.com](http://www.sciencesetgastronomie.com) and supported by Hervé This (AgroParisTech), Paris 2007

1er Trophée Sciences & Cuisine, « 1ères Rencontres Sciences & Cuisine - à la Découverte des Additifs », organized by [www.sciencesetgastronomie.com](http://www.sciencesetgastronomie.com) and supported by Hervé This (AgroParisTech), Paris 2006