



Funded by  
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Project Code: 74666

### CALL FOR EXPRESSION OF INTEREST

(For submission of proposals for the conclusion of a project lease contract)

The Research Committee (Special Account for Research Funds) of the Aristotle University of Thessaloniki (ELKE AUTH), in the framework of the project “**Design for IGA-type discretization workflows**” funded under European Union– HORIZON 2021-2027, Marie Skłodowska-Curie, with Academic Head Athanasios Michailidis, Prof. Em. AUTH, invites candidates to submit proposals for **1 position** as described below, through the award of a project contract, for 36 months (starting from the signing of the contract) with a total anticipated remuneration **145.238,40 €** (VAT and taxes included). Contracts can be extended until the end date of the project 31-12-2026 (in case of extension until its completion) and within the approved limits of its budget.

**1 position / Doctoral Candidate (DC) /total anticipated remuneration up to 145.238,40 € (VAT and taxes included)/ for 36 months**

#### 1. PROJECT DESCRIPTION

- The researcher will undertake the preparation of a doctoral (PhD) thesis within the framework of the GECKO project entitled “Design for IGA-type discretization workflows”. Detailed information about the project can be found on the website: <https://gecko.cimne.com/>.  
Title of the doctoral thesis: **Implementation of IGA in the design and analysis workflow of machine elements and systems**  
*Although the basic principles of IGA are known for some decades, its application in industry is less spread than one would expect considering its fundamental advantage: the representation of real surfaces in a well-defined mathematical way instead of a discrete non-smooth finite element mesh. On the other hand, in many cases a multitude of analysis iterations must be performed to reach a competitive, successful design, making the need for accurate efficient procedures even more profound.*
- The researcher who will participate in the project as a PhD candidate must not already hold a PhD on the date of signing the contract and must meet the mobility criterion\*. Researchers who have successfully defended their doctoral thesis, but who have not yet formally been awarded the doctoral degree will not be considered eligible.
- The researcher **will be enrolled as Doctoral Candidate in the School of Mechanical Engineering AUTH** and he/she will collaborate with the Academic Head and other Researchers of the Project on the above-mentioned topic, which will be carried out in the context of the following work packages:  
*WP2: Dissemination, Training and Exploitation*  
*WP3: Solver technology (CFD & CSD)*

#### **Expected outcomes:**

- To achieve more accurate results at less computational cost by employing IGA analysis
- To narrow the gap between CAD and FEM.
- To develop procedures enabling accurate simulation of contacts in machine elements in an efficient way

### **Mobility requirements (Secondments):**

The project includes the following two international secondments (training trips) of a total duration of 8 months:

(a) TU Braunschweig, Germany, duration 4 months

(b) IDIADA, Spain, duration 4 months

### **Payments**

Maximum payment:	4.034,40 € per month
Living allowance:	2.774,40 € per month
Mobility allowance:	600,00 € per month
Family allowance:	660,00 € per month, (if applicable)

### **Requirements**

- **Conditional Acceptance:** Students in their final year of post-graduate education or in the final year of an Integrated Studies Course (Integrated Master, Dipl. Ing.) may also apply and if qualified, receive a conditional offer. If the applicant has not completed her/his studies, she/he should include a written statement from the degree administration office (or equivalent department), confirming that he/she is enrolled on the final year of her education and stating the expected completion date. If the applicant receives a conditional offer, the candidate should present the degree certificate upon enrolment.
- **\*Mobility Criterion (Mobility Rule):** At the time of recruitment, he/she must not have resided or carried out his/her main activity (work, studies, etc.) in Greece for more than 12 months in the 3 years immediately before the reference date (indicative start of the contract, December 2023).  
*This criterion is more flexible in case of candidates who are characterized as refugees, according to the Geneva Conventions. Specifically, for these candidates, the period before they are officially given the refugee status is not considered as a residence/work period in the host country. The residence/work period will be calculated from the day they were given the refugee status.*

## **2. REQUIRED QUALIFICATIONS**

- University Degree in Mechanical Engineering, Civil Engineering or closely related Course of an Engineering Highschool, University or Technical University, which should comply with Level 7 of the European Qualifications Framework (such as Bachelor and Master, Integrated Master, Dipl. Ing.) entitling the candidate to embark on a doctorate.
- Verified Knowledge of "Finite Element Method", "Computational Mechanics", "Machine Elements" (for Mechanical Engineers) or "Steel Structures" (for Civil Engineers) or closely related courses.  
*Note: The knowledge is verified by a relevant certificate, or by relevant diploma or master thesis, or by the successful completion of relevant courses (if the course title is not self-explanatory the syllabus should be provided)*
- Good knowledge of the English Language (Level B2)

## **3. ADDITIONAL QUALIFICATIONS**

- Verified knowledge of programming in Python and/or C++
- Verified knowledge of modelling in ANSA or other modelling environment
- Verified knowledge of the GitHub or/and GitLab environment
- *Note: The knowledge is documented with a relevant certificate or with a relevant bachelor's / master's dissertation / doctoral thesis or with relevant courses of the study cycle (detailed grade and if the correlation does not immediately result from the title of the course, the detailed course score must be accompanied by description of the course in the Study Guide) or with teaching of relevant courses (certificate of institution and / or contract).*
- Additional knowledge of English Language (Level C2)
- Interview
- Applied skills test.

#### 4. QUALIFICATIONS ASSESSMENT

	Qualifications criteria	Credits (Researchers)
1	Verified knowledge of programming in Python and/or C++	20
2	Verified knowledge of modelling in ANSA or other modelling environment	15
3	Verified knowledge of the GitHub or/and GitLab environment	15
4	English language (Level C2)	70
5	Interview	≤50
6	Applied skills test	≤50

**All the qualifications listed above are in relevance with the project requirements and objectives.**

#### 5. REQUIRED DOCUMENTS

1. Submission of Proposal - Statement (see appendix)
2. Solemn Declaration of Law 1599/1986 (see appendix), in which it is stated that:
  - At the time of recruitment, the candidate has not resided or carried out their main activity (work, studies, etc.) in Greece for more than 12 months in the 3 years immediately before the reference date.  
*(This criterion is more flexible in the case of candidates who have been declared refugees in accordance with the Geneva Convention. In particular, for those people, the period before their official designation as refugees is not counted as a residence / activity period in the beneficiary's country. This period will be calculated from the day of their recognition as refugees).*
  - The candidate does not have any research experience or in case he/she have already gained prior work experience in academia, he/she is in the first four years (full-time equivalent research experience) of his/her research career at the time of recruitment by the host organisation and has not been awarded a doctoral degree. Full-time equivalent research experience is measured from the date when you obtained the degree entitling you to embark on a doctorate, even if a doctorate was never started or envisaged. Part-time research experience will be counted pro-rata.
3. Detailed Curriculum Vitae
4. Copies of the Degrees  
Special cases:
  - a) In cases where the degree grade is a qualification/criterion and is not indicated on the relevant copy of the degree, the transcript of records should be submitted in addition, otherwise the specific qualification requested will not be marked.
  - b) Postgraduate and PhD students should submit a recent certificate (within the last three months) from the relevant University Department, showing that they have the relevant status (postgraduate/PhD student) at the time of submission of the proposal.
  - c) If the scientific field/specialisation is not evident from the degree:
    - For bachelor's and master's degrees, the transcript of records should be submitted,
    - For PhD candidates, if the scientific field/specialisation is not evident from the subject of the doctoral thesis, as indicated on the registration certificate from University's Department Secretariat, any other certificate documenting the above, signed by the Secretariat or the supervisor or the three-member committee, should be submitted.
    - For PhD holders, if the scientific field/specialisation is not evident from the doctoral degree, the electronic address of the doctoral thesis from the National Archive of Doctoral Dissertations should be included in the Curriculum Vitae. If the doctoral thesis was obtained from foreign institutions, the title and an abstract should be included in the Curriculum Vitae.
5. Copies of certificates and certifications of previous experience, as well as any other document that will certify the information mentioned in the CV and which are related to the Required or Additional qualifications-criteria of this call for expression of interest.

6. In order to prove that the criterion of publications in journals and/or conference announcements has been fulfilled, the candidate should include the required minimum information in the detailed CV, for journals, the title of the journal, the issue, the date of publication, the title of the publication, the authors, and for conferences, the title, the date and venue and a copy of the programme.

## 6. INTERVIEW – APPLIED SKILLS TEST

Qualified candidates will be invited for an interview (after being notified in writing by email). Candidates who do not attend the interview will be rejected.

The topics covered in the interview and the grading system that will be used are shown in the following table:

	QUALIFICATION – INTERVIEW CRITERIA	Success Level - Score	Maximum score
1	Efficiency in oral communication	Insufficient (0) Sufficient (5) Good (10) Very Good (15)	15
2	Time management and work organization	Insufficient (0) Sufficient (5) Good (10) Very Good (15)	15
3	Ambitions and dedication	Insufficient (0) Sufficient (5) Good (10) Very Good (15)	15
4	Adaptability in new environment	Insufficient (0) Sufficient (5) Good (10) Very Good (15)	15

The topics of the applied skills test and the grading system that will be used are shown in the following table:

	QUALIFICATION – APPLIED SKILL CRITERIA	Success Level - Score	Maximum score
1	Algorithmic thinking	Insufficient (0) Sufficient (5) Good (10) Very Good (15)	15
2	Engineering awareness, Dealing with complex modelling problems	Insufficient (0) Sufficient (5) Good (10) Very Good (15)	15
3	Wide range of engineering knowledge background (numerical analysis, mathematics, statics, strength of materials, dynamics)	Insufficient (0) Sufficient (5) Good (10) Very Good (15)	15
4	Research skills of technical solutions	Insufficient (0) Sufficient (5) Good (10) Very Good (15)	15

\*For the applied skills test to be considered sufficient, the candidate must have accumulated a total of at least 20 points. Candidates that have accumulated less than 20 points are assessed as failing the applied skill test and placed on the list of the excluded (unsuccessful) candidates.

## 7. SUBMISSION OF PROPOSALS

Proposals and required documents should be submitted **preferably via e-mail to [amih@meng.auth.gr](mailto:amih@meng.auth.gr)** or in person or by post to the following address: Secretariat of the School of Mechanical Engineering, Faculty of Engineering, Building D, 3 Septemvriou and N. Egnatia Str. Crossing, Aristotle University of Thessaloniki, Postcode 54624, Thessaloniki, Greece within hours 10am- 1pm, **no later than 13/11/2023 at 1pm**. Proposals will be assigned a reference number from the Secretariat of the School of Mechanical Engineering.

## 8. PUBLICATION - INFORMATION

This Call will be published on the website of ELKE AUTH <https://rc.auth.gr/proskliseis-gia-apasholisi-se-erga>, on the website of "Diavgeia" and on the EURAXESS platform.

For more information and questions regarding the position, candidates may contact by e-mail the Scientific Head at [amih@meng.auth.gr](mailto:amih@meng.auth.gr). For information on the proposal submission process candidates may contact ELKE AUTH at **00302310- 994082, 4052, 4053**.

## 9. EVALUATION

Submitted proposals will be evaluated by a three-member Evaluation Committee in accordance with the procedure provided for in article 244 of Law 4957/2022 and in article 20 of the Funding and Project Management Guide of ELKE AUTH as applicable.

## 10. OBJECTION

Candidates are informed of the results through the website of the ELKE AUTH (<https://rc.auth.gr/proskliseis-gia-apasholisi-se-erga>) in the online posting of this call, as well as through the program Diavgeia. The candidate has the right to submit an objection against the results of this call (Decision of acceptance of results) within an exclusive period of five (5) calendar days from the day following the posting of the decision of acceptance of results on the website of the ELKE AUTH. The objection must be in writing and legally signed, accompanied by a photocopy of the objector's identity card and must be submitted either electronically at [prosk@rc.auth.gr](mailto:prosk@rc.auth.gr), or in person, or by post to the Special Account for Research Funds (ELKE) of the Aristotle University of Thessaloniki (KEDEA Building, 3rd September - University Campus, Thessaloniki, P.O. Box 54636, 1st floor, Office 101). No objections may be raised on the grounds of interview or skill test.

The procedure for objections is defined by article 245 of Law 4957/2022 and article 20A of the Funding and Project Management Guide of the ELKE AUTH as applicable.

If the objection concerns the qualifications of one or more candidates, it is communicated to the latter by e-mail, at the discretion of MODY. Each of them has the right to submit their opinion by electronic or paper submission to the MODY within three (3) calendar days of the notification. All the above shall be forwarded to the Objections Committee. Candidates who will not submit any opinion in accordance with the procedure as described above, may not submit an objection to the new Decision on the acceptance of results of the Research Committee, which will be issued after the approval of the recommendation of the Objections Committee on the acceptance of the objection.

For the effective exercise of the right to submit an objection, candidates have the right to access the data of their individual candidature file and the evaluation-scoring documents, both of themselves and of their other candidates, upon written request within the objection submission deadline and under the conditions of articles 5 of Law 2690/1999, 42 of Law 4624/2019 and 6 par. 1(f) of the GDPR (EU 2016/679). The application shall be submitted in the same way as the objection.

Taking into account that the data of the candidates' individual files submitted for participation in this Call for Expression of Interest constitute personal data within the meaning of Article 4 of the General Data Protection Regulation 2016/679, the access of the other candidates to these data is possible under the terms of the legislation on personal data and Article 5 of the Code of Administrative Procedure, as well as in accordance with

the conditions consistently accepted by the Hellenic Data Protection Authority (decision 28/2018). In any event, by submitting their application, candidates accept that the documents and supporting documents they submit may be issued to their fellow candidates, subject to the above conditions.

Both objections and requests for access to candidate file data must be legally signed, i.e. either with an electronic-digital signature (gov.gr or other legally granted digital signature), or with a handwritten signature. A photocopy of a document with a handwritten signature (scanned pdf file) will be given a same-day incoming file number but will be examined only if the original document will be submitted within five (5) calendar days.

Requests for access to data and objections that do not meet the above requirements will not be examined.

## **11. PERSONAL DATA**

ELKE AUTH takes all appropriate measures for the protection of personal data during the evaluation process and it is strongly recommended that you read about the data protection policy and your rights on the AUTH website <https://www.auth.gr/gdpr>

## OTHER CONDITIONS

1. From all the proposals submitted according to the above specifications, the one that best meets the project's requirements will be selected and awarded a work contract on the basis of contractual freedom.
2. Only proposals / objections that will be received by the set date and time will be considered. In the case of postal submission, the deadline is judged on the basis of the date mentioned in the shipping file, provided that it will be received by ELKE AUTH no later than the approval of the results. ELKE AUTH bears no responsibility for the content of the candidacy files that will be sent.
3. Changes to the proposals (replacements, corrections or submission of additional documents) are not allowed after the expiration of the deadline.
4. It is pointed out that the procedure for submitting proposals for the conclusion of a project lease contract is not competitive, while the selection of a contractor has the character of accepting the proposal and not "recruitment". The evaluation process will be completed by compiling a ranking list and / or a list of excluded, while those selected will be notified individually. In case of a tie, the proposal of the interested person is selected in order a) with the longest experience, b) with the highest bachelor's degree mark, c) with the highest master's degree mark.
5. The proposal that is first in the ranking table and has the highest score in all the scoring criteria will be the one that will be selected. In case of obstruction of the person who submitted it, the next proposal is selected until the ranking order is exhausted.
6. Any submitted proposal that does not meet the criteria of the call of the expression of interest will not be examined any further and will be automatically rejected.
7. Throughout the execution of the project and according to the terms of the contract, following a relevant decision of the Research Committee, the selected person may be replaced by the next candidate in the ranking order, either due to his/her resignation or due to improper execution of the contract, following a written notice of termination of the contract that will be duly served on him/her and after the deadline for compliance set in the same document has expired without effect.
8. The contract may be extended without restriction, following a decision of the competent body of ELKE AUTH and if the required budget of the project allows it, without a new invitation, until the end date of the project (and in case of extension of the project until its new end date).
9. ELKE AUTH does not undertake any commitment to conclude a contract, as it is left to its full discretion to conclude or not contracts, as well as their number, excluding any claim of the interested parties.
10. The project assignment will take place in accordance with the provisions of the Program Implementation Guide.
11. The knowledge of foreign languages is certified in accordance with the provisions of the Presidential Decree 85/2022 "Determining the qualifications for appointment to positions of public sector" (A'232/17.12.2022), especially according to the articles 10, 14 par. 3 and 15 par. 7.
12. Foreign documents, other than those in English, must be accompanied by photocopies of their official translation into the Greek or English language, except for English, French, German, Italian and Spanish language certificates which, if they meet the conditions of the P.D. 85/2022, are accepted without requiring their translation.
13. For candidates, computer skills shall be certified according to the Presidential Decree 85/2022 "Determining the qualifications for appointment to positions of public sector" (A'232/17.12.2022), especially according to the article 9.

The President of the Research Committee

Professor Efstratios Stylianidis  
Vice Rector Research and Lifelong Learning

**SUBMISSION OF PROPOSAL - STATEMENT\***  
(with consequences of law on false/inaccurate statement)

**(To be completed by the candidate):**

Mobile phone number: .....

E-mail: .....

VAT or password number: .....

**Please note in this proposal - statement and outside of the postal file the following**

Reference number of this call

I affirm that:

- a. I have read and understood all the terms of this Call, which I accept unconditionally.
- b. the information given in all the forms in this proposal is accurate and true.
- c. I give my explicit and unconditional consent to the collection and processing of my personal data, as indicated in this proposal and in the documents submitted with it, exclusively for the purposes of implementing this Call for expressions of interest, including the posting of the results thereof on DIAVGEIA, in accordance with the provisions of the General Data Protection Regulation (GDPR) and Law 4624/2019.

**SIGNATURE**

Date : \_\_\_/\_\_\_/\_\_\_\_\_

Find attached:

- 1.
- 2.

***\*Incomplete filling of the proposal – statement constitutes a criterion for exclusion***