

Position 1:

One (1) postdoctoral position in the project Gr-Pero2LiBs

Green Perovskites/2D Conjugates: From Materials Design to High Energy Li-ion Cells

Action: Basic Research Financing (Horizontal support for all Sciences),

National Recovery and Resilience Plan (Greece 2.0)

The Institute of Electronic Structure and Laser of the Foundation for Research and Technology Hellas (IESL-FORTH), in the framework of the project Gr-Pero2LiBs (PI Prof George Kioseoglou, Co-PI Dr Athanasia Kostopoulou), Basic Research Financing (Horizontal support for all Sciences), National Recovery and Resilience Plan (Greece 2.0), Project number: 016465), funded under Hellenic Foundation for research and Innovation, is seeking to recruit one Postdoctoral researcher.

Job Description

Development of green perovskite-based materials (perovskite and perovskite-2D materials conjugates) as anode materials for Li-ion batteries. This project will include the design, fabrication, and characterization of the materials. Gr-Pero2LiBs project involves the validation of working-prototype anodes through relevant environments and measurements in half coin and full pouch cells. This project will be realized in collaboration with experts in electrochemical characterization in the Hellenic Mediterranean University and fabrication and evaluation of the Li-ion cells in the Democritus University of Thrace.

Required qualifications

- Bachelor's degree (B.Sc.) in physics, chemistry, or material science (20%)
- Postgraduate Diploma in physics, chemistry, or material science (30%)
- Experimental laboratory experience in materials development and characterization techniques (30%)
- Relevant publications (20%)

Desirable Qualifications

- Experience on perovskite and graphene-based material development and characterization (structural, optical)
- Previous publications in the position topic
- Demonstrated ability to work both independently and in a team
- Fluent in English, both in written and writing

Contact: Prof George Kioseoglou (gnk@materials.uoc.gr), Dr Athanasia Kostopoulou (akosto@iesl.forth.gr),

Location: IESL-FORTH, Heraklion Crete GREECE

Start Date (earliest): 1/2/2024

Salary: 1200-1500 euro

Project Duration: 12 Months

Position 2:

One (1) PhD candidate position in the project Gr-Pero2LiBs Green Perovskites/2D Conjugates: From Materials Design to High Energy Li-ion Cells Action: Basic Research Financing (Horizontal support for all Sciences), National Recovery and Resilience Plan (Greece 2.0)

The Institute of Electronic Structure and Laser of the Foundation for Research and Technology Hellas (IESL-FORTH), in the framework of the project Gr-Pero2LiBs (P.I. Prof George Kioseoglou, Co-PI Dr. Athanasia Kostopoulou) Basic Research Financing (Horizontal support for all Sciences), National Recovery and Resilience Plan (Greece 2.0), Project number: 016465), funded under Hellenic Foundation for research and Innovation, is seeking to recruit one PhD candidate.

Job Description

Development of green perovskite-based materials (perovskite and perovskite-2D materials conjugates) as anode materials for Li-ion batteries. This project will include the design, fabrication, and characterization of the materials. Gr-Pero2LiBs project involves the validation of working-prototype anodes through relevant environments and measurements in half coin and full pouch cells. This project will be realized in collaboration with experts in electrochemical characterization in the Hellenic Mediterranean University and fabrication and evaluation of the Li-ion cells in the Democritus University of Thrace.

Required qualifications

- Bachelor's degree (B.Sc.) in physics, chemistry, or materials science (20%)
- Postgraduate Diploma in physics, chemistry, or materials science (30%)
- Experimental laboratory experience in materials development and characterization techniques (30%)
- Relevant publications (20%)

Contact: Prof George Kioseoglou (gnk@materials.uoc.gr), Dr Athanasia Kostopoulou (akosto@iesl.forth.gr)

Location: IESL-FORTH, Heraklion Crete GREECE

Start Date (earliest): 1/2/2024

Salary: 900 €

Project Duration: 12 Months with possibility of extension according to the needs of the project

Position 3:

One (1) PhD candidate position in the project Glas-A-Fuels

Single-Atom Photocatalysts Enhanced by a Self-Powered Photonic Glass Reactor to Produce Advanced Biofuels, HORIZON-EIC-2023-PATHFINDEROPEN-01-01

Job Description

Given the forthcoming start of the HORIZON-EIC-2023-PATHFINDEROPEN-01-01 Project Glas-A-Fuels, entitled “Single-Atom Photocatalysts Enhanced by a Self-Powered Photonic Glass Reactor to Produce Advanced Biofuels”, we are looking to recruit a Ph.D. student for the duration of four years. The experimental work will be implemented in the ULMNP laboratory of IESL-FORTH, while the provisional starting date will be February or March 2024. The main research activities will involve the synthesis, patterning, and characterization of functional composite inorganic oxide glasses.

Qualifications

- B.Sc. and M.Sc. in physical sciences (Chemistry, Physics, Materials Science)
- Strong analytical and problem-solving skills
- Excellent scientific writing and presentation skills
- Experience in conducting research and publishing papers
- Ability to work both independently and in a team environment
- Highly organized and detail-oriented
- Fluency in English (verbal and written)
- Experience in interdisciplinary research is a plus
- Strong academic record and research potential
- Publications in reputable scientific journals are preferred

The applicants are kindly asked to provide their CV to Dr. I. Konidakis (ikonid@iesl.forth.gr) and Dr. E. Stratakis (stratak@iesl.forth.gr).

Useful links

FORTH: <https://www.forth.gr/>

IESL-FORTH: <http://www.iesl.forth.gr/>

ULMNP: <http://stratakislab.iesl.forth.gr/> and <https://www.iesl.forth.gr/en/research/ULNMP-Group>

Position 4:

One (1) postdoctoral position position in the project Glas-A-Fuels

Single-Atom Photocatalysts Enhanced by a Self-Powered Photonic Glass Reactor to Produce Advanced Biofuels, HORIZON-EIC-2023-PATHFINDEROPEN-01-01

Job Description

Given the forthcoming start of the HORIZON-EIC-2023-PATHFINDEROPEN-01-01 Project Glas-A-Fuels, entitled “Single-Atom Photocatalysts Enhanced by a Self-Powered Photonic Glass Reactor to Produce Advanced Biofuels”, we are looking to recruit a Post-doc researcher for the duration of two years. The experimental work will be implemented in the ULMNP laboratory of IESL-FORTH, while the provisional starting date will be February or March 2024. The main research activities will involve the synthesis, patterning, and characterization of functional composite inorganic oxide glasses.

Qualifications

- B.Sc. and Ph.D. in physical sciences (Chemistry, Physics, Materials Science)
- Strong analytical and problem-solving skills
- Excellent scientific writing and presentation skills
- Experience in conducting research and publishing papers
- Ability to work both independently and in a team environment
- Highly organized and detail-oriented
- Fluency in English (verbal and written)
- Experience in interdisciplinary research is a plus
- Strong academic record and research potential
- Publications in reputable scientific journals are preferred

The applicants are kindly asked to provide their CV to Dr. I. Konidakis (ikonid@iesl.forth.gr) and Dr. E. Stratakis (stratak@iesl.forth.gr).

Useful links

FORTH: <https://www.forth.gr/>

IESL-FORTH: <http://www.iesl.forth.gr/>

ULMNP: <http://stratakislab.iesl.forth.gr/> and <https://www.iesl.forth.gr/en/research/ULNMP-Group>

Position 5:

One (1) Postdoctoral candidate position in the project METAMORPHA *Made-to-measure micromachining with laser beams tailored in amplitude and phase*

Action: HORIZON-CL4-2021-TWIN-TRANSITION-01-03: Laser-based technologies for green manufacturing (Photonics - Made in Europe Partnerships) (RIA)

The Institute of Electronic Structure and Laser of the Foundation for Research and Technology Hellas (IESL-FORTH), in the framework of the project METAMORPHA (P.I. Dr Emmanuel Stratakis, Co-PI Dr. George Tsibidis) funded under EU- HORIZON Research and Innovation Action (HORIZON-CL4-2021-TWIN-TRANSITION-01-03, 'Laser-based technologies for green manufacturing -Photonics - Made in Europe Partnerships') (Project number: 101057457), is seeking to recruit one Postdoctoral researcher.

Job Description

Micro- and nano-structuring of materials with ultrashort laser pulses has proven its significance and contribution to major advances in science, technology and industry. The project will include the fabrication of nano/micro-structured topographies via the employment of ultrashort pulsed lasers tailored in shape and amplitude. The project will be realized in collaboration with partners in the consortium and the team of the Ultrafast Laser Micro- and Nano- Processing group (ULMNP) that has a strong and renowned expertise in laser-based processing.

Required qualifications

- Bachelor's degree (B.Sc.) and Master's in physics or materials science (20%)
- PhD in physics or Material Science (30%)
- Experimental laboratory experience in materials processing, optics and characterization techniques (30%)
- Relevant publications (20%)

Desirable Qualifications

- Experience on laser-based processing, optical and material characterization, knowledge of laser-matter interaction fundamentals
- Previous publications in the position topic
- Demonstrated ability to work both independently and in a team
- Fluent in English, both in written and writing

Contact: Dr Emmanuel Stratakis (stratak@iesl.forth.gr), Dr George Tsibidis (tsibidis@iesl.forth.gr)

Location: IESL-FORTH, Heraklion Crete GREECE

Start Date (earliest): 1/2/2024

Salary: 1200-1500 €

Project Duration: 12 months

Position 6:

One (1) PhD candidate position in the project METAMORPHA

Made-to-measure micromachining with laser beams tailored in amplitude and phase

Action: HORIZON-CL4-2021-TWIN-TRANSITION-01-03: Laser-based technologies for green manufacturing (Photonics - Made in Europe Partnerships) (RIA)

The Institute of Electronic Structure and Laser of the Foundation for Research and Technology Hellas (IESL-FORTH), in the framework of the project METAMORPHA (P.I. Dr Emmanuel Stratakis, Co-PI Dr. George Tsibidis) funded under EU- HORIZON Research and Innovation Action (HORIZON-CL4-2021-TWIN-TRANSITION-01-03, 'Laser-based technologies for green manufacturing -Photonics - Made in Europe Partnerships') (Project number: 101057457), is seeking to recruit one PhD candidate.

Job Description

Micro- and nano-structuring of materials with ultrashort laser pulses has proven its significance and contribution to major advances in science, technology and industry. The project will include the fabrication of nano/micro-structured topographies via the employment of ultrashort pulsed lasers tailored in shape and amplitude. The PhD candidate will have an excellent opportunity to develop skills in a multidisciplinary field of Physics (Lasers, Optics, Plasma Physics, Material processing, Mechanics) and engineering. The project will be realized in collaboration with partners in the consortium and the team of the Ultrafast Laser Micro- and Nano- Processing group (ULMNP) that has a strong and renowned expertise in laser-based processing.

Required qualifications

- Bachelor's degree (B.Sc.) in Physics or Materials science (20%)
- Master's in physics or related subjects (30%)
- Experimental laboratory experience in materials processing, optics and characterization techniques (30%)
- Relevant publications (20%)
- Fluent in English, both in written and other forms (10%)

Contact: Dr Emmanuel Stratakis (stratak@iesl.forth.gr), Dr George Tsibidis (tsibidis@iesl.forth.gr)

Location: IESL-FORTH, Heraklion Crete GREECE

Start Date (earliest): 1/2/2024

Salary: 900 €

Project Duration: 3 years