

PUBLIC NOTICE

Post-Doctoral Position at the Istanbul Kultur University, Istanbul, Türkiye – ERA-Chair Spectroscopy@IKU Project

I – Reference, Place of Work and Salary:

A one-year **postdoctoral position** (Ref: ERA-CHAIR-PD), with the possibility of renewal until the end of the ERA-Chair Project, is available at the Istanbul Kultur University (Türkiye) within the ERA-Chair Spectroscopy@IKU “*Manipulating and Characterizing Molecular Architecture: from Isolated Molecules to Molecular Crystals*” Project. The gross salary will be €2800 per month, and the contract is expected to start January 2025. **A permanent position at the University, compatible with the qualifications of the candidate, will be offered to the recruited candidate after the end of the ERA-Chair Project.**

II - Position Objectives, Admission Requirements and Skills:

The applicant will develop his/her work according to the objectives of the ERA-Chair project.

Position Objectives: The project focuses on two main research areas that share the need for precise molecular structure manipulation and characterization, and to which spectroscopy is the fundamental exploration technique: (i) structure and reactivity of atmospheric and astrophysically/space relevant molecules, and (ii) polymorphism in molecular crystals and cocrystals. The first subject centres on the laboratory study of isolated molecules and small aggregates, addressing fundamental chemistry and physics of Earth's atmosphere and space, through exploration of new avenues of chemical reactivity and their underneath physical processes, such as reactions triggered by vibrational excitation of molecules or those taking place via quantum mechanical tunnelling (QTM). The second subject encompasses the development of new approaches for polymorphs screening, based on the development of novel versatile techniques for molecular crystals/cocrystals generation, and the detailed characterization of the synthesized materials, in particular using spectroscopic (IR, UV-Visible, Raman and cryogenic matrix isolation), diffraction and calorimetric methods. The experimental work will be complemented by quantum chemistry calculations, particularly DFT and TD-DFT.

Admission Requirements and Skills: Applicants should demonstrate the professional qualifications and overall well-being necessary to fulfill the role's demands. The candidates shall hold a PhD in Physics or Chemistry or a related field, and a strong experience in molecular spectroscopy (IR, UV-Vis, Raman, ...), knowledge of diffraction, calorimetric, and vacuum and cryogenic techniques, and familiarity with theoretical methods for studying molecular structure and reactivity.

The candidates should be highly motivated, with a collaborative mindset, and eager to work on a combined experimental-theoretical project. The successful candidate will be expected to present his/her work at scientific conferences and take the lead in preparing peer-reviewed publications. Therefore, excellent written and verbal communication skills are essential.

III – Application:

Applications are to be sent by e-mail to **ERA-Chair Spectroscopy@IKU Project Team** (spectroscopy@iku.edu.tr), exclusively in digital portable document format (pdf), with the exception of the documents referred in **III.4** that can be delivered in other digital formats. If any of the works/papers submitted contains classified information, revealing trade or industrial secrets or literary, artistic or scientific property secrets, candidates must clearly indicate that for each document; otherwise, those works/papers can be freely accessed by any of the other applicants when consulting the tender records.

Applications have to be received within 20 days after publication of this note, i.e., till 4 December 2024.

Mandatory documents to be delivered:

III.1. Curriculum Vitae (English) duly dated and signed. The Curriculum Vitae shall include a foreword with a summary of the professional activity of the candidate that clearly demonstrates that the candidate specialises in the scientific areas for which this tender is open. The candidate's Curriculum Vitae shall be structured in order to separately respond to the following evaluation items:

- A. Authoring or co-authoring of books, book chapters, articles in journals indexed or others of relevant international scientific interest, related to the disciplinary area or subarea for which the competition is open;
- B. Participation and coordination of research projects;
- C. Scientific mentoring and development of human resources training actions related to the disciplinary area or subarea for which the competition is open;
- D. Creation and/or direct involvement in maintaining and managing laboratory infrastructures to support research;
- E. Funding acquisition for research.

III.2. Copy of qualification certificates (certified English translation).

III.3. Separate copies of the 5 of the candidate's most relevant works/papers that have contributed to the development of the scientific field for which this tender is open. In a separate document, the reasons for this choice shall be provided, highlighting the scientific impact of the work (English).

III.4. Any other information considered relevant by the candidate (English).

Demonstrating proofs for the items mentioned in the CV shall be provided (DOI's for publications are enough). Applications that do not comply with the instructions or that fail to meet the tender's formal requirements, pursuant to the applicable laws and to this Public Notice, will not be accepted. In the same way, if the required documents or papers are submitted outside the established timeframe, the application shall not be accepted.

IV – Selection methods and criteria:

The selection methods to be used are approval in absolute merit, evaluation of the candidates' scientific and curricular background, and, if considered necessary by the selection jury, an interview.

Approval in Absolute Merit: Approval on Absolute Merit will be given to candidates who hold a curriculum vitae that the jury considers adequate for the position to be filled, namely the merit of their scientific and technical work, as well as their professional experience and training, compatible with the scientific areas for which the tender is open, always taking into account for this evaluation the items A to E enumerated in **III.1** above.

Evaluation of scientific and curricular background (100% if no interview will take place; 60% if interview will be held): Evaluation of the scientific and curricular background will be undertaken by the selection jury following the items A to E enumerated in **III.1** above, to which will be given the following weights: A: 40%, B: 10%, C: 10%, D: 30%, E: 10%.

Interview (40%, if held): The interview will serve to elucidate the jury on issues raised by the analysis of the CV of the candidate and the evaluation additional skills, including facility of expression in English.

V– Selection process

1st Meeting of the Jury: to verify the requirements for admission of the applications, and perform the evaluation of the candidates that meet the formal requirements. For the evaluation of the candidates, the jury starts by deciding on the approval of candidates on absolute merit and then proceeds to evaluate the candidates admitted on absolute merit and prepares the ordered list that will be the final one in the case the jury prescinds from interviews. If the jury decides to interview the candidates, the ordered list will be provisory.

2nd Meeting of the Jury: to conduct the interviews (if to be held) and prepare the final ordered list of the candidates. This meeting will not be held if the jury decides to prescind of the interviews.

3rd Meeting of the Jury: to decide on eventual reclamations

VI– Ranking and voting method

After the debate on the candidates towards establishing a final deliberation about the ranking, each member of the Jury will present a written document, which will be attached to the meeting minutes with their individual ranking proposal, based on the selection criteria and evaluation parameters stated in this Public Notice. Throughout the various vote rounds, each member of the Selection Committee must respect his/her proposed ranking.

VI.1. The first vote round is intended to select the candidate to be ranked in the first place. If a candidate obtains more than half of the votes, they shall be placed in the first position. If this is not the case, candidates with no votes shall be eliminated, as well as the candidate with the least votes, provided the latter obtained at least one vote. In the event of more than one candidate being placed in the last position with only one vote, there shall be a vote to decide whom to eliminate. In this vote round, committee members shall vote on the candidate who had the lowest score according to their individual ranking, and the candidate who obtains the most votes shall be eliminated. If a tie persists between two or more candidates, the Selection Committee Chairman shall decide which candidate should be eliminated.

After this process, the Selection Committee shall vote on the ranking of the remaining candidates. This process is repeated until one of the candidates obtains more than half of the votes for the first place.

VI.2. The candidate placed in the first position shall then be excluded from the next vote round, which shall decide the second place. This process shall be consecutively repeated until all approved candidates are ranked.

VI.3. During the voting of the Selection Committee abstentions are not allowed.

VII– Notification of the candidates

The final report with the results of the tender will be notified to applicants by e-mail. Candidates may, if they wish, appeal against the ranking list, in the 10 days following the final notification. If appeals are received, they will be evaluated by the Selection Jury of the tender, which will then reach the final decision, which will be a definitive one and will be subjected to homologation by the Rector of the University.

The administrative records of the tender may be consulted by the candidates, upon previous appointment, requested by e-mail sent to **ERA-Chair Spectroscopy@IKU Project Team (spectroscopy@iku.edu.tr)**.

VIII– Selection Jury

The Selection Jury of this tender is constituted as follows:

Chairman:

Prof. Dr. Rui Fausto M. R. S. Lourenço, ERA-Chair Spectroscopy@IKU Holder. Professor, University of Coimbra, Portugal.

Jury Members:

Prof. Dr. Gulce Ögrüç Ildız, ERA-Chair Spectroscopy@IKU Project Coordinator, Vice-Rector and Professor, Istanbul Kultur University.

Prof. Dr. Sevim Akyüz, Professor, Istanbul Kultur University.

Prof. Dr. Nihal Sarier, Professor, Istanbul Kultur University.

Prof. Dr. Cláudio Manaia Nunes, Assistant Professor, University of Coimbra, Portugal.

Prof. Dr. Justyna Krupa, Assistant Professor, Wroclaw University, Poland.

IX– Dissemination and Final Remarks

This public notice will be published on the ERA-Chair Spectroscopy@IKU website, the website and LinkedIn account of Istanbul Kultur University, the website and LinkedIn account of IKU Technology Transfer Office Inc., Turkish job portal at www.kariyer.net , and on the EURAXESS portal at <http://ec.europa.eu/euraxess/> .

The Istanbul Kultur University, as employer, actively promotes a policy of equal opportunities between men and women in access to employment and professional development, and acts to prevent each and every kind of discrimination. Therefore, no one can be privileged, benefited, harmed or deprived of any right or immune from any duty on account of, in particular, ancestry, age, sexual orientation, gender, marital status, family, economic situation, education, origin or social condition, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic or racial origin, territory of origin, language, religion, political or ideological beliefs and trade union membership.

This recruitment process complies with the European Charter for Researchers & code of Conduct for the Recruitment of Researchers. The recruited researcher will be offered a sustainable career, will be treated as professional and as an integral part of the Host Institution, and will enjoy adequate social security coverage. Also, appropriate working conditions for researching, including for disabled researchers, will be provided that guarantee the flexibility deemed essential for successful research performance in accordance with existing national legislation and with national or sectoral collective-bargaining agreements. These will include working conditions which allow both women and men researchers to combine family and work, children and career. The code of conduct to be followed is that of the Istanbul Kultur University.

Istanbul Kultur University, November 14th, 2024