

19/09/2022

43/ECUM/CFUM/2022 - QNEEX2D

Where to apply

Application Deadline: 03/10/2022 23:00 - Europe/London

Contact Details

Where to send your application.

COMPANY

Universidade do Minho

E-MAIL

amorim.bruno@fisica.uminho.pt



Hiring/Funding Organisation/Institute

ORGANISATION/COMPANY

Universidade do Minho

DEPARTMENT

Escola de Ciências

ORGANISATION TYPE

Higher Education Institute

WEBSITE

<https://www.uminho.pt>

E-MAIL

centrodefisica@fisica.uminho.pt

COUNTRY

Portugal

CITY

Braga

STATE/PROVINCE

Braga

POSTAL CODE

4710-057

STREET

Campus de Gualtar

PHONE

+351 253601560

ORGANISATION/COMPANY

Universidade do Minho

RESEARCH FIELD

Physics

RESEARCHER PROFILE

First Stage Researcher (R1)

LOCATION

Portugal › Braga

REFERENCE NUMBER

EXPL/FIS-MAC/0953/2021

APPLICATION DEADLINE

03/10/2022 23:00 - Europe/London

OFFER DESCRIPTION

ANNOUNCEMENT FOR THE AWARD OF A RESEARCH FELLOWSHIP

Title: Research Fellowship; 3 vacancies

A call for applications is now open for the attribution of 3 (three) research grants (BI) within the scope of the R&D project “Quantum Non-equilibrium excitons in two-dimensional semiconductors” at the Physics Center of Minho and Porto Universities, reference EXPL/FIS-MAC/0953/2021, financed the by the State Budget - Portuguese Foundation for Science and Technology (FCT), I.P., under the following conditions:

Scientific Area: Physics

Recipient category: The research grant (BI) is intended for R&D activities by:

- a) students enrolled in an integrated master’s degree or master’s degree;
- b) graduates enrolled in non-academic degree courses integrated into the educational project of Uminho.

Requirement for granting the fellowship:

The applicants may apply without prior registration in the course for which the fellowship is open. The requirement to enroll in a degree course or non-academic degree course will be verified on the date of contracting the fellowship;

Only fellowships whose selected applicants present a valid proof of enrollment in a degree course or non-academic degree course will be contracted, according to the type of the fellowship, issued by the academic services of the Higher Education Institution, indicating, respectively, the academic year or its duration (star and term).

Enrollment in non-certified courses (without curricular units) will not be considered as proof of enrollment.

Candidates profile:

1. The candidates must have an undergraduate degree in Physics.
2. Mandatory requirements: The candidates must have attended and passed the academic courses of “Advanced Quantum Mechanics” and “Many-body Quantum Physics”.

Applicants eligibility: Applicants must comply with the eligibility conditions laid down in article 9 of the Research Grants Regulation of the Portuguese Foundation for Science and Technology (FCT) I.P. (2019).

Workplan and objectives to be achieved:

The candidates will contribute to an ongoing project with the goal of theoretically studying excitonic effects in the phenomena of electroluminescence and photocurrent generation in devices based on two-dimensional semiconductors. The candidates will develop and apply methods (theoretical and numerical) for the:

1. Study of electroluminescence due to exciton generation in two-dimensional semiconductors, subjected to a potential bias.
2. Study of excitonic effects in photocurrent generation in illuminated devices based on two-dimensional semiconductors.
3. Calculation of excitonic energy levels and wavefunctions in two-dimensional semiconductors in the presence of lattice defects.

The developed work will include the development of non-equilibrium formalism, implementation of numerical code and analysis of results. The evaluation of the work carried will take into account the candidate effort and their ability to overcome theoretical and numerical problems and understanding of the obtained results.

The work developed by the candidates will contribute to the consolidation of their scientific training in the framework of their master thesis.

Applicable legislation and regulations: Research Fellowship Holder Statutes, approved by Law no. 40/2004 of August 18, in its current version published by Decree-Law no. 123/2019 of August 28; Regulation of Scientific Research Fellowships of the University of Minho (RBIC), published in “Diário da República”, 2nd serie, no. 119, through dispatch no. 6524/2020 of 22-06-2020, ratified by ratification declaration no. 447/2021 of 22-06-2021 and Regulation of Research Studentships and Fellowships (RBI) of the Foundation for Science and Technology, I.P. - in force.

Host/Contracting institution and scientific supervision: The workplan will be carried out in the Centro de Física das Universidades do Minho e do Porto, at the Escola de Ciências of the Universidade do Minho, located in Campus de Gualtar at Braga under the scientific supervision of the Junior Researcher Bruno António Campos Amorim.

Fellowship duration: The grant will take place for a period of 7 months, with a provisional starting date on October of 2022. The fellowship grant will not be renewed.

Amount of the research grant: The value stipend (Monthly Maintenance Allowance) is 875,98€ per month, in accordance with the stipends values published by the Foundation for Science and Technology (FCT I.P.) in the country (Annex I – Monthly Stipends Values for the maintenance allowances of the FCT Regulation for Research Studentships and Fellowships) and Annex II of the Regulation of Scientific Research Fellowships of the University of Minho (RBIC), published in “Diário da República”, 2nd serie, no. 119, through dispatch no. 6524/2020 of 22-06-2020, ratified by ratification declaration no. 447/2021 of 22-06-2021, according to the applicable regulation.

Payment is made on the 23st of each month, through bank transfer to the Bank Identification Number of the fellow identified in the contractualization process.

Other benefits: Reimbursement of Voluntary Social Security (Social Security contributions), corresponding to the 1st level of discounts (for research grants with a total duration 6 months or higher) and personal accident insurance.

Exclusivity regime: The grantee will perform the activities under exclusivity, as foreseen in article 5º of the Research Fellow Statutes and applicable regulations.

Selection panel:

President: Bruno António Campos Amorim, Investigador Júnior, Escola de Ciências / Centro de Física da Universidade do Minho.

First Effective Member: Nuno Miguel Machado Reis Peres, Professor Catedrático no Departamento de Física da Escola de Ciências da Universidade do Minho

Second Effective Member: Mikhail Igorevich Vasilevskiy, Professor Catedrático no Departamento de Física da Escola de Ciências da Universidade do Minho

First Substitute Member: Rui Emanuel Ferreira da Silva, Postdoc "LaCaixa" Junior Leader, Instituto de Ciencia de Materiales de Madrid (ICMM-CSIC)

Second Substitute Member: Pablo San José Martín, Científico Titular, Instituto de Ciencia de Materiales de Madrid (ICMM-CSIC)

The first effective member will substitute the President of the selection panel in case of impediment, being nominate the first substitute member in the place of the first effective member.

Criteria and procedures for applications assessment and selection: The applications assessment will focus on the candidate's Merit, following evaluation criteria, valued on a scale of 1 to 5 values (or another scale):

Applicant Merit - AM (100%):

1. Academic path (considering the classifications of academic degrees), with a weighting of 70%;
2. Personal curriculum (considering professional and scientific background), with a weighting of 15%
3. Motivation letter, with a weighting of 15%.

The final classification of the applicant's merit with the achieved through the following formula:

$$MC=(a*0,7)+(b*0,15)+(c*0,15)$$

The academic degrees and diplomas documents, or their respective recognition when awarded by foreign higher education institutions are not mandatory in the application phase, being replaced by a declaration of honor of the candidate with the contents of academic results. The documents of academic qualification or respective recognition will be required in the contracting phase and must attest facts that occurred on a date prior to the application. In situations of divergence between the information contained in the declaration and the documentation submitted for contracting the grant, only the information contained in the latter will be consider. If the documents proving the ownership of the academic degree and diploma, or the respective recognition under the terms of Decree-Law No. 66/2018, of August 16, do not correspond to the classifications awarded in the evaluation of the academic path, which can change the candidate's ranking, the fellowship won't be contracted.

Notes: Applicants with degrees obtained abroad must present proof of recognition of qualifications in Portugal and conversion of the final classification obtained in them to the Portuguese classification scale or declaration under the terms indicated in the previous point. Candidates who do not comply with one of these provisions, the selection panel will assign "0" in the grade of the graduation and/or master course. Candidates will be evaluated on the remaining parameters.

Disclosure of results: The provisional results of applications, based in the selection panel minutes, will be send to the applicants by email until 90 working days from the applications deadline., pursuant to article 12 of FCT's RBI | article 13 of Uminho's RBIC.

If case of unfavourable results, the candidates have a period of 10 working days to comment, if desired, in a prior hearing to interested parties, pursuant to articles 121 and 122 of the Code of Administrative Procedure (DL no. 4 / 2015 of January 7th).

Complaint and appeal procedures: The final results of the evaluation will be published through an ordered list (alphabetically, by final grade obtained), posted in a visible and public place of the host unit, as well as by email to all applicants, enclosing for that purpose, the minutes of the jury deliberations.

The selected candidate must inform its willingness to accept the grant, in writing. In case of rejection, the fellowship will be awarded to the next candidate in the ordered list of applicants.

The final decision can be contested within 15 working days, by sending to the President of the jury the corresponding claim. Interested parties may also submit an optional hierarchical appeal, addressed to the Pro-Rector for Research and Projects, Professor Sandra Paiva.

Constitution of a selection reserve list: The applicants ranked in the next positions on the ordered list will be included in a selection reserve list, which can be used until 01/04/2023.

Application deadline and submission: The call for applications is open for the period of 10 working days, counted after the date of publication of this notice in the Euraxess portal.

Applications must be formalized by sending an application letter with the following documents: curriculum vitae; qualifications certificate (undergraduate degree); grade certificate for Master's degree courses already attended; motivation letter.

Applications must be sent by email to amorim.bruno@fisica.uminho.pt and bolsas@ecum.uminho.pt, indicating the reference of the call 43/ECUM/CFUM/2022 - QNEEX2D in the email's Subject. Applications submitted by other means will not be accepted.

Fellowship contractualization: The fellowship will be attributed by signing a fellowship contract between the University of Minho and the fellow, accordingly with the contract minute (annex IV of the Regulation of Research Fellowships of the University of Minho (RBIC), published in Diário da República, 2nd Série, no. 119, through dispatch no. 6524/2020 of 22-06-2020, ratified by ratification declaration no. 447/2021 of 22-06-2021, as indicated in 2.4 of the FCT document: "Rules for Granting and Management of Grants within the scope of R&D projects, including infrastructure projects, the multi-annual financing program for R&D units and other FCT financing instruments (Version 2021)".

The contract may only be concluded after all the documentation required is collected, which must take place within a maximum period of 6 months [including evidences of the academic degrees or diplomas and enrolment in degree courses or non-conferring courses, depending on the type of scholarship].

Once all the documentation has been received, the contracting entity has a period of 60 working days to conclude the scholarship contract [in the case of contracts under the RBIC of Uminho, the deadline is of 15 working days, pursuant of nº 2 of article 15]. Once received, the fellow must return the contract duly signed within 15 working days.

The activities under the fellowship contract can only began after proper authorization by the contracting entity.

Term and cancellation of fellowship contracts: Without prejudice to the other causes provided the fellowship regulations (FCT and UMinho) and in the Statute of the Research Fellow, the fellowship ends with the completion of the work plan, as well as with the expiration date for which it was granted or renewed.

At the end of the fellowship, the grantee is obliged to present a Final Report of the work carried out, in accordance with the objectives and evaluation criteria defined with the scientific advisor, within 30 days after the end of the scholarship.

The final report must be prepared in accordance with Annex I of the Scientific Research Fellowships Regulation of the University of Minho (RBIC), published in Diário da República, 2nd Série, no. 119, through dispatch no. 6524/2020 of 22-06-2020, ratified by ratification declaration no. 447/2021 of 22-06-2021.

More Information

ADDITIONAL INFORMATION

Benefits

Please you can find the information in the Offer Description section

Eligibility criteria

Please you can find the information in the Offer Description section

Selection process

Please you can find the information in the Offer Description section

Web site for additional job details

<https://www.ecum.uminho.pt/pt/Investigacao/Paginas/Emprego-Cientifico.aspx>

REQUIREMENTS

Offer Requirements

Skills/Qualifications

Please you can find the information in the Offer Description section

Specific Requirements

Please you can find the information in the Offer Description section

Map Information



 Job Work Location  Personal Assistance locations

WORK LOCATION(S)

3 position(s) available at
Universidade do Minho
Portugal
Braga
Braga

4710 - 057

Campus de Gualtar

EURAXESS offer ID: 838354

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