

PATROKLOS K. VARELTZIS

Chemical Engineer · MSc, PhD Food Science

Assistant Professor — Field: “Food Process Engineering”

Department of Chemical Engineering, Faculty of Engineering, Aristotle University of Thessaloniki

Director, Laboratory of Industrial Food and Agricultural Processing Technologies

Co-founder of the POSS spin-off — Driving Innovation in Functional Foods

CURRICULUM VITAE

CONTACT DETAILS

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The published work and the conference presentations (sections 12 and 13) are presented in three periods: before my appointment (up to January 2018), from appointment to tenure (January 2018 – March 2021), and from tenure to the present (March 2021 – present)

1. PROFILE AT A GLANCE

I am a Chemical Engineer with graduate studies and a doctorate in Food Science (University of Massachusetts at Amherst) and two years of postdoctoral research at Chalmers University of Technology. I was appointed Assistant Professor in the Department of Chemical Engineering of AUTH in January 2018, in the field of “Food Process Engineering”, and was tenured in March 2021. Since September 2018 I have directed the Laboratory of Industrial Food and Agricultural Processing Technologies.

My research sits at the interface of process engineering with food science and nutrition and is organised along three interconnected axes: (a) recovery and valorisation of biofunctional components from by-products and waste streams of the agri-food industry; (b) design of functional foods and study of the bioaccessibility and bioavailability of their constituents using simulated gastrointestinal digestion protocols (INFOGEST), cell lines (CaCo-2) and mechanistic mathematical modelling; (c) application of mild and non-thermal processing technologies (high hydrostatic pressure, ultrasound, cold extraction, spray drying and lyophilisation, membrane processes) to improve food quality and safety.

The great majority of my work has been produced after tenure: 30 of the 44 peer-reviewed journal articles, 46 of the 71 conference presentations and 4 of the 5 patents belong to the period March 2021 – present, while 491 of the 597 citations to my work (82%) were recorded in the same interval. In parallel I developed teaching in three postgraduate programmes, took on institutional roles at Department and Institution level, and in 2024 co-founded the POSS spin-off.

The work at a glance (Scopus, September 2026)

- 44 articles in peer-reviewed international journals (42 documents in Scopus) — 30 of them after tenure
- 597 citations, of which 565 are external (94.6%) and 32 self-citations· h-index 16
- 491 of the 597 citations (82%) were recorded from March 2021 onwards
- 34 of the 41 Scopus articles are in JCR **Q1**/Q2 journals· first or last (corresponding) author in 29 of them
- 5 patents, 2 book chapters, 71 presentations at 41 scientific conferences
- 6 doctoral theses as supervisor, 6 advisory and 9 examination committees, more than 75 completed diploma theses
- Co-founder of the POSS spin-off (AUTH & UTh, 2024)· 6 contract-research agreements with companies through the AUTH Research Committee (ELKE)
- 5 national competitive projects (Principal Investigator in 3 of them)
- 78 verified peer reviews· member of the Reserve List of the EFSA Scientific Committee and Scientific Panels

2. PERSONAL DETAILS

First name	Patroklos
Surname	Vareltzis
Father's name	Kyriakos
Date of birth	28 December 1977
Place of birth	Thessaloniki
Home address	8D Agion Panton St., Pefka, 57010 Thessaloniki, Greece
Telephone	+30 2310 996162 (office) · +30 6989 510191 (mobile)
E-mail	pvareltzis@cheng.auth.gr · p.k.vareltzis@gmail.com
Marital status	Married
Military service	Completed (11-5-2009)

ORCID	0000-0003-4796-183X
Scopus Author ID	23096440900
Web of Science ResearcherID	D-2415-2018

3. EDUCATION AND TRAINING

2006 – 2008	Postdoctoral research — Chalmers University of Technology Biology and Biological Engineering, Food Science and Nutrition Department, Gothenburg, Sweden. Two-year fellowship for research on the processing of low-cost marine raw materials.
2001 – 2006	Doctoral Diploma in Food Science Food Science Department, University of Massachusetts at Amherst, USA. Thesis title: “Oxidation of cod microsomal lipids in situ and in vitro as affected by processing parameters”. Research Assistantship.
2001 – 2003	Master of Science (MSc) in Food Science Food Science Department, University of Massachusetts at Amherst, USA.
1995 – 2001	Diploma in Chemical Engineering (5-year, integrated MSc) Faculty of Engineering, AUTH — grade 7.4/10. Diploma thesis on risk analysis of chemical installations (supervisor: Prof. A. Karabelas).
2001	CERTH — undergraduate research fellowship Simulation of chemical processes with gPROMS· optimisation of gas separation processes with zeolite membranes (supervisor: Prof. M. Georgiadis).
1995	Secondary school leaving certificate — Anatolia College, grade “Excellent” (19.7/20)

Additional training and certifications

- Thermo Fisher Scientific — eight training certificates in LC, LC-MS, GC-MS, ICP and ICP-MS (San Jose, Cambridge, Bremen, Milan, Austin· 2013–2017)
- Laboratory accreditation to ISO/IEC 17025 — Association of Greek Chemists, Thessaloniki (2014)
- ELINYAE — 100-hour seminar on occupational health and safety (2011)
- CAMO ASA — “Multivariate Analysis” with the Unscrambler software, Chalmers (2008)
- OSU–AZTI Surimi School Europe, Bilbao, Spain — three-day laboratory workshop (2007)
- LIPIDFORUM ACADEMY — intensive seminar, Nordic Forum for Lipid Research and Technology, Chalmers (2007)
- Natural Products Summer School “Natural Products: Chemistry, Biology and Applications”, AUTH/KEDEA (27–29 April 2018)

4. ACADEMIC AND PROFESSIONAL CAREER

01/2018 – present	Assistant Professor, Department of Chemical Engineering, AUTH Faculty of Engineering, Division of Technologies· field “Food Process Engineering” (Government Gazette, issue C, 1315/14.12.2017). Tenured in the rank in March 2021.
09/2018 – present	Director, Laboratory of Industrial Food and Agricultural Processing Technologies
2024 – present	Co-founder and partner of the POSS spin-off — “Driving Innovation in Functional Foods” A knowledge-intensive company founded in 2024 with the participation of AUTH and the University of Thessaly, for the transfer of research results into the design and development of functional foods and value-added products.

2017	Teaching Fellow (Presidential Decree 407/80), University of Patras School of Medicine — “Pharmacology I” (February – July 2017).
2013 – 2017	RigasLabs S.A., Sindos, Thessaloniki Technical and scientific consultant on liquid and gas chromatography, mass spectrometry and inductively coupled plasma systems· development of methods for toxins, pesticides and heavy metals in foods and waters.
2011 – 2014	Process consultant to food industries and research associate projects “Archimedes III” (tetrodotoxin) and 09SYN-42-440 (nanoporous membranes).
2009 – 2013	Scientific and laboratory associate, ATEI of Thessaloniki (now IHU) Departments of Food Technology and of Fisheries & Aquaculture Technology (14 hours/week).
2009 – 2011	Teaching Fellow (Presidential Decree 407/80), University of Thessaly School of Veterinary Medicine and School of Agriculture.
2006 – 2008	Postdoctoral fellow, Chalmers University of Technology
2001 – 2006	Research Assistant, University of Massachusetts at Amherst

5. TEACHING

Undergraduate courses — Department of Chemical Engineering, AUTH

- **Food Engineering** — core course, 7th semester, 5 hours/week (2018 – present)
- **Food Quality Control, Quality Assurance and Storage** — elective course, 8th semester, 3 hours/week (2018 – 2025)
- **Quality Assurance and Functional Foods** — elective course, 8th semester, 3 hours/week (2025 – present)
- **Food Chemistry** (2025 – present) — elective course, 5th and 7th semester, 3 hours/week
- **Techno-economic Study I and II (SVE)** — core course, co-taught (20%) (2020 – present)
- **Mass and Energy Balances** — core course, 2nd semester, 3 hours/week (2018 – 2023)

Postgraduate courses

MSc programme “Chemical and Biochemical Engineering: Health and Foods”, Department of Chemical Engineering, AUTH — since 2026

- **Functional Food Technology** — 3 hours/week
- **Design of Industrial Food Production Plants** — 3 hours/week, co-taught (60%)

Interdepartmental MSc programme “Biomedical Engineering” — since 2022

- **Mechanical Properties of Biomaterials** — co-taught (15%)
- **Biomaterials and Processing** — co-taught (15%)
- **MSc programme “Chemical and Biomolecular Engineering”, Department of Chemical Engineering, AUTH — 2019 to 2023**
- **Food Science and Engineering** — 3 hours/week

Previous teaching

- University of Patras, School of Medicine — “Pharmacology I” (PD 407/80, 2017)
- University of Thessaly — “Technology of Foods of Animal Origin” (Veterinary Medicine) and “Food Safety and Quality Assurance” (Agriculture), 2009–2011

- ATEI of Thessaloniki — “Processing Laboratory I”, “Technology and Quality Control of Meat and Meat Products”, “Technology and Quality Control of Fishery Products”, “Engineering Laboratory I”, “Hygiene and Safety in the Food Industry”, “Chemistry of Natural Resources” (2009–2013)
- Chalmers University of Technology — lectures in Seafood Biotechnology and supervision of a student project (2007)

6. SUPERVISION OF RESEARCH WORK

Doctoral theses as supervisor (6)

1. **Sidirokastritis, Nikolaos D.** — “Study of the mechanisms of the effect of high hydrostatic pressure on antibiotic and insecticide residues in honey and assessment of its effect on the nutritional value of honey through metabolomic techniques”. Started 05/12/2018· defended 12/12/2024 with the grade “Excellent”. Completed.
2. **Kyrogrou, Smaro** — “Study and control of the physicochemical and rheological properties of juicing products and valorisation of the by-products as biodegradable materials”. Started 30/10/2020· the thesis is complete, the recommendation of the advisory committee was signed in September 2026 and the defence before the seven-member committee is scheduled for October 2026.
3. **Pasidi, Evangelia** — “Effect of food composition and structure on the bioavailability of vitamin D — kinetics of release from the food and of absorption in the human body”. Started 11/05/2020.
4. **Gkogkou, Thetis** — “Valorisation of the waste streams of prickly pear (*Opuntia ficus-indica*) oil production — Preliminary techno-economic study of a prickly pear valorisation plant” (industrial doctorate). Topic assigned 06/12/2023
5. **Oikonomou, Georgios** — “Development and optimisation of processes for the recovery of biomaterials from meat and fish processing by-products, and their applications”. Topic assigned 20/02/2024.
6. **Tsamitropoulou, Fani** — “Design and development of innovative controlled-release systems for bioactive substances based on natural food polymers”. Topic assigned by decision 22/29-05-2026 of the Department Assembly.

Member of the three-member advisory committee of doctoral theses (6)

- Samara, Christina (supervisor: Assoc. Prof. C. Chatzidoukas, AUTh)
- Fotiou, Dimitrios (supervisor: Prof. A. Goula, AUTh)
- Solomakou, Nikoletta (supervisor: Prof. A. Goula, School of Agriculture, AUTh) — completed
- Orova, Melina (supervisor: Assoc. Prof. C. Chatzidoukas, AUTh)
- Tzimopoulou, Evangelia (supervisor: Asst. Prof. A. Kyparissidis, AUTh)
- Karakoula, Konstantina — University of Western Macedonia (supervisor: Assoc. Prof. K. Kalogiannis)

Member of the seven-member examination committee of doctoral theses (9)

- Saliakellis, Panagiotis — AUTh (2018, supervisor: Prof. S. Yiantsios)
- Pavlou, Alexandros — AUTh (2018, supervisor: Prof. C. Panayiotou)
- Kaderidis, Kyriakos — AUTh (2020, supervisor: Prof. A. Goula)
- Georgiadis, Georgios — AUTh (2021, supervisor: Prof. M. Georgiadis)
- Giannopoulou, Panagiota — University of Patras (January 2023, supervisor: Prof. K. Kypreos)
- Tsiriga, Asimina — AUTh (2024, supervisor: Prof. A. Aggeli)
- Fragkopoulos, Theofilos — IHU (30/08/2024)
- Dimopoulou, Maria — University of Thessaly (2025, supervisor: Prof. O. Gortzi)
- Kakafoni, Georgia — University of Patras (2026, supervisor: Prof. K. Kypreos)

Postgraduate and undergraduate diploma theses

More than 75 undergraduate diploma theses have been completed and successfully examined under my supervision, while 7 are in progress. I have also supervised three postgraduate diploma theses in the MSc programme “Chemical and

Biomolecular Engineering” and have served as a member of the three-member examination committee in 25 consecutive diploma-thesis examination periods (March 2018 – June 2026). Indicatively:

- Chamilaki, Maria — “Microencapsulation of phenolic compounds from oregano distillation solid waste: process optimisation, bioaccessibility and antioxidant activity” (MSc, 2023)
- Zeleskidou, Marina — “Optimum spray-drying conditions for the production of powdered products from egg white, yolk and whole egg” (MSc, 2022)
- Matzaridou, Avrakomi — “Hydrocolloids as carriers for the per os delivery of bioactive substances” (MSc, 2020)
- Papatheologou, Vasiliki — “Deep eutectic versus organic solvents for the extraction of antioxidants from lavender waste” (2024)
- Loustas, Georgios — “Behaviour of omega-3 fatty acid emulsions during in vitro digestion” (2023)
- Kragiopoulou, Anastasia — “Fast-dissolving polymeric films for the per os delivery of active substances” (2022)
- Missias, Alexandros — “Recovery and characterisation of collagen from salmon bones” (2022)
- Tsiantoulas, Ioannis — “Effect of high hydrostatic pressure on the degradation of antibiotics” (2021)
- Dagkli, Georgia — “Mathematical simulation of vitamin D absorption” (2021)
- Ioannou, Ioanna — “Study of eggshell properties and recovery of biofunctional components” (2020)
- Kyroglou, Smaro — “Cold brew coffee: comparative study of processes and optimisation of parameters under vacuum” (2019)
- Filippou, Polychronis — “Recovery of functional components from red winemaking waste using membranes” (2019)

7. ADMINISTRATIVE DUTIES AND INSTITUTIONAL ROLES

Institutional roles in the Department of Chemical Engineering, AUTH

- Director, Laboratory of Industrial Food and Agricultural Processing Technologies · September 2018 – present
- Principal Investigator of the Department’s Practical Training (internship) programme, and member of its Evaluation Committee and Appeals Committee · 2019/2020 – present
- Regular member of Evaluation and Appeals Committees for the recruitment of teaching staff
- Member of the Committee for Events, Outreach and Liaison with Industry and Alumni · 2020–2022 and 2025–2028
- Member of the Department’s Building Infrastructure Committee · 2025 – present
- Member of electoral committees for the election of Head of Department and Director of Division, and for the AUTH rectorial elections · 2018–2019
- Member of the organising committee of the 14th Panhellenic Scientific Congress of Chemical Engineering, Thessaloniki · May 2024

Institutional roles at University level

- Member of the AUTH Committee for International Educational Programmes (decision 14/29-04-2024 of the Administrative Board) · 2024–2025
- Member of the Appeals Committee of the AUTH Research Committee (ELKE) (article 245, Law 4957/2022) — participation in the examination of an appeal and signature of the minutes · 2023 and 2024
- Member of the Working Group “Development and Sustainability of Research Infrastructures” of the AUTH Vice-Rectorate for Research and Lifelong Learning · 2019–2021

8. RESEARCH PROJECTS, SPIN-OFF AND COLLABORATION WITH INDUSTRY

Competitive research projects

7. 3DPharma — “3D Printing of an Innovative Carrier for Active Substances for Personalized Oral Drug Administration”, YP3TA-0560399, “Sub-action 1.1 — Research Excellence Partnerships”. Start: April 2025.

8. EggWhiteBrain — “Production of value-added functional products based on egg white”, T2EDK-00371, EPAnEK “Research – Create – Innovate” (2nd cycle). Start 12/05/2020. / PI
9. UltraAntiLavander — “Production of lavender extracts and their incorporation into dairy products”, M16SYN-00110, Measure 16 “Cooperation”. / PI
10. EggWhite+ — “Development of a functional egg-white beverage enriched with omega-3 fatty acids”, M16SYN-00807. / PI
11. Non-Antibiotic Cert — “Pilot application of the non-antibiotic cert standard in livestock units”, M16SYN-00690.

Participation as a research team member or expert

12. EFSA — **Framework Partnership Agreement** GP/EFSA/NUTRI/2021/01, GA 10: «Support to EFSA in the Safety Assessment of Novel Foods and Nutrient Sources».
13. Archimedes III (MIS 383572), Subproject 22 — analytical method for the determination of tetrodotoxin in the Mediterranean pufferfish (2011–2014).
14. 09SYN-42-440 — “Innovative hybrid processes using nanoporous membranes for water treatment” (2011–2013).

Spin-off

Co-founder and partner of the POSS spin-off — “Driving Innovation in Functional Foods”, established in 2024 with the participation of the Aristotle University of Thessaloniki and the University of Thessaly. Its object is the transfer of the Laboratory’s research results to the market, through the design and development of functional foods and value-added products.

Contract-research agreements with companies (through the AUTH Research Committee, ELKE)

Beyond the competitive research projects, I have concluded a total of six (6) contract-research agreements with private-sector companies, administered through the Special Account for Research Funds of AUTH. They concern specialised research and technological services for the agri-food industry — product and process development and optimisation, quality and stability studies, bioaccessibility assessment — and document the systematic connection of the Laboratory with production.

Evaluation of research projects

- Interim certification of the physical object of project T1EDK-04125.

9. FIELDS OF SPECIALISATION AND RESEARCH INTERESTS

Three thematic axes within the field of “Food Process Engineering”

My research work develops along three interconnected thematic axes, all of which fall directly within the field of the position. (i) Separation processes and recovery of bioactive and functional components: experimental design and optimisation of extraction, membrane filtration, spray drying and lyophilisation, and protein solubilisation/precipitation at extreme pH values, applied to by-products of winemaking, lavender, oregano, peach and cereals, to fishery products, to collagen and to biodegradable packaging materials (papers A3, A5, A6, A11, A15, A16, A21, A24, A27, A30, C6, C7, C10, C12). (ii) Food matrix engineering and bioaccessibility: quantitative description of the effect of food structure and composition on the release and absorption of micronutrients and bioactive compounds, using in vitro digestion protocols (INFOGEST) and mechanistic kinetic models of ordinary differential equations for vitamin D3, omega-3 fatty acids and functional beverages and snacks (A1, A2, A14, A20, A23, A28, A29). (iii) Non-thermal processes, safety and quality: high hydrostatic pressure, ultrasound, vacuum-assisted cold extraction and modified atmosphere packaging, addressing antibiotic and pesticide residues, lipid oxidation, stability and shelf

life (A7, A13, A18, A19, A26, C5, C8, C9, C11). The three axes converge on the integrated design of production processes for functional and innovative foods — from raw material and by-product to the final product and its physiological action — and are documented by the 44 peer-reviewed journal articles, the 5 patents, the research projects, the contracts with industry and the POSS spin-off.

10. SUMMARY AND ASSESSMENT OF SCIENTIFIC WORK

The data that follow come from Scopus exports (author profile 23096440900) of September 2026, both with and without self-citations. The work is presented in three periods: C = up to my appointment (January 2018), B = from appointment to tenure (January 2018 – March 2021), A = from tenure to the present (March 2021 – present).

Table 1. Citations and impact indicators (Scopus)

Indicator	With self-citations	Without self-citations
Total citations	597	565
Self-citations	32	—
Share of external citations in the total	—	94.6%
h-index	16	15
Citations received up to and including 2020	106	99
Citations received from 2021 to the present	491 (82%)	466 (82%)
Documents indexed in Scopus	42	42
Distinct co-authors	86	—

Table 2. Scientific output per period

Category	C: up to 1/2018	B: 1/2018–3/2021	A: 3/2021–present	Total
Articles in peer-reviewed international journals	12	2	30	44
of which indexed in Scopus	9	2	30	41
Chapters in scientific books	1	—	1	2
Patents	1	—	4	5
Presentations at peer-reviewed conferences	16	9	46	71
Total	30	11	81	122

Table 3. Citations to the publications of each period (Scopus)

Period of publication	Documents	Citations	External citations
C: up to January 2018	9	205	195
B: January 2018 – March 2021	2	14	14
A: March 2021 – present	31	378	356
Total	42	597	565

Table 4. Quality characteristics of the Scopus-indexed articles

Characteristic	C	B	A	Total
Articles in peer-reviewed journals (Scopus)	9	2	30	41
First or last (corresponding) author	7	1	21	29
Mean number of authors per article	3.7	3.5	4.4	4.1
Articles in Q1 journals (JCR 2025)	4	—	12	16
Articles in Q2 journals (JCR 2025)	3	1	14	18
Articles in Q1 or Q2 journals	7	1	26	34

Table 5. Supervision and evaluation of research work

Category	Number
Doctoral theses — supervisor (1 completed, 1 awaiting defence, 4 in progress)	6
Doctoral theses — member of the three-member advisory committee	6
Doctoral theses — member of the seven-member examination committee	9
Undergraduate diploma theses — completed	> 75
Undergraduate diploma theses — in progress	7
Postgraduate diploma theses — completed	3
Diploma-thesis examination periods as committee member (3/2018 – 6/2026)	25
Verified peer reviews of articles in international journals	78

Table 6. Journals of publication and impact indicators (JCR 2025)

Journal	Articles	Impact Factor	Quartile
Food Chemistry	1	10.4	Q1
Journal of Agriculture and Food Research	1	7.2	Q1
Innovative Food Science & Emerging Technologies	1	6.9	Q1
Journal of Agricultural and Food Chemistry	2	6.7	Q1
Foods	2	6.0	Q1
Nutrients	1	5.8	Q1
Pharmaceuticals	1	5.7	Q1
International Journal of Molecular Sciences	4	5.6	Q1
Applied Food Research	1	5.4	Q2
Molecules	3	5.1	Q2
Food Science & Nutrition	1	5	Q2
Food and Bioproducts Processing	1	4.7	Q2
Journal of Cereal Science	1	4.3	Q2
Biomimetics	1	4.2	Q1
Membranes	1	4.2	Q2
Journal of Food Science	2	4.1	Q2
Journal of the Science of Food and Agriculture	2	4.0	Q1
Chemical Engineering Research and Design	1	4.0	Q2
ChemEngineering	1	3.7	Q2
Journal of Food Protection	1	3.7	Q2
Separations	2	3.5	Q2
Italian Journal of Food Science	1	3.3 (2024)	Q2
International Dairy Journal	1	3.1	Q3
Applied Sciences	2	2.9	Q2
International Journal of Dairy Technology	1	2.7	Q3
Food Additives & Contaminants: Part A	1	2.5	Q3
Analytical Letters	1	1.8	Q3
Journal of Aquatic Food Product Technology	1	1.2	Q4
Journal of the Hellenic Veterinary Medical Society	1	0.6	Q4
Journal of Food and Nutrition Research	1	0.6	Q4
Food Science and Applied Biotechnology	1	0.4	Q2
Journal of Food Research	1	—	—
Annals. Food Science and Technology	1	—	—

The Impact Factor and the quartile refer to the Clarivate Journal Citation Reports 2025 edition. For the Italian Journal of Food Science the value of the 2024 edition is given

11. DISTINCTIONS, EDITORIAL AND REVIEWING ACTIVITY, SCIENTIFIC SOCIETIES

Distinctions and awards

- Ecotrophelia Greece — seven consecutive appearances in the final stage of the Panhellenic innovative food competition (2019–2026), with seven awards in total for the student teams under my supervision (2 × 2nd best product, 2 × best marketing plan, 3 × best business plan).
- Member of the Reserve List for the Scientific Committee and Scientific Panels of the European Food Safety Authority (EFSA), 2023 – present.
- Best poster presentation award at the Food BioTech Conference 2021 (work of the research group).
- Session chair at the 15th Panhellenic Scientific Congress of Chemical Engineering (Technical University of Crete, Chania, 5 June 2026).
- Chair of the session “Innovation on Processing and Preservation” at the 37th WEFTA Conference (Lisbon, 2007).
- Undergraduate research fellowship from the Thessaloniki Technology Park / CERTH (2001)
- Research Assistantship, University of Massachusetts at Amherst (2001–2006)
- Representative of Greece and head of delegation at the European Youth Parliament (Berlin and Brussels, 1994) and at Harvard Model United Nations (Boston, 1994).

Invited talks

- Invited talk at a round table on the “Principles of Good Manufacturing Practice”, 13th Panhellenic Conference of the Hellenic Society of Basic and Clinical Pharmacology, Patras, 15–17 May 2026.
- Dairy News, issue 20, September 2020 — “Special feature on protein”.
- Brokerage Event – Interreg Adrion, Thessaloniki (2019) — presentation of the Laboratory’s research interests and results.
- Chalmers University, Food Science Department (April 2006) — invited presentation of research work.

Guest Editor of special issues of international journals (5)

- *Antioxidants* (MDPI) — “Innovative Processing for Bioactive and Antioxidant Recovery in Foods”. Sole Guest Editor. Submission deadline: 30 November 2026.
- *International Journal of Molecular Sciences* (MDPI) — “Functional Foods: Molecular Insights into Nutrition and Health”. Sole Guest Editor. Submission deadline: 30 April 2027.
- *International Journal of Molecular Sciences* (MDPI) — “Functional Foods: Bridging the Gap between Nutrition and Health”. Sole Guest Editor.
- *Antioxidants* (MDPI) — “Antioxidant Properties of Functional Foods”. Guest Editors: Dr. K. G. Adamopoulos, Dr. P. Vareltzis. Submission deadline: 31 December 2025.
- *Separations* (MDPI) — “Bioactive Compounds in Foods: Separation, Extraction and Application”. Guest Editors: Dr. P. Vareltzis, Prof. Dr. O. Gortzi, Dr. S. I. Patsios. Submission deadline: 20 June 2024.

Reviewer for international scientific journals

78 verified reviews (Publons / Web of Science and Elsevier Reviewer Hub) for the journals: Food Chemistry· Food Chemistry Advances· Journal of Agricultural and Food Chemistry· Journal of Food Engineering· Journal of Food Science and Technology· Journal of the Science of Food and Agriculture· Foods· Nutrients· Molecules· Sustainability· Coatings· Applied Food Research· International Journal of Biological Macromolecules· International Journal of Thermophysics· Journal of Aquatic Food Product Technology· Food Science and Technology International· Environmental Science and Pollution Research.

Member of scientific societies

- Institute of Food Technologists (IFT / NEIFT) — since 2001
- American Oil Chemists' Society (AOCS) — since 2003
- EuroFed Lipid Organization — since 2007
- Society of Chemical Industry (SCI) — since 2019
- Hellenic Atherosclerosis Society — since 2023
- EMEDE — Society for Metabolism, Nutrition and Wellbeing — since 2023

Other skills

- Languages: Greek (native), English (excellent command), German (Mittelstufe).
- Software: Microsoft Office (advanced level), Visio, gPROMS, Unscrambler, Minitab / statistical design of experiments· working knowledge of GW-Basic, Pascal, Fortran, Python.
- Laboratory infrastructure: development, operation and maintenance of LC, LC-MS, GC-MS, ICP and ICP-MS systems· organisation of laboratories in a GMP/GLP environment· training in the ISO/IEC 17025 standard.

12. PUBLISHED SCIENTIFIC WORK

The published work is listed in three periods, in reverse chronological order within each period. For every article the DOI, the number of Scopus citations and, at the end of the entry, the Impact Factor and the quartile of the journal according to JCR 2025 are given.

Journal quartile (JCR 2025): **Q1** **Q2** **Q3** **Q4**

PART A — Work after tenure (March 2021 – present)

A.1 Articles in peer-reviewed international journals (30)

- A1.** Pasidi, E., Stratis, N. and Vareltzis, P. **Vitamin D3 concentration behavior during intestinal in vitro digestion: an experimental and kinetic modelling approach.** *Journal of Agriculture and Food Research*, 31, 2026, <https://doi.org/10.1016/j.jafr.2026.103310> Impact Factor: 7.2, **Q1**
- A2.** Vareltzis, P., Kyroglou, S., Pasidi, E., Oikonomou, G., Gkogkou, T., Govari, M., Kalogiannis, K., Gortzi, O. **Food Matrix Effects on Plant-Derived Bioactive Compounds and Micronutrients: Implications for Functional Food Development.** *International Journal of Molecular Sciences*, 27(12), 5503, 2026. DOI: 10.3390/ijms27125503 · Citations: 4 · Impact Factor: 5.6, **Q1**
- A3.** Kyroglou, S., Margellou, A.G., Triantafyllidis, K.S., Vareltzis, P. **From Waste to Value: Fruit Biofillers in Biodegradable Composite Materials.** *Biomimetics*, 11(4), 274, 2026. DOI: 10.3390/biomimetics11040274 · Citations: 0 · Impact Factor: 4.2, **Q1**
- A4.** Karavia, E.A., Pittaras, A., Andreopoulou, O., Hatziri, A., Makrydimitri, A., Anagnostopoulos, D., Vareltzis, P., Kypreos, K.E. **Evidence-Based Management of MASLD: GRADE Evaluation of Pharmacological Therapies.** *Pharmaceuticals*, 19(4), 605, 2026. DOI: 10.3390/ph19040605 · Citations: 1 · Impact Factor: 5.7, **Q1**
- A5.** Oikonomou, G., Vareltzis, P. **Cold-water versus warm-water fish collagen (Type I): Comparative functional properties and implications for food industry applications.** *Applied Food Research*, 6(1), 102068, 2026. DOI: 10.1016/j.afres.2026.102068 · Citations: 1 · Impact Factor: 5.4, **Q2**
- A6.** Karakoula, K., Vareltzis, P., Kalogiannis, K.G. **Extraction and valorization of arabinoxylans from cereal processing by-products: Current methods, challenges, and future perspectives.** *Journal of Cereal Science*, 128, 104381, 2026. DOI: 10.1016/j.jcs.2026.104381 · Citations: 0 · Impact Factor: 4.3, **Q2**
- A7.** Sidirokastritis, N.D., Kanelis, D., Tananaki, C., Vareltzis, P. **Crystallization and antibiotic residues in honey during storage after treatment with high hydrostatic pressure, ultrasound and heat.** *Food and Bioproducts Processing*, 153, 389–399, 2025. DOI: 10.1016/j.fbp.2025.07.015 · Citations: 2 · Impact Factor: 4.7, **Q2**
- A8.** Papachristoudis, I.P., Dimopoulou, M., Kyroglou, S., Vareltzis, P., Gortzi, O. **Development of Novel Canned Peaches (Fercluse Variety) as a Healthy and Possible Diabetic Food Choice.** *Applied Sciences*, 15(6), 3336, 2025. DOI: 10.3390/app15063336 · Citations: 0 · Impact Factor: 2.9, **Q2**
- A9.** Govari, M., Vareltzis, P. **Conjugated linoleic acid in cheese: A review of the factors affecting its presence.** *Journal of Food Science*, 90(2), e70021, 2025. DOI: 10.1111/1750-3841.70021 · Citations: 8 · Impact Factor: 4.1, **Q2**
- A10.** Kakafoni, G., Zvintzou, E., Kyroglou, S., Giannatou, K., Mparnia, V., Vareltzis, P., Kypreos, K.E. **Effect of a Novel Lavender Extract on Plasma Lipid and Lipoprotein Metabolism, Glucose Tolerance and Adipose Tissue Metabolic Activation: A Preclinical Safety and Efficacy Study.** *Nutrients*, 17(1), 76, 2025. DOI: 10.3390/nu17010076 · Citations: 3 · Impact Factor: 5.8, **Q1**
- A11.** Kyroglou, S., Ritzoulis, C., Theocharidou, A., Vareltzis, P. **Physicochemical Factors Affecting the Rheology and Stability of Peach Puree Dispersions.** *ChemEngineering*, 8(6), 119, 2024. DOI: 10.3390/chemengineering8060119 · Citations: 9 · Impact Factor: 3.7, **Q2**
- A12.** Dimopoulou, M., Vareltzis, P., Gortzi, O. **A Systematic Review of the Twelve Most Popular Bean Varieties, Highlighting Their Potential as Functional Foods Based on the Health Benefits Derived from Their Nutritional Profiles, Focused on Non-Communicable Diseases.** *Applied Sciences*, 14(22), 10215, 2024. DOI: 10.3390/app142210215 · Citations: 17 · Impact Factor: 2.9, **Q2**

- A13.** Sidirokastritis, N.D., Vareltzis, P. **Matrix effect on the effectiveness of high hydrostatic pressure treatment on antibiotic residues.** *Journal of Food Protection*, 87(6), 100278, 2024. DOI: 10.1016/j.jfp.2024.100278 · Citations: 3 · **Impact Factor: 3.7, Q2**
- A14.** Pasidi, E., Vareltzis, P. **Vitamin D3 Bioaccessibility from Supplements and Foods—Gastric pH Effect Using a Static In Vitro Gastrointestinal Model.** *Molecules*, 29(5), 1153, 2024. DOI: 10.3390/molecules29051153 · Citations: 17 · **Impact Factor: 5.1, Q2**
- A15.** Vareltzis, P., Fotiou, D., Papatheologou, V., Kyroglou, S., Tsachouridou, E., Goula, A.M. **Optimized Solid–Liquid Separation of Phenolics from Lavender Waste and Properties of the Dried Extracts.** *Separations*, 11(3), 67, 2024. DOI: 10.3390/separations11030067 · Citations: 24 · **Impact Factor: 3.5, Q2**
- A16.** Vareltzis, P., Karatsioli, P., Kazakos, I., Menelaou, A.-M., Parmaxi, K., Economou, V. **Optimization of the Reaction between 5-O-Caffeoylquinic Acid (5-CQA) and Tryptophan—Isolation of the Product and Its Evaluation as a Food Dye.** *Separations*, 11(2), 60, 2024. DOI: 10.3390/separations11020060 · Citations: 2 · **Impact Factor: 3.5, Q2**
- A17.** Govari, M., Vareltzis, P. **Conjugated linoleic acid in meat.** *Journal of the Hellenic Veterinary Medical Society*, 75(2), 7513–7522, 2024. DOI: 10.12681/jhvms.35159 · Citations: 2 · **Impact Factor: 0.6, Q4**
- A18.** Govari, M., Vareltzis, P. **Effect of argon-based modified atmosphere packaging storage on Manouri cheese.** *International Dairy Journal*, 150, 105846, 2024. DOI: 10.1016/j.idairyj.2023.105846 · Citations: 6 · **Impact Factor: 3.1, Q3**
- A19.** Sidirokastritis, N.D., Karazafeiris, E., Tananaki, C., Vareltzis, P. **High hydrostatic pressure effect on the concentration of selected pesticides residues in spiked honey samples.** *Innovative Food Science & Emerging Technologies*, 91, 103527, 2024. DOI: 10.1016/j.ifset.2023.103527 · Citations: 5 · **Impact Factor: 6.9, Q1**
- A20.** Dimopoulou, M., Vareltzis, P., Floros, S., Androutsos, O., Bargiota, A., Gortzi, O. **Development of a Functional Acceptable Diabetic and Plant-Based Snack Bar Using Mushroom (*Coprinus comatus*) Powder.** *Foods*, 12(14), 2702, 2023. DOI: 10.3390/foods12142702 · Citations: 26 · **Impact Factor: 6.0, Q1**
- A21.** Vareltzis, P., Stergiou, A., Kalinderi, K., Chamilaki, M. **Antioxidant Potential of Spray- and Freeze-Dried Extract from Oregano Processing Wastes, Using an Optimized Ultrasound-Assisted Method.** *Foods*, 12(13), 2628, 2023. DOI: 10.3390/foods12132628 · Citations: 10 · **Impact Factor: 6.0, Q1**
- A22.** Papaliagkas, V., Kalinderi, K., Vareltzis, P., Moraitou, D., Papamitsou, T., Chatzidimitriou, M. **CSF Biomarkers in the Early Diagnosis of Mild Cognitive Impairment and Alzheimer’s Disease.** *International Journal of Molecular Sciences*, 24(10), 8976, 2023. DOI: 10.3390/ijms24108976 · Citations: 68 · **Impact Factor: 5.6, Q1**
- A23.** Kolonas, A., Vareltzis, P., Kiroglou, S., Goutzourelas, N., Stagos, D., Trachana, V., Tsadila, C., Mossialos, D., Mourtakos, S., Gortzi, O. **Antioxidant and Antibacterial Properties of a Functional Sports Beverage Formulation.** *International Journal of Molecular Sciences*, 24(4), 3558, 2023. DOI: 10.3390/ijms24043558 · Citations: 19 · **Impact Factor: 5.6, Q1**
- A24.** Kyroglou, S., Laskari, R., Vareltzis, P. **Optimization of Sensory Properties of Cold Brew Coffee Produced by Reduced Pressure Cycles and Its Physicochemical Characteristics.** *Molecules*, 27(9), 2971, 2022. DOI: 10.3390/molecules27092971 · Citations: 17 · **Impact Factor: 5.1, Q2**
- A25.** Michailidis, M., Tata, D.A., Moraitou, D., Kavvadas, D., Karachrysafi, S., Papamitsou, T., Vareltzis, P., Papaliagkas, V. **Antidiabetic Drugs in the Treatment of Alzheimer’s Disease.** *International Journal of Molecular Sciences*, 23(9), 4641, 2022. DOI: 10.3390/ijms23094641 · Citations: 61 · **Impact Factor: 5.6, Q1**
- A26.** Sidirokastritis, N.D., Tsiantoulas, I., Tananaki, C., Vareltzis, P. **The effect of high hydrostatic pressure on tetracycline hydrochloride and sulfathiazole residues in various food matrices – comparison with ultrasound and heat treatment.** *Food Additives & Contaminants: Part A*, 39(4), 687–698, 2022. DOI: 10.1080/19440049.2022.2036820 · Citations: 8 · **Impact Factor: 2.5, Q3**
- A27.** Filippou, P., Mitrouli, S.T., Vareltzis, P. **Sequential Membrane Filtration to Recover Polyphenols and Organic Acids from Red Wine Lees: The Antioxidant Properties of the Spray-Dried Concentrate.** *Membranes*, 12(4), 353, 2022. DOI: 10.3390/membranes12040353 · Citations: 18 · **Impact Factor: 4.2, Q2**

- A28.** Floros, S., Toskas, A., Pasidi, E., Vareltzis, P. **Bioaccessibility and Oxidative Stability of Omega-3 Fatty Acids in Supplements, Sardines and Enriched Eggs Studied Using a Static In Vitro Gastrointestinal Model.** *Molecules*, 27(2), 415, 2022. DOI: 10.3390/molecules27020415 · Citations: 28 · **Impact Factor: 5.1, Q2**
- A29.** Pasidi, E., Papaliagkas, V., Vareltzis, P. **Factors affecting the mechanism and modelling of vitamin D absorption in designing fortified foods – A review.** *Journal of Food and Nutrition Research*, 60(2), 93–110, 2021. · Citations: 0 · **Impact Factor: 0.6, Q4**
- A30.** Kyroglou, S., Thanasouli, K., Vareltzis, P. **Process characterization and optimization of cold brew coffee: effect of pressure, temperature, time and solvent volume on yield, caffeine and phenol content.** *Journal of the Science of Food and Agriculture*, 101(11), 4789–4798, 2021. DOI: 10.1002/jsfa.11125 · Citations: 19 · **Impact Factor: 4.0, Q1**

A.2 Chapters in scientific books (1)

- ACh1. Vareltzis, P., Sidirokastritis, N. Agrochemicals and safety: effects related to food processing and manufacturing (Chapter 15, pp. 343–366). In: *Food Toxicology and Safety: Food Manufacturing Related Effects* (eds. S. Agriopoulou, M. Tarapoulouzi), CRC Press / Taylor & Francis, 2025. DOI: 10.1201/9781032712291-15 · Citations: 0

A.3 Patents (4)

- APt1. Vareltzis, P., Kyroglou, S. Preparation of cold-brew beverages with optimised sensory characteristics. Patent (Hellenic Industrial Property Organisation, OBI) no. 1010642, 2024.
- APt2. Vareltzis, P., Papaliagkas, V., Digkalis, P. Innovative functional dessert based on pasteurised liquid egg white. Patent (OBI) no. 1010576, 2023.
- APt3. Vareltzis, P., Papaliagkas, V., Digkalis, P. Functional beverage based on liquid egg white. Patent (OBI) no. 1010315, 2022.
- APt4. Kypreos, K.E., Vareltzis, P. Fast-dissolving oral films for the administration of active substances by mouth. Patent (OBI) no. 20200100430, 2022.

PART B — Work as Assistant Professor before tenure (January 2018 – March 2021)

B.1 Articles in peer-reviewed international journals (2)

- B1.** Vareltzis, P., Gargali, I., Kiroglou, S., Zeleskidou, M. **Production of instant coffee from cold brewed coffee; process characteristics and optimization.** *Food Science and Applied Biotechnology*, 3(1), 39–46, 2020. DOI: 10.30721/fsab2020.v3.i1.92 · Citations: 11 · Scopus **Q2** (SJR 0.397) · no JCR impact factor
- B2.** Raizi, P., Vareltzis, P., Petridis, D. **Processing and Digestion of Press Juices from Different Fish Muscles; Temperature and Lyophilization Effects on Their Anti-Oxidative Properties.** *Journal of Aquatic Food Product Technology*, 28(5), 519–530, 2019. DOI: 10.1080/10498850.2019.1604599 · Citations: 3 · **Impact Factor: 1.2, Q4**

PART C — Work before appointment (up to January 2018)

C.1 Articles in peer-reviewed international journals (12)

- C1.** Tanis, D., Vareltzis, P., Nikolaidis, G., Minos, G., Kokokiris, L., Rigas, P.G. **Evaluation of Helically Coiled and Knitted Open Tubular Reactors for the Efficient Post-Column Determination of Tetrodotoxin by High-Performance Liquid Chromatography.** *Analytical Letters*, 50(2), 271–293, 2017. DOI: 10.1080/00032719.2016.1177068 · Citations: 2 · **Impact Factor: 1.8, Q3**
- C2.** Vareltzis, P., Adamopoulos, K., Stavarakakis, E., Stefanakis, A., Goula, A.M. **Approaches to minimise yoghurt syneresis in simulated tzatziki sauce preparation.** *International Journal of Dairy Technology*, 69(2), 191–199 (online 2015), 2016. DOI: 10.1111/1471-0307.12238 · Citations: 50 · **Impact Factor: 2.7, Q3**
- C3.** Vareltzis, P., Petridis, D., Petropoulou, A., Tsamitropoulou, F. **Plackett-Burman Experimental Design for Investigating the Effect of Porcine Plasma Protein, Trehalose and Bovine Meat Protein Isolate on Cook Yield and Texture of Minced Bovine Meat.** *Journal of Food Research*, 2(3), 122–136, 2013. DOI: 10.5539/jfr.v2n3p122 · Not indexed in JCR or Scopus

- C4.** Petridis, D., Ritzoulis, C., Tzivanos, I., Vlazakis, E., Derlikis, E., Vareltzis, P. **Effect of fat volume fraction, sodium caseinate, and starch on the optimization of the sensory properties of frankfurter sausages.** *Food Science & Nutrition*, 1(1), 32–44, 2013. DOI: 10.1002/fsn3.6 · JCR 2025: **Q2** (Food Science & Technology)
- C5.** Botsoglou, E., Vareltzis, P., Giannouli, P., Govaris, A. **Effect of modified atmosphere packaging on Halvas Farsalon quality during refrigerated storage.** *Italian Journal of Food Science*, 24(2), 173–181, 2012. · Citations: 0 · Impact Factor: **3.3 (JCR 2024), Q2**
- C6.** Vareltzis, P.K., Papakonstantinou, E., Ntoumas, D., Adamopoulos, K.G. **Process characteristics and functionality of sardine (*Sardina pilchardus*) muscle proteins extracted by a pH-shift method.** *Annals. Food Science and Technology*, 13(2), 132–143, 2012. · Not indexed in JCR or Scopus
- C7.** Vareltzis, P.K., Undeland, I. **Protein isolation from blue mussels (*Mytilus edulis*) using an acid and alkaline solubilisation technique — process characteristics and functionality of the isolates.** *Journal of the Science of Food and Agriculture*, 92(15), 3055–3064, 2012. DOI: 10.1002/jsfa.5723 · Citations: 50 · Impact Factor: **4.0, Q1**
- C8.** Vareltzis, P., Adamopoulos, K.G., Hultin, H.O. **Interactions between Hemoglobin and Cod Muscle Constituents following Treatment at Extreme pH Values.** *Journal of Food Science*, 76(7), C1003–C1009, 2011. DOI: 10.1111/j.1750-3841.2011.02309.x · Citations: 4 · Impact Factor: **4.1, Q2**
- C9.** Vareltzis, P., Hultin, H.O., Autio, W.R. **Hemoglobin-mediated lipid oxidation of protein isolates obtained from cod and haddock white muscle as affected by citric acid, calcium chloride and pH.** *Food Chemistry*, 108(1), 64–74, 2008. DOI: 10.1016/j.foodchem.2007.10.043 · Citations: 40 · Impact Factor: **10.4, Q1**
- C10.** Vareltzis, P., Undeland, I. **Removal of Lipids and Diarrhetic Shellfish Poisoning Toxins from Blue Mussels (*Mytilus edulis*) during Acid and Alkaline Isolation of Proteins.** *Journal of Agricultural and Food Chemistry*, 56(10), 3675–3681, 2008. DOI: 10.1021/jf800224n · Citations: 24 · Impact Factor: **6.7, Q1**
- C11.** Vareltzis, P., Hultin, H.O. **Effect of Low pH on the Susceptibility of Isolated Cod (*Gadus morhua*) Microsomes to Lipid Oxidation.** *Journal of Agricultural and Food Chemistry*, 55(24), 9859–9867, 2007. DOI: 10.1021/jf0708600 · Citations: 14 · Impact Factor: **6.7, Q1**
- C12.** Vareltzis, P., Kikkinides, E.S., Georgiadis, M.C. **On the Optimization of Gas Separation Processes Using Zeolite Membranes.** *Chemical Engineering Research and Design*, 81(5), 525–536, 2003. DOI: 10.1205/026387603765444483 · Citations: 21 · Impact Factor: **4.0, Q2**

C.2 Chapters in scientific books (1)

- CCh1. Vareltzis, P.K. Sensory (texture) evaluation of selected fishery species (Chapter 12). In: Sensory evaluation of foods of animal origin (ed. S. Georgakis), Afoi Kyriakidi Publications, Thessaloniki, 2012.

C.3 Patents (1)

- CPT1. Hultin, H.O., Ke, S., Huang, Y., Imer, S., Vareltzis, P. Process for improving water holding capacity and tenderness in cooked protein food products. International Patent WO/2007/059262 (USA), 2007.

13. PRESENTATIONS AT SCIENTIFIC CONFERENCES

The following are 71 presentations (oral and poster) at 41 peer-reviewed Greek and international conferences.

PART A — Work after tenure (March 2021 – present) — 46 presentations at 20 conferences

13th Panhellenic Conference of the Hellenic Society of Basic and Clinical Pharmacology, Conference and Cultural Centre of the University of Patras (Amphitheatre I-4), University Campus, Rio, Patras, Greece — 15-17 May 2026

PA1. Patroklos Vareltzis. Principles of Good Manufacturing Practice (Oral presentation)

15th Panhellenic Scientific Congress of Chemical Engineering (15th PESXM), Technical University of Crete, Chania, Greece — 3–5 June 2026

PA2. K. Karakoula, A. Karnaouri, P. Vareltzis, K.G. Kalogiannis. From Structure to Process: Optimizing Arabinoxylan Recovery from Cereal By-Products (Oral presentation)

PA3. G. Oikonomou, P. Vareltzis. Comparative analysis of the functional properties of cold- and warm-water fish collagen and applications in the food industry (Oral presentation)

PA4. T. Gkogkou, S. Kyroglou, M. Vlachos, P. Vareltzis. Evaluation of drying models and optimisation of extraction parameters for the valorisation of prickly pear (*Opuntia ficus-indica*) waste (Oral presentation)

PA5. E. Pasidi, N. Stratis, P. Vareltzis. Effect of vitamin D3 concentration on bioaccessibility — mathematical modelling (Oral presentation)

PA6. E. Kangaras, K. Karakoula, G. Samiotis, A. Karnaouri, P. Vareltzis, I. Vasileiadou, K. Kalogiannis. Design and evaluation of an integrated process for the extraction of arabinoxylans from agro-industrial by-products (Poster presentation)

PA7. N. Christodoulou, K. Karakoula, G. Samiotis, A. Karnaouri, P. Vareltzis, I. Vasileiadou and K. Kalogiannis. Statistical design and optimisation study of a methodology for the isolation of arabinoxylans from agricultural by-products (Poster presentation)

11th Panhellenic Conference of the Working Groups of the Hellenic Atherosclerosis Society, Divani Caravel Hotel, Athens, Greece — 5-6 December 2025

PA8. V. Mparnia, S. Kyroglou, M. Vlachos, K. Kypreos, P. Vareltzis. Three-dimensional printing technology in the service of personalised oral drug administration (Poster presentation)

PA9. A. Hatziri, Aristidis Vrachatis, Chrysa Bourtzinakou, P. Manesis, S. Konstantopoulos, P. Vareltzis, Andreas Pittaras, K. E. Kypreos. Artificial intelligence for real-time personalisation of therapy (Poster presentation)

39th EFFoST International Conference 2025, Porto, Portugal — 17-19 November 2025

PA10. Patroklos Vareltzis, Panagiota Karatsioli. Investigation of the reaction CGA-TRP for the production of a novel stable red food-dye [the poster PDF in the folder is titled “Optimization of the reaction between 5-O-Caffeoylquinic acid (5-CQA) and Tryptophan and evaluation of the product’s characteristics as a food dye”] (Poster presentation)

PA11. Thetis Gkogkou, Dimitris Gavanozis, Patroklos Vareltzis. Valorization of Bioactive Compounds from Prickly Pear (*Opuntia ficus-indica*) Waste Streams (Poster presentation)

MIKROBIOKOSMOS & CEESME 2025 joint conference, Thessaloniki, Greece — 2025

PA12. K. Karakoula, P. Vareltzis, K.G. Kalogiannis. Arabinoxylans from Zea - A Natural Xylan Source Promoting Stimulation of probiotic bacteria (Poster presentation)

RETASTE Conference (RETASTE: Rethink Food Waste), Vol. 5, Athens, Greece — 24-27 September 2025

PA13. Konstantina Karakoula. Valorisation of Emmer Bran through Arabinoxylan Extraction and Prebiotic Functionality Assessment (Oral presentation)

14th Panhellenic Scientific Congress of Chemical Engineering, Thessaloniki, Greece — 29-31 May 2024

PA14. E. Antonopoulou, A. Lazou, T. Tsiaka, P. Vareltzis. Recovery of phenolic and antioxidant components from grape pomace waste with herbs, and study of their properties (Poster presentation)

PA15. E. Pasidi, C. Belitselis, E. Kikkinides, P. Vareltzis. Effect of the composition and physicochemical characteristics of the matrix on vitamin D3 absorption — mathematical modelling (Poster presentation)

PA16. S. Kyroglou, P. Vareltzis. Effect of physicochemical properties on the rheology and stability of peach puree (Oral presentation)

- PA17. N. D. Sidirokastritis, P. Vareltzis. High hydrostatic pressure for reducing the concentration of antibiotic residues in foods. Study of the effect of the nature of the food on the effectiveness of the method (Oral presentation)
- PA18. P. Vareltzis. Symbiotic foods: the next big innovation in Food Science? The example of metabolic syndrome and obesity (Oral presentation)
- PA19. A. Koutsopetras, P. Vareltzis. Design, production and characterisation of a functional dessert based on egg white (Oral presentation)
- PA20. M.D. Antoniadou, S. Kyroglou, P.K. Vareltzis, C. Ritzoulis. Incorporation of lavender extracts into model dairy products (Poster presentation)
- PA21. I. Velopoulos, M.D. Antoniadou, S. Kyroglou, P.K. Vareltzis, et al. Innovative dairy products from lavender extracts (Poster presentation)
- PA22. P. Vareltzis, V. Papatheologou. COMPARISON OF NATURAL DEEP EUTECTIC SOLVENTS AND ORGANIC SOLVENTS FOR THE ULTRASOUND ASSISTED EXTRACTION OF ANTIOXIDANTS FROM LAVENDER DISTILLATION SOLID WASTE (Poster presentation)
- PA23. A. Athanasiadi, A. Tsiriga, S.I. Patsios, P. Vareltzis. Characterisation of encapsulated *Yarrowia lipolytica* cells, viability study and behaviour during digestion (Oral presentation)

38th EFFoST International Conference 2024, Bruges, Belgium — 12-14 November 2024

- PA24. Patroklos Vareltzis, Sotirios Patsios. Symbiotics in the metabolic syndrome and obesity; the example of *Yarrowia Lipolytica* (Poster presentation)
- PA25. Evangelia Pasidi, Patroklos Vareltzis. Matrix and pH effect on Vitamin D3 bioaccessibility and bioavailability (Poster presentation)

61st European High Pressure Research Group Meeting (61st EHPRG Meeting), Porto Palace Hotel, Thessaloniki, Greece — 1-6 September 2024

- PA26. N. Sidirokastritis, P. Vareltzis. High Pressure Processing effect on food contaminants; the role of the food matrix (Oral presentation)

10th Panhellenic Conference of the Working Groups of the Hellenic Atherosclerosis Society, Greece — city not stated in the folder — 2023

- PA27. Patroklos Vareltzis. Symbiotic foods and their role in metabolic syndrome and obesity (Oral presentation)

13th Panhellenic Conference on Alzheimer's Disease (PICAD) & 5th Mediterranean Conference on Neurodegenerative Diseases (MeCoND), Thessaloniki, Greece — 09-12/02/2023

- PA28. Vasileios Papaliagkas, Patroklos Vareltzis. The role of an egg-based functional beverage in vitamin levels in patients with Mild Cognitive Impairment (Presentation)

37th EFFoST International Conference 2023, Valencia, Spain — 6-8 November 2023

- PA29. Patroklos Vareltzis, Smaro Kyroglou and Vasiliki Papatheologou. EFFECT OF SPRAY AND FREEZE DRYING ON ANTIOXIDANT ACTIVITY OF DISTILLED LAVENDER AND OREGANO WASTE (Poster presentation)
- PA30. Smaro Kyroglou, Patroklos Vareltzis. EFFECT OF CONCENTRATION, TEMPERATURE AND Z-POTENTIAL ON THE RHEOLOGICAL PROPERTIES AND CONSISTENCY OF PEACH PUREE (Poster presentation)

7th Panhellenic Conference "Meat and its products", Greece — city/venue not stated in the programme printout in the folder — 3-5 February 2023

- PA31. P. Karatsioli, I. Kazakos, A-M. Menelaou, K. Parmaxi and P. Vareltzis. Preparation of a stable red pigment with potential application in heat-treated meat products (Oral presentation)

13th Panhellenic Scientific Conference on Chemical Engineering, Conference & Cultural Centre of the University of Patras, Patras, Greece — 2-4 June 2022

- PA32. Panagiota Karatsioli, Anna Maria Menelaou, Konstantina Parmaxi, Patroklos Vareltzis. Study of the reaction of chlorogenic acid with tryptophan and of the physicochemical characteristics of the product (Poster presentation)
- PA33. S. Kyroglou, R. Laskari, P. Vareltzis. OPTIMISATION OF COLD BREW COFFEE EXTRACTION UNDER REDUCED PRESSURE: EFFECT OF THE PROCESS ON THE PHYSICOCHEMICAL AND SENSORY CHARACTERISTICS OF COLD BREW COFFEE (Poster presentation)
- PA34. N. D. Sidirokastritis, I. Tsiantoulas, C. Tananaki, P. Vareltzis. THE EFFECT OF HIGH HYDROSTATIC PRESSURE (HHP) ON TETRACYCLINE HYDROCHLORIDE (HTC) AND SULFATHIAZOLE (STZ) RESIDUES IN FOODS. COMPARISON WITH HEAT AND ULTRASOUND TREATMENT (Presentation)

- PA35. Dimitra Barmpoudi, Evi Pasidi, Christina Vasileiou, Nikolaos Tyrovouzis, Kyriakos Chatzidimitriou. PREDICTION OF THE GROWTH OF L. MONOCYTOGENES AT CONSTANT AND FLUCTUATING TEMPERATURES USING AN ARTIFICIAL NEURAL NETWORK (ANN) [the printed programme shows the placeholder title “ABSTRACT LISTERIA MONOCYTOGENES” for this entry] (Poster presentation)
- PA36. Stylianos Floros, Alexandros Toskas, Evangelia Pasidi, Patroklos Vareltzis. EFFECT OF THE HUMAN DIGESTIVE SYSTEM ON THE OXIDATION AND BIOACCESSIBILITY OF OMEGA-3 FATTY ACIDS (programme title; the corresponding full paper in the folder is titled “BIOACCESSIBILITY AND OXIDATIVE STABILITY OF OMEGA-3 FATTY ACIDS IN SUPPLEMENTS, SARDINES AND ENRICHED EGGS STUDIED USING A STATIC IN VITRO GASTROINTESTINAL MODEL”) (Poster presentation)
- PA37. S. Kyroglou, I. Tsakas, G. Karapetsas, P. Vareltzis. STUDY OF THE EFFECT OF CONCENTRATION AND TEMPERATURE ON THE RHEOLOGICAL PROPERTIES OF PEACH AND APPLE PUREE (Oral presentation)
- PA38. E. Pasidi, M. Konstantinidis, D. Kleanthous, G. Dagkli, E. Kikkinides, P. Vareltzis. VITAMIN D: STUDY OF BIOACCESSIBILITY AND OF THE EFFECT OF GASTRIC pH - MODELLING (Oral presentation)

7th International Conference on Food Digestion (ICFD2022), organised within the INFOGEST research network by Teagasc; Maryborough Hotel, Cork, Ireland — 3rd May 2022 to 5th May 2022

- PA39. Stylianos Floros, Evaggelia Pasidi, Patroklos Vareltzis. Bioaccessibility of omega-3s and vitamin D in supplements, naturally rich and fortified foods using a static in vitro gastrointestinal model (Poster presentation)

FFC’s 30th International Conference — “Mediterranean Diet, Functional Foods and Bioactive Compounds: Science and Practice” (30th International Conference of the Functional Food Center / 18th International Symposium of ASFFBC), Department of Food Science and Nutrition, University of the Aegean, Myrina, Lemnos, Greece (in-person and virtual/live online event) — September 23-25, 2022

- PA40. Patroklos Vareltzis, Avrakomi Matzaridou, Vasileios Papaliagkas. Functional Foods based on liquid egg-white protein (Oral presentation)

5EUGSC — 5th EuChemS Conference on Green and Sustainable Chemistry (name abbreviated as “5EUGSC” on the registration invoice), Thessaloniki, Greece — 2021

- PA41. Stergiou A., Vakratsas G., Vareltzis P. Recovery and antioxidant potential of functional components from oregano essential oil industry wastes (Presentation)

9th Jordan International Chemical Engineering Conference (JChEC09), hybrid, organised by the Chemical Engineering Division of the Jordan Engineers Association, Amman, Jordan — 12-14 October 2021

- PA42. Anna Maria Menelaou, Konstantina Parmaxi and Patroklos Vareltzis. Ultrasound effect on 5-CQA and tryptophan reaction: Assessment of the reaction kinetics and product’s physicochemical characteristics (Oral presentation)

9th Virtual Panhellenic Conference of the Greek Lipid Forum “Current Trends in the Field of Lipids”, Greek Lipid Forum (member of Euro Fed Lipid) — virtual conference, Greece — 22 October 2021

- PA43. S. Floros, P. Vareltzis. Study of the bioaccessibility of omega-3 fatty acids throughout the human gastrointestinal tract (Poster presentation)

Food BioTech Conference 2021, organised by ITMO University (online) — 23-24 August 2021

- PA44. Angeliki Avramidou, Patroklos Vareltzis, Amalia Aggeli. Extraction of collagen and hyaluronic acid from egg shell membrane (Presentation)
- PA45. Christina Vasileiou, Nikolaos Tyrovouzis, Kyriakos Chatzidimitriou, Evangelia Pasidi, Patroklos Vareltzis. Growth of Listeria monocytogenes under constant and variable temperatures in BHI broth and milk (Oral presentation)
- PA46. Stylianos Floros, Patroklos Vareltzis. Study of the bioaccessibility of omega-3 fatty acids throughout the human gastrointestinal tract (Poster presentation)

PART B — Work as Assistant Professor before tenure (January 2018 – March 2021) — 9 presentations at 7 conferences

12th Panhellenic Conference on Alzheimer’s Disease & 4th Mediterranean Conference on Neurodegenerative Diseases (PICAD & MeCoND 2021), held online, Greece — 18-21 February 2021

- PB1. Patroklos Vareltzis, Vasileios Papaliagkas. Functional beverage based on egg white enriched with B12 and folic acid (Oral presentation)

1st Online Conference (Symposium) of Young Scientists “Mineral Resources – Environment – Chemical Engineering”, University of Western Macedonia, Faculty of Engineering (Departments of Chemical Engineering & Mineral Resources Engineering), Kozani, Greece — held online — 26-28 February 2021

PB2. Sidirokastritis D.N., Fotiadi D., Karazafeiris E., Tananaki C., Vareltzis P. EFFECT OF HIGH PRESSURE ON THE RESIDUES OF ACARICIDES AND ANTIBIOTICS IN LIQUID FOODS (Oral presentation)

7th Environmental Conference of Macedonia, organised by the Association of Greek Chemists – Regional Branch of Central & Western Macedonia, Thessaloniki, Greece — 30 October - 1 November 2020

PB3. Ioannou I., Aggeli A., Vareltzis P. STUDY OF EGG SHELL PROPERTIES AND RECOVERY OF BIOFUNCTIONAL COMPONENTS (Poster presentation)

ISEKI-Food e-conference 2020 — “Food Quality and Texture in Sustainable Production and Healthy Consumption”, organised by the ISEKI-Food Association with the University of Agronomic Sciences and Veterinary Medicine of Bucharest, Bucharest, Romania (held online)

PB4. Evangelia PASIDI, Nikolaos TYROVOUZIS, Kyriakos CHATZIDIMITRIOU, Patroklos VARELTZIS. Growth of *Listeria monocytogenes* under constant and fluctuating temperatures. (Poster presentation)

66th Scientific Conference with International Participation “Food Science, Equipment and Technology - 2019”, University of Food Technologies (UFT), Plovdiv, Bulgaria — October 11-12, 2019

PB5. Patroklos Vareltzis, Irene Gargali, Smaro Kiroglou, Marina Zeleskidou. Production of instant coffee from cold brewed coffee; process characteristics and optimization (Poster presentation)

PB6. Patroklos Vareltzis, Konstantina Thanasoulia, Smaro Kiroglou. Optimization of vacuum assisted cold extraction of ground coffee beans (Oral presentation)

Green Chemistry conference, Athens, Greece — 18-20 October 2019

PB7. Georgios Vakraatsas and Patroklos Vareltzis. RECOVERY OF ANTIOXIDANT INGREDIENTS FROM OREGANO OIL DISTILLATION PROCESS (Oral presentation)

PB8. Polichronis Filippou, Patroklos Vareltzis and Anastasios J. Karabelas. RECOVERY OF FUNCTIONAL INGREDIENTS FROM WINE LEES AND INVESTIGATION OF THEIR ANTIOXIDATIVE PROPERTIES (Oral presentation)

Panhellenic Conference “Meat and its products” — Friday 1 – Sunday 3 February 2019

PB9. Vareltzis P., D. Petridis, A. Petropoulou, F. Tsamitropoulou, P. Raizi, N. Kemanetzi. Incorporation of natural functional components into meat preparations aiming at the replacement of chemical additives within the framework of the circular economy (Oral presentation)

PART C — Work before appointment (up to January 2018) — 16 presentations at 14 conferences

9th International Conference on Instrumental Methods of Analysis: Modern Trends and Applications (IMA 2015), Kalamata, Greece — 2015

PC1. Tanis, D., Vareltzis, P., Rigas, P.G. et al. Design characteristics of a post-column derivatization system for tetrodotoxin analysis (Poster presentation)

3rd International Exergy, Life Cycle Assessment and Sustainability Workshop & Symposium (ELCAS-3), Nisyros, Greece — 7–9 July 2013

PC2. Vareltzis, P., Tsirekas, E., Stylianou, S., Zouboulis, A.I., Samaras, P. The use of a low-energy hybrid membrane process for water treatment (Oral presentation)

11th International Congress on Engineering and Food (ICEF 11), Athens, Greece — May 2011

PC3. Vareltzis, P., Undeland, I. Challenges and solutions of a novel muscle-food processing technology: acid and alkaline solubilization (Poster presentation)

PC4. Stefanakis, A.G., Stavrakakis, E.K., Adamopoulos, K.G., Vareltzis, P.K., Goula, A.M. Effect of various proteins on the characteristics and syneresis of tzatziki (Poster presentation)

4th International Congress of Aquatic Biology and Fisheries, Volos, Greece — June 2011

PC5. Vareltzis, P., Undeland, I. Production of “surimi” from cod fillets (*Gadus morhua*) and blue mussels (*Mytilus edulis*) using two different techniques: the traditional and the acid/alkali solubilization method (Oral presentation)

7th International Conference “IMA 2011 — Instrumental Methods of Analysis: Modern Trends and Applications”, Chania, Crete, Greece — 18–22 September 2011

PC6. Tanis, D., Vareltzis, P., Rigas, P.G. et al. NBD-Cl as a new post-column reagent for HPLC analysis of amino and imino acids (Oral presentation)

8th Panhellenic Scientific Congress of Chemical Engineering, Thessaloniki, Greece — May 2011

PC7. Vareltzis, P. et al. Effect of vacuum packaging on fresh sardines during refrigerated storage (Oral presentation)

2nd Panhellenic Conference “Meat and its products”, Athens, Greece — September 2010

PC8. Vareltzis, P. et al. Improvement of the water holding capacity of cooked minced beef by the addition of various salts and protein solutions (Oral presentation)

WEFTA Annual Meeting, Florence, Italy — September 2008

PC9. Vareltzis, P., Undeland, I. Functional properties of a protein-rich paste produced from blue mussels (*Mytilus edulis*) using acid or alkaline solubilization (Oral presentation)

37th WEFTA Annual Meeting, Lisbon, Portugal — 24–27 October 2007

PC10. Vareltzis, P., Undeland, I. A multivariate approach and evaluation of lipid recovery from lean and fatty tissues using CHCl₃ and MeOH extraction (Oral presentation)

PC11. Vareltzis, P., Undeland, I. Production of protein isolate from blue mussel meat using a pH-shifting method with or without the addition of citric acid and calcium chloride (Oral presentation)

5th International Congress of Food Science, Thessaloniki, Greece — March 2007

PC12. Vareltzis, P., Hultin, H.O. Atlantic cod (*Gadus morhua*) microsomal fraction: effect of pH on its physicochemical properties and the interaction with hemoglobin (Oral presentation)

EuroFed Lipid Congress, Gothenburg, Sweden — September 2007

PC13. Vareltzis, P., Undeland, I. Evaluation and optimization of lipid recovery from lean and fatty fish tissue using Response Surface Methodology (Oral presentation)

AOCS Annual Meeting, St. Louis, Missouri, USA — May 2006

PC14. Vareltzis, P., Hultin, H.O. Atlantic cod microsomal fraction: structural properties, susceptibility to lipid oxidation and hemoglobin pro-oxidative properties as affected by pH (Oral presentation)

IFT (Institute of Food Technologists) Annual Meeting, New Orleans, Louisiana, USA — July 2005

PC15. Vareltzis, P., Hultin, H.O. Effect of low pH and citric acid–calcium chloride on precipitation and oxidation stability of microsomal suspensions (Oral presentation)

IFT (Institute of Food Technologists) Annual Meeting, Las Vegas, Nevada, USA — July 2004

PC16. Vareltzis, P., Hultin, H.O. Inhibition of lipid oxidation during processing of Atlantic cod (*Gadus morhua*) using citric acid and calcium chloride (Poster presentation)