



HELLENIC REPUBLIC MINISTRY OF DEVELOPMENT GENERAL SECRETARIAT FOR RESEARCH & INNOVATION



Patras, 21.03.2025 Ref. No.: 172683



This project has received funding from the European Union's Horizon Europe (2021-2027) research and innovation programme under grant agreement No 101137639.



Invitation for Expression of Interest:

PhD Candidate "Assessment of the impact of aerosols on climate with a combination of radiative transfer models and remote sensing"

The Institute of Chemical Engineering Sciences, Foundation of Research and Technology - Hellas, (FORTH/ICE-HT) is seeking applicants for one PhD Candidate position in the context of the research project "Clouds and climate transitioning to post-fossil aerosol regime (CleanCloud) GA- 101137639 — CleanCloud — HORIZON-CL5-2023-D1-01 / HORIZON-CL5-2023-D1-01-04" which is implemented under the EU- Horizon Europe Research and Innovation Action (2021-2027).

Job Description

To conduct research under a work assignment or fixed-term employment contract in the framework of the aforementioned project "CleanCloud" and in work packages: WP1, WP2, WP3, WP4, WP5, WP10, WP11, WP12, WP13, WP14, WP15, WP16 and WP17. The candidate will be responsible for developing and optimizing pH-sensitive sensors monitored via Raman Spectroscopy and/or Surface-Enhanced Raman Spectroscopy (SERS). This research aims to accurately assess atmospheric acidity levels to enhance the detection of primary aerosol, and their aging through a combination of laboratory and field experiments. Additionally, the candidate will focus on improving the sensitivity and robustness of pH-sensitive substrates for application in ambient conditions. This work has the potential to yield critical insights into atmospheric processes and contribute to the advancement of effective environmental policies. CleanCloud will address the major gaps impeding robust aerosolcloud interaction (ACI) assessments, improve their representation in current and next generation kilometer-scale climate models, quantify and understand their regional and temporal effects, and how they will evolve in the transition to the post-fossil regime. To accomplish this, CleanCloud will 1) carry out targeted field experiments in European climate hotspots; and 2) assess the role of aerosols in the life cycle of convective systems, focusing on precipitation formation and the impacts on the hydrological cycle, and 3) enhance the exploitation of data centres, measurement programs, international campaigns, laboratory studies, and models. With these, CleanCloud will profoundly strengthen European Research on climate change, significantly contribute to upcoming climate assessments, and benefit society through models that enable improved weather and seasonal predictions.

Location: FORTH/ICE-HT, Patras, Greece

Duration: up to 12 months, with the potential of renewal or extension according to the needs of the project and performance

Salary: up to approximately 1580 Euros per month, (total cost of the employer, including social security and taxes), depending on qualifications.

Envisaged starting date: 01/05/2025



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Requirements and Qualifications

The candidate is required to hold a Diploma or BSc and a Master's degree (MSc) in Environmental Engineering or Chemical Engineering, or a related field of Engineering. Additionally, the candidate should be currently registered as a PhD candidate. Moreover, candidates must be fluent in Greek language and have good knowledge of English (at least level B2) language.

The evaluation of the candidacies will be based on the following criteria and qualifications:

Qualifications	Weight	Evaluation criteria
Relevance of the MSc thesis to the subject of the position, e.g. spectroscopic techniques experience / aerosol pH	20	Demonstrated through MSc diploma thesis: weak relevance: 7 points, medium relevance: 12 points, strong relevance: 20 points)
Participation in research projects in atmospheric science	20	4 points for each trimester, up to 20 points
BSc or diploma grade	20	Grade X 2 points
MSc degree grade	20	Grade X 2 points
Participation to conferences	20	10 points / presentations and/or poster Maximum: 20 points
Overall	100	

Application Submission

Interested candidates who meet the aforementioned requirements should submit their applications, no later than 3/4/2025, 16:00, by email to Kleanthi Zacharopoulou: <u>kleanthi@iceht.forth.gr</u>. In order to be considered, the application must include:

- Application letter
- CV
- Scanned copies of academic titles & English language certificate
- Certificate of registration as a PhD candidate
- Copy of MSc diploma thesis
- Copies of oral or poster presentations to conferences
- Employer's certificate and any other official documentation of the required experience

Any application received after the deadline will not be considered for the selection.

Selection Procedure

Applications that are received on time will be evaluated by a scientific committee using the criteria mentioned above. If necessary, certain candidates will be invited to a personal interview with the committee.

Interview Criteria:

(a) Background in the objective of the assignment (5 points). (b) Organizational and communication skills (5 points). (c) Team-spirit and self-motivation (5 points). (d) Commitment to achieving the goals (5 points)



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The outcome of the selection will be announced on the website of FORTH/ICE-HT as well as on the website of "DIAVGEIA".

In case of titles and qualifications awarded by foreign Higher Education Institutions, the provisions of the Law 55/2023 (article 36) and 4957/2022 (article 304) are implemented.

Selection Announcement

The result of the selection will be announced on the website of: FORTH/ICE-HT.

Candidates have the right to appeal the selection decision, by addressing their written objection to the FORTH/ICE-HT Research Secretariat, e-mail: kleanthi@iceht.forth.gr, within five (5) days after the results announcement on the web.

Contact

For information and questions regarding the application and selection procedure, candidates are asked to contact the FORTH/ICE-HT Research Secretariat, e-mail: <u>kleanthi@iceht.forth.gr</u>, tel.: +30 2610 965278.

For information and questions about the advertised position and the research activity of the group or the Institute, candidates are asked to contact Professor Athanasios Nenes, tel: +30 2610 965343, e-mail: <u>athanasios.nenes@epfl.ch</u>.

General Protection Data Regulation

FORTH is compliant with all legal procedures for the processing of personal data as defined by the Regulation EU/2016/679 on the protection of natural persons with regard to the processing of personal data.

FORTH processes the personal data and relevant supporting documents that you have submitted to us. Processing of that data is carried out exclusively for the needs and purposes of this specific call. Such data shall not be transmitted to or communicated to any third party unless required by law.

FORTH retains the above data up to the announcement of the final results of the call, unless further process and reservation is required by law or for purposes of exercise, enforcement, prosecution of certain one's legitimate legal rights' as defined in the Regulation EU/2016/679 and/or in national law. We inform you that under the Regulation EU/2016/679 you have the rights to be informed about your personal data, access to, rectification and erasure, restrictions of process and objection to as provided by applicable regulation and national laws.

We acknowledge also to you, that you have the right to file a complaint to the national Data Protection Authority. For any further information regarding exercise of your personal data protection rights, you may contact the Data Protection Officer at FORTH at dpo@admin.forth.gr.

You have the right to withdraw your application and consent for the processing of your personal data at any time. We inform you that, in this case, FORTH shall destroy such documents and/or supporting documents submitted and shall delete the related personal data.

For FORTH/ICE-HT,

Theophilos Ioannides Director



