



Funded by
the European Union

Department: Human Resources Department,
Research Committee AUTH
Info: Dimitra Koutsostamati
Tel.: 2310-994022
E-mail: prosk@rc.auth.gr
Project Code: 74666

Thessaloniki, 10-05-2023
Ref. No. Call: 127341/2023

**TO BE PUBLISHED ONLINE
CORRECTED VERSION**

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 **145.140,80 €** (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 / total anticipated remuneration up to 145.140,80 € (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 in 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 doctoral candidate must not possess a doctoral degree at the date of the recruitment 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 Academic Head the 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:	4.031,69 € per month
Living allowance:	2.774 € 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, June 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 Bacheror 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)
- Very good knowledge of the English Language (Level C1)

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.

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).
3. Detailed Curriculum Vitae
4. Copies of the Degrees (Note: In case the specialization / direction does not result from the Degree, the Detailed Score and/or Diploma Supplement should be attached. In cases where the degree is a grading criterion and is not indicated in the copy of the degree then the detailed score is submitted additionally)
5. Copies of certificates and certifications of previous service, 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. Copy of certificate of military stats or discharge papers / Copy of deferral of enlistment (for male candidates)

Male candidates must have fulfilled their military obligations or have been legally discharged from them or have been deferred for the entire duration of the project. In case the time for which a deferral of enlistment has been received does not cover in its entirety the duration of the project, ELKE AUTH is obliged to terminate the respective contract at the expiration time of the above deferral. Both the contractor of the Special Account and the Academic Head Officer of the project are obliged to immediately inform ELKE AUTH one (1) month before the end of the deferral.

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.

Proposals and required documents should be submitted **preferably via e-mail to 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 15.06.2023 at 1pm**. Proposals will be assigned a reference number from the Secretariat of the School of Mechanical Engineering.

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. For information on the proposal submission process candidates may contact ELKE AUTH at **00302310- 994022, 4082, 4052**.

Submitted proposals will be evaluated by a three-member Evaluation Committee based on the requirements/provisions of the call.

The candidate who wishes to submit an objection to the result (Decision for Approval of Results) is entitled to recourse either via e-mail to prosk@rc.auth.gr or in person or by post to the Special Account of Research Authorities of the Aristotle University of Thessaloniki (Research Committee AUTH, 1st floor, Office 101 - 3rd September Str., University Campus 546 36, Thessaloniki, Greece) within five (5) days from the day following the posting of the Decision for Approval of Results on the website of ELKE AUTH and Diavgeia. The candidate has the obligation to be informed about the posting of the results from the website of ELKE <https://rc.auth.gr/proskliseis-gia-apasholisi-se-erga> in the online posting of this call for expression of interest in Diavgeia. Candidates are entitled to access the data of the individual proposal file and the assessment and evaluation papers of their own and of their other co-candidates, upon written request within five (5) days of the day following announcement of the results on the website of Diavgeia and under the conditions of articles 5 of Law 2690/1999, 42 of Law 4624 / 2019 and 6 par. 1 lit. f of the GCC (EU 2016/679).

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>.

EVALUATION PROCEDURE – 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 announcement 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. In case the diplomas of higher education have been awarded by institutions in Greece and the call requires a grading /points scale of the degree, it is required that the grade is indicated in the presented degree. If the grade is not indicated in the degree, then the detailed course score is presented. In case the degree does not indicate the grade and a detailed course score has not been submitted, the proposal of the interested person is not rejected, but the specific required qualification is not graded.
5. 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.
6. 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.
7. 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.
8. Throughout the duration of the project, it is possible that the selected candidate(s) may be replaced, if necessary, by other candidate(s) of the present call and in accordance with the ranking list.
9. 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).
10. 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.
11. The project assignment will take place in accordance with the provisions of the Program Implementation Guide.
12. 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.
13. 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.
14. 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.
15. It should be noted that the project assignment to candidates employed in the Public Sector, in Public and Private Bodies, etc. is subject to the provisions of paragraph 14 of Article 12 of YAKED 110427/EYTHY1020/01.11.2016

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)

Mobile phone: E-mail: VAT number:

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

(To be completed by the candidate):

The protocol number of this call

I affirm that the information given in
this proposal - statement is accurate and true

SIGNATURE

Date: ___/___/_____

Find attached: 1.
2.

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