

## JOB OFFER

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| Position in the project:                      | <b>Postdoc</b>   |
| Scientific discipline:                        | Material Sciences; Biomaterials; Tissue Engineering  |
| Job type:                                     | Full-Time Employment Contract  |
| Number of job offers:                         | 1  |
| Remuneration/stipend amount/month:            | Full monthly remuneration (total employment costs including net salary, taxes, insurances and pension): around 7 100 PLN – approximately 5 700 PLN net (around 1350 euro net)  |
| Position starts on:                           | 1 <sup>st</sup> February 2019  |
| Maximum period of contract/stipend agreement: | <b>36 months</b>   |
| Institution:                                  | Institute of Fundamental Technological Research (IPPT PAN), Warsaw   |
| Project leader:                               | Filippo Pierini  |
| Project title:                                | <b>Electrospun conducting hydrogel nanomaterials for neural tissue engineering</b><br><i>Project is carried out within the FIRST TEAM programme of the Foundation for Polish Science</i>   |
| Project description:                          | Neurological diseases, disorders and injuries have always been among the challenges faced by humanity. Medications and physical therapy often prove insufficient to cure patients affected by these clinical problems. Electrical stimulation of nerve tissue and recording of neural electrical activity are at the forefront of biomedical diagnosis and treatments. Brain stimulation is based on the implantation of biomaterials placed at the interface between a device and body tissues, to record physiological electrical signals and to stimulate the brain. The aim of this research project is to develop bioactive nanomaterials for neural tissue engineering. The development of the proposed electrospun implantable conducting hydrogel nanomaterials will bring enormous advantages to patients and will open up great opportunities for innovative and advanced bionic applications. The biomaterials will be studied with all the necessary methods to prove their outstanding properties and allow the needed miniaturization necessary for the emerging biomedical applications |
| Key responsibilities include:                 | <ol style="list-style-type: none"> <li>1. Design and conduct electrospinning experiments</li> <li>2. Develop interpenetrating polymer network hydrogels based on conjugated polymers</li> <li>3. Morphological, chemical, mechanical and electrical characterization of the obtained hydrogel nanomaterials (from designing/performing the experiments to the data analysis)</li> <li>4. Report preparation</li> <li>5. Disseminate the scientific results, publishing the work in high quality journals</li> <li>6. Supervision of PhD students</li> </ol>  |

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| Profile of candidates/requirements:               | <ol style="list-style-type: none"> <li>1. Holding a doctoral degree/PhD in Chemistry, Polymer Science, Physics, Nanotechnology or any related field of Material Sciences for no longer than 5 years</li> <li>2. Solid background in polymer biomaterial development (expertise in electrospinning as well as hydrogel and/or conjugated polymer nanomaterial fabrication is desirable)</li> <li>3. Keen interest in polymer nanomaterial characterization (e.g. SEM, AFM, FT-IR, XRD, DSC, TGA, four-point method, etc.)</li> <li>4. Ability to design, execute and evaluate research experiments (experience with <i>in vitro</i> and <i>in vivo</i> tests is not mandatory but highly desirable)</li> <li>5. Excellent collaboration skills as well as the ability to work independently</li> <li>6. Ability to co-supervise students</li> <li>7. Highly capable of communicating scientific results in English, both orally and in writing</li> </ol> |
| Required documents:                               | <ol style="list-style-type: none"> <li>1. Motivation letter with a description of research interests and previous experience relevant to the position applied for</li> <li>2. CV and complete list of publications</li> <li>3. Attested copies of scientific degree (MSc/PhD), diploma in English</li> <li>4. Reference letter and an additional referee that we can contact</li> <li>5. Please include in your CV the following clause: "I agree to the processing of personal data contained in my job offer for the needs necessary to carry out the recruitment process conducted by IPPT PAN with headquarters in Warsaw, ul. A. Pawińskiego 5B, according to art. 13 para. 1 and 2 of Regulation (EU) 2016/679 of the Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and the free movement of such data and the repeal of Directive 95/46 / EC (RODO).</li> </ol>  |
| We offer:   | <ol style="list-style-type: none"> <li>1. Postdoc position in a top-ranked research institute in Europe</li> <li>2. Full-time employment contract within an internationally competitive environment</li> <li>3. Access to modern equipment and facilities</li> <li>4. Possibility for interdisciplinary collaborations with foreign cooperation partners</li> <li>5. Opportunity to participate in scientific conferences and training courses</li> </ol>  |
| Please submit the following documents to:         | Applications should be sent to <a href="mailto:kadry@ippt.pan.pl">kadry@ippt.pan.pl</a> quoting "Postdoc1 FirstTeam [Surname of the Applicant]" in the email subject.  |
| Application deadline:                             | <b>31<sup>st</sup> December 2018</b> (candidates selected for interviews will be contacted a few days after the deadline)  |
| For more details about the position please visit: | <a href="http://www.nanoprg.com">www.nanoprg.com</a> or email: <a href="mailto:fpierini@ippt.pan.pl">fpierini@ippt.pan.pl</a>  |
| Euraxess job/stipend offer:                       | (to be inserted)   |

Due to the entry into force of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, we also require that your job advertisements include a clause requesting the candidate's consent to the processing of his or her personal data by the institution which carries out the recruitment process.