



## Doctoral Vacancy Announcement form

**Research Topic Title:** "Spectroscopic and Chromatographic Study of Bioactive/Anticancer Microcomponents of Olive Oil"

**No. of Openings:** 1 (one)

**Description:** Olive oil constitute the basis of the Mediterranean diet, and is intertwined with the history, development and culture of Cyprus. Although olive oil mostly consists of components such as triglycerides of fatty acids, it also contains notable amounts of microcomponents such as phenolic molecules which have antioxidant, chemotherapeutic and anticancer properties. Methodologies for their isolation will be developed while characterization studies will be conducted using mainly chromatographic and spectroscopic techniques.

**Required Qualifications:** Candidates for the above position must hold a Bachelor's and Master's Degree from an accredited University in one of the following fields: Chemistry, Food Chemistry, Food Science or other related discipline. Previous relevant research experience will be considered. In addition, candidates must have a very good command of the English language. The evaluation may also include a personal interview of the candidates. Candidates must provide the names of three professors from academia who can provide recommendations for the candidate when asked

**Funding:** Currently, there is no scholarship for this position. Partial financial support there may be offered for candidates qualified to (a) offer work as teaching assistants, (b) to receive internal scholarships awarded by the university on the basis of their excellence, and (c) participate in future research programs related to this field

**Research Advisor:**

**Name/Surname:** Chryssoula Drouza

**Position:** Associate Professor

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## Doctoral Vacancy Announcement form

**Research Topic Title:** “Study of the microbiome of dairy products for potential functional and/or technological properties for the production of value-added products”

**No. of Openings:** 1 (one)

**Description:** The microbiome of dairy products is a source of various microorganisms where they may contribute with their properties (technological or otherwise) to the production of products with functional properties (e.g. antimicrobial activity) or product typicality properties (e.g. aromatic and other organoleptic profile). The study concerns technological and microbiological characteristics as well as molecular characterization of the genetic background of the traits of interest.

**Required Qualifications:** Candidates for the above position must possess a Bachelor's and Master's Degree from a recognized university in one of the following fields: Food Science and Technology, Agricultural Science, Dairy Science and Technology, Food Microbiology/Biotechnology or other related discipline. Previous relevant research experience is an added advantage. In addition, candidates must have a very good command of the English language. Candidates will be interviewed for the current position. Applicants are advised to submit a letter of their interests and vision in the relevant field of microbiology and food technology showing independent thinking and ideation capacity proving their potential as leaders in research. The Teams of Agricultural Microbiology and Biotechnology and Dairy Science and Technology are equal opportunity, motivational and inspirational teams for all applicants and their members.

**Funding:** The PhD candidate can potentially be employed as a teaching assistant, receive, based on his excellence, an internal scholarship from the University or another source, while he can participate in funded research projects, which can secure him funding.

**Research Advisor:**

**Name/Surname:** Dimitris Tsaltas/ Photis Papademas

**Position:** Professor/ Associate Professor

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## Doctoral Vacancy Announcement form

**Research Topic Title:** “Investigation of the Effects of Dietary Polyphenols on Pathogenic and Probiotic Microorganisms”

**No. of Openings:** 1

**Description:** Dietary polyphenols are secondary metabolites found in plant-based foods and are primarily known for their antioxidant, antimicrobial, and anti-inflammatory properties. The purpose of the dissertation is to further investigate the effect of dietary polyphenols on pathogenic and probiotic microorganisms, focusing on understanding how polyphenols may influence the gut microbiome and its balance. The interaction of polyphenols with the microbiome is significant, as it could provide new strategies for improving gut health through diet.

Dietary polyphenols are plant compounds found in various foods and are mainly known for their antioxidant and anti-inflammatory properties. The purpose of the dissertation is to further investigate the effect of dietary polyphenols on pathogenic and probiotic microorganisms, focusing on understanding how polyphenols might influence the gut microbiome and its balance. The interaction of polyphenols with the microbiome is significant, as it could provide new strategies for improving gut health through diet.

**Required Qualifications:** Bachelor and Master of Science degree in Agricultural Sciences, Food Science and Technology, Chemistry, Pharmaceutical Sciences or related disciplines. Applicants must have an excellent working knowledge of the English language. Previous relevant research experience will be considered. Candidates will have to support interview for the current position.

**Funding:** The candidate can potentially be employed as a teaching assistant, receive an internal scholarship from the University, based on his/her excellence, while he/she can participate in funded research projects which potentially can secure a scholarship.

**Research Advisor:**

**Name/Surname:** George Botsaris

**Position:** Associate Professor

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## Doctoral Vacancy Announcement form

**Research Topic Title:** “Greenhouse crops and intensive cultivation systems (i.e. Hydroponics) for the vegetables and Aromatic Plant production”

**No. of Openings:** 2 (Two)

**Description:** The positions refer to the study of vegetables and/or aromatic and medicinal plants in intensive growth systems, e.g. Hydroponics in greenhouse crops. Emphasis is placed on endemic plants of Cyprus or plants of increased nutritional value and properties, with the aim of studying them and their response to abiotic stress. Biofortification and bioaccumulation are also research fields of our interest. More information on the studies carried out from the group, on the website <http://www.cut.ac.cy/hydro-aromatic-plants>

**Required Qualifications:** Bachelor and Master from an accredited University in Agricultural Sciences or Biology or related disciplines. Applicants should be fluent in English. Previous relevant research experience will be considered. Candidates will have to support interview for the current position.

**Funding:** No funding is foreseen for the positions at this stage. Chosen candidate may be hired as teaching assistant, or upon his/her performance acquire internal scholarships. The candidate may be funded through external funding sources (research or services).

**Research Advisor:**

**Name/Surname:** Nikolaos Tzortzakis

**Position:** Associate Professor

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## Doctoral Vacancy Announcement form

**Research Topic Title:** “Postharvest Physiology and Technology of Fresh Produce/ Alternative processing methods and their effects on quality and safety”

**No. of Openings:** 1(One)

**Description:** The position refers to the post-harvest physiology and technology of fresh products with an emphasis on the preservation of vegetables and/or aromatic and medicinal plants both with a combination of physical/chemical methods but mainly with the use and evaluation of natural products/components e.g. essential oils and plant extracts. Emphasis is placed on evaluation of antioxidant, antimicrobial and other biocidal properties of plant products, but also to enhance nutritive value of the final commodity. More information on the studies carried out on the website <http://www.cut.ac.cy/hydro-aromatic-plants>

**Required Qualifications:** Bachelor and Master of Science degree in Agricultural Sciences, Food Science/Technology or Food Chemistry or other relevant degree in the area. Applicants should be fluent in English. Previous relevant research experience will be considered. Candidates will have to support interview for the current position.

**Funding:** No funding is foreseen for this position at this stage. Chosen candidate may be hired as teaching assistant, or upon his/her performance acquire internal scholarships. The candidate may be funded through external funding sources (research or services).

**Research Advisor:**

**Name/Surname:** Nikolaos Tzortzakis

**Position:** Associate Professor

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## Doctoral Vacancy Announcement form

**Research Topic Title:** "The use of alternative forage plants and pastoralism in Cyprus. Research into animal physiology, productivity and quality of the products "

**No. of Openings:** 2 (Two)

**Description:** The purpose of the research project is to study the use of alternative forage plants in ruminant nutrition both for the improvement of the end-products (eg halloumi) and for the multiple effects this has on the environment, the soil and the local community. Thus, a part of the research concerns the use of pastures and forage pastures, as applied today in Cyprus, while the main part of the research concerns field experiments with new cultivation practices (e.g. no-tillage), with alternative plants (forage legumes, mixtures) adapted to dry climates for forage production and use in ruminants. This PhD investigates (a) possible alternative forage plants and their cultivation methods in Cyprus, (b) their use for feeding ruminants, to create special products (eg grass-fed halloumi) (c ) the effect they may have on their digestive physiology, the quantity/quality of milk, as well as on the expression of genes involved in metabolism, and (d) the overall effect that this use of alternative plants has on social, economic and environmental level (quality local products, reduction of feed imports, increased forage production and carbon sequestration, soil health and improved water retention, etc.).

**Required Qualifications:** Applicants for the above post must possess a Bachelor's and Master's Degree (or only a Bachelor's Degree with a grade above 8.5/10) from a recognized University in one of the following fields: General Agriculture or Animal Production or Crop Production or Veterinary Medicine or Biology or other related field and want to carry out research on alternative forage plants and ruminants. In addition, candidates must have an excellent knowledge of the Greek and English languages (level C1-C2), a driving license, while previous research experience is considered an additional qualification.

**Funding:** The candidate(s) will receive a monthly stipend that will cover accommodation and living expenses from external funding secured within the framework of the research project (PRIMA), and may potentially be employed as a teaching assistant, or receive, based on excellence, an internal scholarship from the University or other source.

**Research Advisor:**

**Name/Surname:** Ouranios Tzamaloukas

**Position:** Associate Professor,

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## Doctoral Vacancy Announcement form

**Research Topic Title:** “Valorization of Mediterranean native plants for the development of novel functional foods and innovative food packaging systems”

**No. of Openings:** 1

**Description:** Plant secondary metabolites are extraordinary sources of bioactive compounds eliciting many beneficial health effects for human health. The present study is going to evaluate the phytochemical composition and health effects of a panel of native plants grown in Cyprus. The development of new ultrasound assisted and microwave assisted extraction technologies with the use of “eco-friendly” solvents for the recovery of bioactive compounds from plant materials will be also investigated. Furthermore, the effective valorization of plant extracts for the development of novel functional foods and innovative food packaging systems will be studied.

**Required Qualifications:** Bachelor and Master of Science degree in Agricultural Sciences, Food Science and Technology, Chemistry, Pharmaceutical Sciences or related disciplines. Applicants must have an excellent working knowledge of the English language. Previous relevant research experience will be considered. Candidates will have to support interview for the current position.

**Funding:** The candidate can potentially be employed as a teaching assistant, receive an internal scholarship from the University, based on his/her excellence, while he/she can participate in funded research projects which potentially can secure a scholarship.

**Research Advisor:**

**Name/Surname:** Vlasios Goulas

**Position:** Assistant Professor

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## Doctoral Vacancy Announcement form

**Research Topic Title:** “Evaluating the Socio-Economic and Environmental Performance of Mediterranean Agroecosystems: The case of Cyprus agriculture”

**No. of Openings:** 1 (one)

**Description:** Sustainable Intensification (SI) is both a practice and a strategic farm management approach that balances productivity with sustainability. In Mediterranean agriculture, and particularly in Cyprus, SI has the potential to enhance environmental benefits while addressing climate, cultural, and spatial challenges. Key practices include ecological intensification, crop diversification, and measures to improve soil health and resilience. However, identifying SI practices that are both effective and acceptable to farmers is essential for successful implementation. This PhD project aims to promote SI in Cyprus by:

- Identifying and evaluating SI practices suited to Cyprus, such as agroforestry, high nature value farmland, and soil health improvements.
- Assessing the socio-economic and environmental performance of Mediterranean agroecosystems to understand the factors influencing SI adoption.

By addressing these objectives, the research will provide insights into overcoming barriers and leveraging opportunities for sustainable agricultural development. As interest grows in balancing productivity with environmental stewardship, this study will offer evidence-based recommendations to inform farm management strategies and policy decisions. Supporting SI adoption in Cyprus is critical to enhancing long-term agricultural resilience, ensuring food security, and promoting environmentally sustainable farming systems.

**Required Qualifications:** Candidates must hold an MSc in Agricultural Economics or other disciplines related to Environmental Economics, Farm Business Management and Economics. Candidates with background and studies relevant to Socio-Economics and Sustainability disciplines will also be considered.

Essential Skills	Desirable skills
Proficiency in statistical analysis	Understanding of crop science, soil science, and ecological principles
Ability to design and conduct research	Skills in Geographic Information Systems (GIS)
Conducting comprehensive literature reviews	Understanding of ecosystem services, biodiversity, and environmental sustainability
Strong writing skills	Familiarity with sustainable agricultural practices





Background of agricultural economics	Ability to plan and manage research projects
Insight into socio-economic factors influencing the adoption of practices/technologies	Flexibility to adapt research plans based on new findings or changing conditions
Ability to engage with farmers, policymakers, and other stakeholders	
Ability to identify and address challenges	
Skills to critically evaluate research findings	

**Funding: Tuition:** Tuition Fees may be covered by the University for the first doctoral student (to be selected) of each new faculty member, according to the Rector's Council decision, during its 239th meeting, dated 29/10/2024)

**Research Advisor:**

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