

JOB OFFER

Position in the project:	POSTDOC at Inverse Materials Design group
Scientific discipline:	Physics, Chemistry, Materials science or related fields
Job type (employment contract/stipend):	Full-time employment contract
Number of job offers:	1
Remuneration/stipend amount/month ("X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"):	Gross monthly salary up to 12,000 PLN depending on experience and expertise
Position starts on:	From August 2022(depending on applicant's availability)
Maximum period of contract/stipend agreement:	December 2023 (possible to elongate)
Institution:	ENSEMBLE ³ Sp. z o. o.
Project leader:	Prof. Dorota Anna Pawlak
Project title:	ENSEMBLE ³ Centre of Excellence for nanophotonics, advanced materials and novel crystal growth-based technologies The Centre is funded through the International Research Agenda of the Foundation for Polish Science, under axis IV of the Smart Growth Operational Programme, Measure 4.3, and the Teaming for Excellence H2020 programme
Project description:	ENSEMBLE ³ is a new Centre of Excellence for nanophotonics, advanced materials, and novel crystal growth-based technologies located in Warsaw, Poland, created jointly by institutions from Poland, Germany, Italy, and Spain. The centre will work on the development of novel material technologies and advanced materials with unique electromagnetic properties, with potential applications in fields such as photonics, optoelectronics, telecommunication, solar energy conversion, medicine, and aerospace.
Group description:	<p>One postdoc researcher position is open in the group of Inverse Materials Design, led by Dr. Oleksandr Malyi. Using deep knowledge of solid-state physics and first-principles theory, this group will develop a fundamental understanding of materials properties at the atomic level and correlate them with basic elemental quantities to define so-called principles of inverse design. Such design principles will be used to guide experimental research and to understand the fundamental physics of materials at the atomic level. The primary focus will be given to understanding materials realization (e.g., prediction synthesis conditions), understanding optoelectronic properties of quantum materials, doping physics, and tailoring materials properties in general.</p> <p>See details on the research expertise of the group in recent publications:</p> <ul style="list-style-type: none"> • A. Zunger, O. I. Malyi Chemical Reviews, 2021, 121, 3031 • O. I. Malyi, A. Zunger Applied Physics Reviews, 2020, 7, 041310 • O. I. Malyi, A. Zunger Physical Review B, 2020, 101, 235202 • O. I. Malyi, G. M. Dalpian, X.-G. Zhao, Z. Wang, A. Zunger Materials Today, 2020, 32, 35 • O. I. Malyi, K. V. Sopiha, C. Persson ACS Applied Materials & Interfaces 2019, 11, 24876 • O. I. Malyi, M. T. Yeung, K. R. Poeppelmeier, C. Persson, A. Zunger Matter, 2019, 1, 280 • O. I. Malyi, K. V. Sopiha, C. Persson npj Computational Materials, 2019, 5, 38

Key responsibilities include:	<ul style="list-style-type: none"> • Develop a fundamental understanding of materials on atomic level; • Perform high throughput DFT calculations; • Disseminate results to the scientific community and to the public.
Profile of candidates/requirements:	<ul style="list-style-type: none"> • Strong background in fundamental physics, electronic structure theory, and modern computational approaches to solids; • Proven record of significant research contributions in the modeling of materials • Proficiency in high-performance computing; • Ph.D. in physics, materials science, or a related field; • Scientific programming skills; • High-level proficiency in communication skills. Strong ability to work independently as well as in a team, social competence, personal responsibility.
Required documents:	<ul style="list-style-type: none"> • CV (including a list of projects/publications); • Cover letter; • Proof of PhD; • Name and addresses of two references.
We offer:	<ul style="list-style-type: none"> • Innovative scientific environment • Outstanding facilities • Opportunity for collaboration with leading theoretical and experimental groups around the globe • Administrative support for visa and related documentation
Please submit the documents to:	https://system.erecruiter.pl/FormTemplates/RecruitmentForm.aspx?WebID=29b11e3be2cd4ea1ad28780f8cd3793c
Application deadline:	17 August 2022 Competitive candidates will be interviewed before the appointments are made.
For more details about the position please visit (website/webpage address):	<p>For further information, visit:</p> <p>www.ensemble3.eu</p> <p>www.facebook.com/fmlaboratory</p> <p>For questions, please contact: recruitment@ensemble3.eu, oleksandr.malyi@ensemble3.eu</p>
Euraxess job/stipend offer (in case of PhD and postdoc positions):	https://euraxess.ec.europa.eu/jobs/754525

Please include in your CV:

I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).