



Patras, 21.11.2025

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This project has received funding from the European Union's Horizon Europe (2021-2027) research and innovation programme under grant agreement No 101095457



Invitation for Expression of Interest:

Postdoctoral Research Assignment "Simulation of aerosol fluid mechanics in novel atmospheric sampling systems"

The Institute of Chemical Engineering Sciences, Foundation for Research and Technology - Hellas, (FORTH/ICE-HT) is seeking applicants for one postdoctoral research assignment in the context of the research project "Effects on Air quality of Semi-VOLatile Engine Emissions (EASVOLEE) GA- 101095457 — EASVOLEE — HORIZON-CL5-2022-D5-01 / HORIZON-CL5-2022-D5-01-07", which is implemented under the EU- Horizon Europe Research and Innovation Action (2021-2027).

Job Description

To conduct research under a work or an employment contract in the framework of the aforementioned project "EASVOLEE". The primary objectives of EASVOLEE are to: i) Quantify the contributions of secondary PM formation from transport engines to air quality problems in Europe, ii) Develop and identify health-related metrics, mitigation strategies, and policies to improve air quality limiting the concentrations of aerosol (organic, inorganic, nanoparticles, primary and secondary) due to vehicle exhaust. EASVOLEE will improve our understanding of organic emissions from vehicle exhaust including low-volatility (LVOCs), semi-volatile (SVOCs), intermediate volatility (IVOCs) and volatile organic compounds (VOCs). It will elucidate the corresponding secondary aerosol formation (both organic and inorganic) and characterize the health effects of these primary and secondary particles.

The objective of this position is to develop simulations of aerosol fluid mechanics in novel atmospheric sampling systems to allow the design of ultrafine particle samplers.

Location: FORTH/ICE-HT, Patras, Greece

Duration: up to 4 months, with the potential of renewal or extension according to the needs of the project and performance

Salary: up to approximately 2.600,00 € per month depending on qualifications (total cost of the employer, including social security and taxes)

Envisaged starting date: 1/01/2026

Requirements and Qualifications

Education level: PhD in Chemical Engineering or Mechanical Engineering on subject relevant to micro- and nano-scale material characterization and modeling.

The interested candidates must be fluent in both Greek and English (at least C1 level).

Publications in international journals and conference proceedings (at least 5).



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Experience in research projects funded by the European Commission (at least three years).
Experience in services to companies or other organizations on material characterization or modeling (at least two years).

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

Qualifications	Weight	Evaluation criteria
Publications relevant to micro- and nano-scale material modeling and characterization, in international journals and conferences/symposia proceedings	40	Number of publications in journals and conferences /symposia proceedings, 5 pts/publication, max. 40 pts
Participation in externally funded projects in the subject of micro- and nano-scale material modeling and characterization	40	Duration of participation in funded projects, 10 pts/year, max. 40 pts
Experience in services to companies or other organizations on material characterization or modeling	20	Duration of involvement in services on material characterization or synthesis, 5pts/year, max. 20pts
Overall	100	

Application Submission

Interested candidates who meet the aforementioned requirements should submit their applications, no later than 1/12/2025, 16:00, by email to Kleanthi Zacharopoulou: kleanthi@iceht.forth.gr.

In order to be considered, the application must include:

- Application letter
- CV with clear description of the simulation methods developed by the applicant
- Scanned copies of academic titles and language knowledge certificates
- Copies of the publications in peer-reviewed journals and conference/symposia proceedings
- Employer's certificate of the work experience and any other official document to certify the aforementioned required qualifications

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)

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.



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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: kleanthi@iceht.forth.gr, 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 Spyros Pandis, tel: +30 2610 969510, e-mail: spyros@chemeng.upatras.gr.

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

