



Postdoctoral research position at the Wigner Research Centre for Physics

The Institute for Solid State Physics and Optics at Wigner Research Centre for Physics (Wigner RCP) is pleased to invite applications for a postdoctoral research fellow position in experimental science with an emphasis on X-ray excited optical properties measurement techniques. Applications will be considered at the Research Fellow level to begin in March 2023. An appointment at the Research Fellow level may be considered for a sufficiently qualified applicant. Exceptional candidates from all areas of experimental optical physics, spectroscopy, or X-ray physics are encouraged to apply.

The Wigner RCP is the most prominent research institute for physics in Hungary. Our researchers investigate the most diverse physics problems of the universe, from studies of tiny particles to space physics, from theoretical problems to applied research.

What You Will Do

Within the Institute for Solid State Physics and Optics of Wigner RCP, our group focuses on synthesizing and characterizing advanced optical nanomaterials for a fundamental understanding of physics, chemistry, quantum science, life science, and many other applications.

Within the framework of a Horizon EIC Pathfinder grant, you will work in a multidisciplinary team composed of physicists, chemists, chemical engineers, biologists, physicians, pharmacologists, and radiologists to develop an innovative nanotechnological approach to address unmet clinical needs. You will carry on the development of a novel nanotechnology-based cancer therapy for deep-seated, clinically unmanageable, drug-resistant, and metastatic tumors. The therapy is based on a novel nano-system made of multi-functional 2D layered nanocrystals, nanoparticles, and micelles. The nanosystem enables, under activation by X-rays, effective multimodal therapy with minimal or no adverse effects. This novel paradigm uses CT not to eradicate cancer but to trigger and image the nanosystem that locally activates non-mutagenic oncotherapies. You will be responsible for designing and establishing the experiment for material characterization.



What we do for you

We offer you the opportunity to join a highly innovative and research-oriented center in physics and materials science and an international team with highly motivated scientists. With your talent, passion, and expertise, you'll become part of a team that makes the impossible possible.

We are committed to being an inclusive employer and proud of our open, multicultural, and informal working environment with ample possibilities to take the initiative and show responsibility. We commit to supporting and guiding you in this process, not only with words but also with tangible actions. We actively invest in your development to further your technical and personal growth.

We are aware that your valuable contribution makes Wigner RCP a top player in its field. Your energy and commitment are therefore appreciated with a competitive salary and benefits.

Who You Are

- You hold a Ph.D. in physics, material science, or a related field
- Hands-on experience in spectroscopy techniques (photoluminescence, absorption, electron spin resonance, Raman)
- Theoretical of, and experience with, optical physics and design optical systems.
- Good English language skills to work in an international environment.
- You are willing to travel during your research for conferences and group meetings.
- Applicants from all over the world are welcome to apply.

How to apply

Send your CV, cover letter, and two names and email addresses for reference to allas@wigner.hu with a subject: PERSEUS.