HELLENIC REPUBLIC
MINISTRY OF DEVELOPMENT
GENERAL SECRETARIAT FOR RESEARCH AND INNOVATION

FOUNDATION FOR RESEARCH AND TECHNOLOGY - HELLAS
INSTITUTE OF MOLECULAR BIOLOGY AND BIOTECHNOLOGY

P.N. 0441-P/130703
19 January 2024

One (1) Position for a Post-Doctoral Researcher

[Ref # ORZ-0583]

The Biosensors lab (https://www.gizeligroup.eu/), headed by Prof. Electra Gizeli, invites applications from **a postdoctoral scientist** for one position to work on the newly awarded EU **HORIZON-CL6-2023-ZEROPOLLUTION-01** project entitled "On-site biological sensing for aquatic pollutants and biohazards", Acronym: AquaBioSens.

Job Description:
Development of a biosensing portable platform for the detection of contaminants in seawater
The candidate will develop an autonomous and portable device to implement immuno-assays in the field for organic contaminants. A currently available 3D-printed device, consisting of an acoustic (SAW) biochip for detection a micropump for sample loading and paper-based microfluidics, will be used as the basis for further development. The successful applicant will work closely with collaborators in Dublin City University, and potentially have opportunities to participate in field testing in Greece, the UK and Ireland. Moreover, they will be encouraged to have an active role in shaping the project and developing their own research interests.

About the lab: The successful applicants will be expected to join a **multidisciplinary group** consisting of biologists, chemists, engineers, bio-physicists and material scientists and contribute in **scientific excellence** and **innovation-driven research** related to the development of assays for healthcare applications and aquatic-pollutants testing in the field. In addition, postdoctoral researchers are encouraged to **supervise** undergraduate and/or master students, participate in **technology transfer** events, contribute towards the **broad dissemination of scientific results** and **develop skills** related to presentations, grant-applications and scientific papers writing.

About the project:
AquaBioSens aims to decentralize aquatic hazard and pollution measurement tools, aligned with the EU Missions to "Restore the oceans and waters" and achieve a "clean environment with zero pollution by 2030". The project will develop portable devices to measure emerging contaminants, microbial biohazards, and heavy metals. The devices will employ cutting-edge techniques, including immunoassays for organic contaminants, RNA quantification for harmful microalgae and bacteria, and genetically modified whole cell biosensors for heavy metal quantification. The project will demonstrate and validate the devices in polluted coastal and freshwater environments in the UK, Ireland, and Greece, with the support of local government inspection agencies. Results will be widely disseminated to maximize the commercial potential of the technologies.

Required qualifications:
- BSc in in engineering, material sciences, physics or other relevant areas of engineering or physical sciences
- PhD in engineering, material sciences, physics or other relevant areas of engineering / physical sciences
- Publication record on biosensors, electronic-circuits design, analytical platforms- prototyping etc.
- Demonstrated 1 year (at least) of research work in the lab in the areas relevant to the project
- Excellent oral and written skills in English

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Desired qualifications / experience in some of the following areas / availability:

- Experience with device development (e.g. CAD software, 3D-printing, (micro)fluidics, rapid prototyping, PCBs, microcontroller platforms and programs, sensor fabrication, PCBs).
- Ability to start in the next 2-3 months

	Evaluation criteria	**Maximum score**
1.	BSc in in engineering, material sciences, physics or other relevant areas of engineering or physical sciences (Points = grade x 2)	20
2.	PhD in engineering, material sciences, physics or other relevant areas of engineering / physical sciences	YES/NO
3.	Publication record on biosensors, electronic-circuits design, analytical platforms- prototyping etc. (1 publication = 2 points)	20
4.	Demonstrated 1 year (at least) of research work in the lab in the areas of interest to the project (12-24 months = 5 points, >24 months = 10 points)	10
5.	Oral and written skills in the English language (proven by certificates or degrees obtained in English language) (B1 = 2 points, B2 = 5 points, C1 = 7 points, C2 = 10 points)	10
6.	Experience with device development (e.g. CAD software, 3D-printing, (micro)fluidics, rapid prototyping, PCBs, microcontroller platforms and programs, sensor fabrication, PCBs). (12-24 months = 10 points, >24 months = 20 points)	20
7.	Interview (general knowledge of the field, motivation, independence)	20
8.	Ability to start in the next 2-3 months	YES / NO
Total score		**100**

Contract Duration: 12 months with the possibility of extension for another three years needs
Salary: 1300-1600€ net per month depending on qualifications and experience
Envisaged starting date: 1st March or 1st April 2024
Application submission: Interested applicants should submit their application electronically by **January 29, 2024 @ 13:00 (Greece time)**

The application should consist of:
1. Application Form (see below)
2. CV
3. Brief statement of purpose
4. The names and contact details of two referees
5. Scanned copies of academic titles
6. Scanned copies proving all the qualifications

Submission of applications: orz0583@imbb.forth.gr

Evaluation procedure

Applications will be evaluated by a three-member evaluation committee. In case of interview procedure, applicants will be invited to participate in person or teleconference.

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.

The results of the selection will be announced on the website of IMBB-FORTH. Applicants have the right to appeal the selection decision, by addressing their written objection to the IMBB secretariat within five days since the results announcement on the web. Objections are submitted in one of the following ways: in person, by an authorized person, by post, by courier. They also have the right to access (a) the files of the applicants as well as (b) the table of applicants' scores (ranking of applicants results). All the above information related to the selection procedure will be available at the secretariat of IMBB-FORTH in line with the Hellenic Data Protection Authority. Access to personal data of co- applicants shall be limited to personal data (and relevant data) and supporting documents which have been the basis of the evaluation of the applicants for the specific post(s). Prior to the announcement of the personal data and/or documents of the co- applicants to the applicant, FORTH will inform the data subjects in an appropriate way.

The selected applicants will be notified personally regarding the success of his/her application and will be requested to submit certified copies of his/her degrees. If the submitted documents do not agree with the original application, the applicant will be dismissed.

GDPR Disclaimer

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 applicants have submitted. 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. Under the Regulation EU/2016/679, applicants have the rights to be informed about their personal data, access to, rectification and erasure, restrictions of process and objection to as provided by applicable regulation and national laws. Applicants have the right to file a complaint to the national Data Protection Authority. For any further information regarding exercise of personal data protection rights, applicants may contact the Data Protection Officer at FORTH at dpo@admin.forth.gr.

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

APPLICATION FORM

Name: _____
Surname: _____
Date of birth *(dd/mm/yy)*: _____
Address: _____
Telephone number: _____
Email address: _____

TO

FOUNDATION OF RESEARCH AND TECHNOLOGY (FORTH)
INSTITUTE OF MOLECULAR BIOLOGY AND BIOTECHNOLOGY

Hereby I submit my application for the position:
In the framework of the project: _____

Position code [Ref #] _____

Submitted with this application:

1. _____
2. _____
3. _____
4. _____
5. _____

I certify that:

A) I accept the terms and conditions of the job announcement
B) I possess all the necessary certificates and documents and I can present them in their original form to the committee without any delay if I am asked to do so
C) I am able to complete the project within the foreseen time -frame
D) all the information given in the framework of this application are accurate and true.

Date: _____

Applicant name

_____
(signature)