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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 ultrafine particle distribution using PMCAMx-UF"

The Institute of Chemical Engineering Sciences, Foundation of Research and Technology - Hellas, (FORTH/ICE-HT) is seeking applicants for one postdoctoral research assignment to conduct research 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 the use of PMCAMx-UF for the simulation of the ultrafine particle size distribution. In PMCAMx these particles are still treated as non-volatile in the ultrafine size range. The information about the volatility of these particles obtained from EASVOLEE will be used for the corresponding parameterization.

Location: FORTH/ICE-HT, Patras, Greece

Duration: up to 6 months, with the potential of renewal or extension according to the needs of the project and performance

Salary: up to approximately 3.000,00 € per month depending on qualifications (total cost of the employer, including social security and taxes)

Envisaged starting date: 1/05/2025

Requirements and Qualifications

Candidates are required to hold a PhD in Chemical Engineering or Environmental Sciences. Moreover, candidates must have good knowledge of the Greek and English (at least level B2) language.

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



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Qualifications	Weight	Evaluation criteria
Publications in international peer reviewed journals on chemical transport models	40	3 points per publication with a maximum of 40 points
Experience in the use of the PMCAMx atmospheric chemical transport model	30	Duration of the proven research experience in the use of the PMCAMx atmospheric chemical transport model: 5 points / year, with a maximum score of 30 points
Experience in the use of the PSAT source apportionment algorithm	30	Duration of the proven research experience in the use of the PSAT source apportionment algorithm: 5 points / year, with a maximum score of 30 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: kleanthi@iceht.forth.gr.

In order to be considered, the application must include:

- Application letter
- CV
- Scanned copies of academic titles & English language certificate
- Copies of publications in peer-reviewed international journals on chemical transport models
- 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)

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.



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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



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