



## Hosting offer for Marie Skłodowska-Curie Postdoctoral Fellowships (PF) 2022 at University of Cyprus - Nanotechnology Imaging and Detection Lab

[MSCA Postdoctoral Fellowships](#) are individual research grants offering excellent postdoctoral researchers the chance to develop their skills by means of international mobility. Through the implementation of an original and personalised research project, MSCA Postdoctoral Fellowships aim to foster excellence through training and mobility and to equip researchers with new skills and competences in order to identify solutions to current and future challenges.

The **Nanotechnology Imaging and Detection Lab** at the University of Cyprus invites motivated postdoctoral researchers to jointly prepare an application for the [MSCA-PF-2022 call Marie Skłodowska-Curie Postdoctoral Fellowships](#) call ([MSCA-PF-2022](#)) with them as host organisation.

### **Description of Hosting organisation/group**

The Nanotechnology Imaging and Detection Lab (NIDL) uses a multidisciplinary and multiscale approach for the detection of health-related molecules. Our mission is to shed light on molecules, to reveal disease and chemical threats in our environment and in our body using **nanotechnology** and other key enabling technologies. We develop smart sensors based on optically active nanoparticles, microdevices integrating fluid flow with electrical and optical components, as well as numerical models to understand physical phenomena. We use biological models of disease and engineer new on-chip biological systems to optimize the translational development of our nanoparticles.

Website: <http://www.chrysafis.com/>

### **Topics/expertise**

We provide training in the development of biological and biochemical assays based on optical imaging with nanoparticles. These can be sensors/devices for biofluid analysis or organ-on-chip systems for testing theranostic nanoparticles. Please contact the Principal Investigator, Dr. Chrysafis Andreou, if you are interested in working with us.

### **Your profile**

Dr. Andreou holds two B.Sc. degrees (in Physics and in Mathematics) from the Pennsylvania State University (2006), a M.Sc. in Electrical Engineering from University of Cyprus (2008), and a Ph.D. in Biomolecular Science and Engineering from University of California Santa Barbara (2013).

During his PhD studies, he developed microfluidic systems for chemical detection based on Surface Enhanced Raman Scattering. Some of the most relevant applications include the detection of methamphetamine in saliva, detection of antibiotics in milk, and real-time analysis of gaseous flows. He has extensive experience in nanoparticle synthesis, sample acquisition and processing, and data analysis with advanced chemometric techniques, as well as numerical simulations for chemical transport phenomena.

Additionally, he worked as a Research Scholar at the Memorial Sloan Kettering Cancer Center (New York, USA) where he engineered molecularly specific SERS nanoprobe and developed new tumor imaging methods based on Raman spectroscopy (2014-2018).

<https://scholar.google.com/citations?user=6ZXmFgMAAAAJ>

- Expected qualifications/expertise of the candidate: expertise in nanotechnology for sensors OR experience in bioengineering/biology is desired.
  - Please specify the required PhD degrees if applicable: bioengineering or similar.
- You must have a completed PhD at the time of the call deadline (14 September 2022).
- Candidates must have a maximum of 8 years full-time research experience from the PhD award date until September 14, 2022. Periods of inactivity in research (e.g. unemployment, periods of employment outside research, parental or sick leave) do not count towards the time of research experience.
- For European fellowships, candidates can be of any nationality and must not have resided or carried out their main activity (work, studies, etc.) in Cyprus for more than 12 months in the 36 months immediately before September 14, 2022.
- Highly motivated candidate with an excellent research track record appropriate to career stage, as evidenced by academic publications and other scientific output.

### **What we offer**

- Support and guidance for the preparation of your MSCA PF proposal
- A stimulating, interdisciplinary environment for high-level research.

See for more details: <https://www.eoc.org.cy/en/index.php?id=3323>

### **How to apply?**

Indicate your interest by contacting the host institution as follows:

Please contact Dr. Chrysafis Andreou by email ([andreou.chrysafis@ucy.ac.cy](mailto:andreou.chrysafis@ucy.ac.cy)) with a short CV and motivation to indicate your interest to prepare a MSCA-PF application with NIDL.

After the supervisor agrees to support you as a MSCA-PF candidate, you can start preparation of MSCA PF project proposal and will be supported further by the Research Support Office of the host university.

For more information please contact the MSCA coordinator of the host institution:

[onisilos@ucy.ac.cy](mailto:onisilos@ucy.ac.cy)