



Πάτρα, 22/12/17  
Αριθμ. Πρωτ.: 3410

**Θέμα: Πρόσκληση εκδήλωσης ενδιαφέροντος για μεταπτυχιακή υποτροφία με αντικείμενο “CVD graphene transfer on flexible substrates adopted in contemporary artworks and characterization using various methods, and, study of Graphene Oxide and graphene flakes as additives in paints and coatings” στο πλαίσιο του ερευνητικού έργου “ERC-PoC (Proof of Concept Grant), Proposal Number: 779985 - GRAPHENART: Graphene as effective anti-fading agent for the protection of artworks”**

Ο Διευθυντής του ΙΤΕ/ΙΕΧΜΗ Βασίλειος Μπουργανός έχοντας υπόψη

1. Τον ν. 4310/2014 «Έρευνα, Τεχνολογική Ανάπτυξη και Καινοτομία και άλλες διατάξεις» όπως τροποποιήθηκε και ισχύει με τον ν.4386/2016 «Ρυθμίσεις για την έρευνα και άλλες διατάξεις»
2. Τον ν.4270/2014 «Αρχές δημοσιονομικής διαχείρισης και εποπτείας (ενσωμάτωσης της Οδηγίας 2011/85/ΕΕ) – δημόσιο λογιστικό» για τον έλεγχο των δαπανών βάσει του Προϋπολογισμού του ΙΤ
3. Το ΠΔ 432/1987 «Σύσταση νομικού προσώπου ιδιωτικού δικαίου με την επωνυμία «ΙΔΡΥΜΑ ΤΕΧΝΟΛΟΓΙΑΣ ΚΑΙ ΕΡΕΥΝΑΣ»
4. Τον Εσωτερικό Κανονισμό του ΙΤΕ (ΦΕΚ Β΄ 1584/31.07.2009) όπως τροποποιήθηκε και ισχύει (ΦΕΚ Β΄ 2193/31.12.2010)
5. Τον ν. 4412/2016 «Δημόσιες συμβάσεις έργων, προμηθειών και υπηρεσιών»
6. Τις διατάξεις του ΠΔ 80/2016 περί αναλήψεως υποχρεώσεων από τους Διατάκτες
7. Την απόφαση του Υπουργείου Παιδείας, Δια Βίου Μάθησης και Θρησκευμάτων με αριθμό 14534/17.12.2013 (ΦΕΚ ΥΟΔΔ 638/20.12.2013) για τον ορισμό Διευθυντή ΙΕΧΜΗ του ΙΤΕ.
8. Την υπ. αριθ. 133654/2017 απόφαση του Υπουργού και Αναπληρωτή Υπουργού Παιδείας, Έρευνας και Θρησκευμάτων για την ανασυγκρότηση του ΔΣ του ΙΤΕ (ΦΕΚ ΥΟΔΔ 396/16.08.2017)
9. Την γενική πολιτική και τις σχετικές αποφάσεις του ΔΣ του ΙΤΕ
10. Την υπ’ αριθμ. 362/27-6/12.10.2017 απόφαση του ΔΣ/ΙΤΕ

αποφασίζει

α) την προκήρυξη πρόσκλησης εκδήλωσης ενδιαφέροντος για απονομή υποτροφίας με αντικείμενο “CVD graphene transfer on flexible substrates adopted in contemporary artworks and characterization using various methods, and, study of Graphene Oxide and graphene flakes as additives in paints and coatings” στο πλαίσιο του ερευνητικού έργου “ERC-PoC (Proof of Concept Grant), Proposal Number: 779985 - GRAPHENART: Graphene as effective anti-fading agent for the protection of artworks”, το οποίο πραγματοποιείται στο πλαίσιο του προγράμματος Ορίζοντας 2020 και χρηματοδοτείται από την Ευρωπαϊκή Επιτροπή,

β) να δοθεί δημοσιότητα στην ως άνω πρόσκληση με την ανάρτηση του κειμένου στο Δικτυακό τόπο του ΙΤΕ/ΙΕΧΜΗ (<http://www.iceht.forth.gr>) και στο Δικτυακό τόπο <http://ec.europa.eu/euraxess/#> για το διάστημα από 22/12/2017 έως και 9/1/2017.

Ο Διευθυντής  
Βασίλειος Μπουργανός



**Invitation for Expression of Interest:****Phd Fellowship: “CVD graphene transfer on flexible substrates adopted in contemporary artworks and characterization using various methods, and, study of Graphene Oxide and graphene flakes as additives in paints and coatings”**

The Institute of Chemical Engineering Sciences, Foundation of Research and Technology - Hellas, (FORTH/ICE-HT) is seeking applicants for one PhD Fellowship in the context of the research project “ERC-PoC (Proof of Concept Grant), Proposal Number:779985 - GRAPHENART: Graphene as effective anti-fading agent for the protection of artworks”. The project is implemented under the EU-Horizon 2020 Research & Innovation Actions (RIA) and is financially supported by EC-financed parts of the Graphene Flagship.

**Job Description**

To conduct research in the framework of the aforementioned project “ERC-PoC (Proof of Concept Grant), Proposal Number: 779985 - GRAPHENART: Graphene as effective anti-fading agent for the protection of artworks”. The aim of this research is to study all possible ways of graphene transfer onto flexible-soft substrates that are adopted in contemporary artworks. Substrates like board card paper, canvas paper and any substrate used in old and modern paintings will be examined. The characterization of the substrates coated with graphene will include accelerated environmental aging, Raman, SEM, Optical Microscopy and colorimetric measurements. Also, the dispersion of Graphene Oxide and graphene flakes to color paints and varnishes so as to bestow enhanced UV, oxidation and humidity resistance will be studied.

The potential candidate should be also responsible for the following main tasks:

- (a) Conduct research activities related to graphene, such as development of graphene-based materials for the conservation of “classic” art works and modern inks and dyes, and, characterization and assessing their properties using techniques such as Raman spectroscopy and environmental aging
- (b) Work in collaboration with the other research and industrial partners of the project for accomplishing the corresponding tasks and subtasks
- (c) Scientific supervision of undergraduate student

**Location:** FORTH/ICE-HT, Patras, Greece

**Duration:** 12 months, with the potential of renewal

**Salary:** up to 840 € per month

**Envisaged starting date:** 01/02/2018

**Requirements and Qualifications**

The candidates are required to hold a Chemical Engineering Diploma and already registered as a Postgraduate-Master. Moreover, the candidates must be fluent in Greek and English, in order to meet working conditions. The appropriate candidate should have:

- (a) Experience in the graphene transfer and characterization of such materials with Raman technique
- (b) Analytical thinking
- (c) Strong personality and good communication skills
- (d) Be a flexible and reliable person



The evaluation of the candidacies will be based on the following criteria and qualifications:

Qualifications	Weight	Evaluation criteria
Diploma in Chemical Engineering	60	Diploma Grade, courses in polymer and carbon-based composite materials
Proven lab experience in: (i) Study of graphene related materials and CVD method, (ii) Graphene transfer and synthesis of conductive graphene based materials	25	Research experience in research groups that work on graphene transfer on contemporary artworks
Research interests	15	Relevance, plans and potential

### Application Submission

Interested candidates who meet the aforementioned requirements should submit their applications, no later than January 9<sup>th</sup>, 2018, 14:00h., by email to Kleanthi Zacharopoulou: [kleanthi@iceht.forth.gr](mailto:kleanthi@iceht.forth.gr)

In order to be considered, the application must include:

- Application letter
- CV
- Scanned copies of academic titles
- Statement of research interests

Any application received after the deadline will not be considered for the selection.

### Selection Procedure

Applications that are received on time will be evaluated by a scientific committee using the criteria mentioned above. If necessary, certain candidates will be invited to a personal interview with the committee.

The outcome of the selection will be announced on the website of FORTH/ICE-HT as well as on the website of "DIAVGEIA".

The selected candidate will be notified and asked to accept the position within three (3) working days and to present all relevant documents that should match the submitted ones.

### Contact

For information and questions regarding the application and selection procedure, candidates are asked to contact the FORTH/ICE-HT Research Secretariat, e-mail: [kleanthi@iceht.forth.gr](mailto:kleanthi@iceht.forth.gr), tel.: +30 2610 965278.

For information and questions about the advertised position and the research activity of the group or the Institute, candidates are asked to contact Professor Costas Galiotis, tel: +30 2610 965255, e-mail: [c.galiotis@iceht.forth.gr](mailto:c.galiotis@iceht.forth.gr).

