## JOB OFFER 001/2020

<table>
<thead>
<tr>
<th>Position in the project:</th>
<th>(Junior) postdoc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific discipline:</td>
<td>Physics</td>
</tr>
<tr>
<td>Job type (employment contract/ stipend)</td>
<td>contract of employment (full time; 40 hours/week)</td>
</tr>
<tr>
<td>Number of job offers:</td>
<td>1</td>
</tr>
<tr>
<td>Remuneration:</td>
<td>~ 8300 PLN (gross amount)</td>
</tr>
<tr>
<td>Position start on:</td>
<td>April 2020</td>
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<tr>
<td>Maximum period of contract/stipend agreement:</td>
<td>42 months</td>
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<tr>
<td>Institution:</td>
<td>Institute of Physical Chemistry Polish Academy of Sciences</td>
</tr>
<tr>
<td>Project leader:</td>
<td>Prof. dr hab. Czesław Radzewicz</td>
</tr>
<tr>
<td>Project title:</td>
<td>“Label-free and rapid optical imaging, detection and sorting of leukemia cells”</td>
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### Project description:

The primary objective of the project is to develop the first Stimulated Raman Spectroscopy (SRS) microfluidic system for non-invasive imaging of live leukemic cells (RApID) and apply it to rapid diagnostics and assessment of chemosensitivity in vitro. The newly developed diagnostic instrument will fill the gap in the current diagnostic methodology of leukemia. The proposed approach will objectify and accelerate initial diagnostics and follow up of leukemia patients; in addition, such approach would be potentially automatable, opening new areas of application in leukemia research. Given the fact that initial/follow-up leukemia diagnostic work-up requires experienced, multidisciplinary approach and consumes considerable costs (>3100 USD for initial diagnostic procedures in USA), the label-free imaging of leukemic cells might significantly accelerate this process and reduce its cost. The research and development envisioned in this application will be conducted by the team of experts in the fields related to the Project. Partners of Consortium consist of five scientific institutions None of the essential parts of the RApID instrument (SRS microscope, microfluidic trap & release
system) are commercially available, so they must be developed by the Partners within the Project.

The employed postdoc will be participating in constructing and testing RApID device, and in carrying out experiments planned in the project with use of the RApID device in Laser Center at IPC PAS (IPC PAS LC).

### Key responsibilities include:

1. Developing novel fiber lasers and methods of light conversion for stimulated Raman microscopy.
2. Participating in measurements of biological materials with use of SRS microscopy.
3. Data analysis and preparation of scientific papers and conferences.
4. Participating in supervising of work of Master student and/or Ph.D. students.

### Profile of candidates/requirements:

1. Ph.D. in Laser Physics, Photonics, or related discipline, preferentially in the area of ultrafast fiber lasers and nonlinear optics.
2. Up to 5 years after accomplishing the PhD.
3. Fluency in English.
4. Experience in non-linear conversion of light in the visible and near-infrared ranges (experiments and numerical simulations).
5. Experience in developing ultrafast fiber lasers (experiments and numerical simulations).
6. Experience in vibrational (Raman or Infrared) spectroscopy will be a plus.
7. Strong ability for independent working and for team working.
8. Accomplished stages in distinguished research centers in the area of nonlinear optics and fiber laser will be a plus.
9. Willing to acquire new skills and competences.

### Required documents:

1. CV including publication list, research stays, projects leaded and performed and other achievements (3 pages max.)
2. Motivation letter with description of the originality of own scientific
<table>
<thead>
<tr>
<th>We offer:</th>
<th>Applications which not fulfill formal requirements maybe rejected without evaluation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work in the outstanding scientific institution in the dynamic research group of the Laser Center of IPC PAS</td>
<td>3. Up to 5 most important full-text papers or patents relevant to the project (at least one) from 10 last years</td>
</tr>
<tr>
<td>2. Full time employment from April 2020 (42 months) with a monthly salary of 8300 PLN (gross amount).</td>
<td>4. 2 recommendation letters from former mentors.</td>
</tr>
<tr>
<td>3. Scientific and organizational support.</td>
<td>5. Certificates of fluency in English, if available.</td>
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<tr>
<td>4. Access to the modern research equipment.</td>
<td>6. Documents confirming the scientific degrees (copies of Master, PhD, other degrees diplomas).</td>
</tr>
</tbody>
</table>

We offer:

- Work in the outstanding scientific institution in the dynamic research group of the Laser Center of IPC PAS
- Full time employment from April 2020 (42 months) with a monthly salary of 8300 PLN (gross amount).
- Scientific and organizational support.
- Access to the modern research equipment.
- Possibility in participating in Erasmus +
- Possibility to collaborate with multidisciplinary research group (Warsaw University, Medical University of Lodz, Institute of Hematology and Transfusion, Jagiellonian University).

Please submit the documents to: rekrutacja@ichf.edu.pl with the email title “Recruitment no. 001/2020” or by post to „Instytut Chemii Fizycznej Polskiej Akademii Nauk, ul. Kasprzaka 44/52, 01-224 Warszawa” with the title “Recruitment no. 001/2020”

Application deadline: 22.02.2020

Euraxess job: https://euraxess.ec.europa.eu.jobs/483542

Additional information regarding recruitment process:

All submitted documents will be evaluated by the Recruitment Committee.

The evaluation will be in two steps. In the first step, the submitted documents will be assessed. The best candidates will be invited to interview (in English for foreign
candidates), in person or in the form of a conference call, in March 2020.

Candidates will be evaluated basing on their knowledge and scientific achievements in the area of the project, realized grants and stages.

The Recruitment Committee will take a decision by majority of votes.

Candidates participating in the recruitment process will not be discriminated for any reason.

The Recruitment Committee will inform candidates about the results of the recruitment no later than 7 days after the end of the recruitment process.

All candidates have the right to appeal against the decision of the Committee within 7 days from the date of receipt of the corresponding information. The complaints may refer to procedural defects of the selection process only.

In response to the appeal, an appeal committee will be appointed, which opinion is necessary for the acceptance of recruitment reports by the Foundation for Polish Science.

For any additional information please contact dr. Katarzyna Krupa kkrupa@ichf.edu.pl

By submitting this application I consent to the processing of my personal data in the recruitment process.

The controller of your personal data is the Institute of Physical Chemistry of the Polish Academy of Sciences with its registered office in Warsaw, NIP: 5250008755 (the "Institute"). The Institute will process your data for the purpose of carrying out scientific and research activities, providing services and contact with the Institute, on the basis of a contract (in connection with the performance of the contract or in order to take action on your request before the contract is concluded – Article 6, paragraph 1, letter b) of GDPR), the legitimate interest of the Institute (Article 6, paragraph 1, letter f) of the GDPR) and legal provisions (Article 6, paragraph 1, letter c) of the GDPR) - depending on the circumstances. You have the right to: request access to your data, receive a copy of it; rectify (correct) it; delete it; limit its processing; transfer it; lodge a complaint to the supervisory body; withdraw your consent for processing at any time (withdrawal of consent does not affect the lawfulness of the processing carried out prior to its withdrawal) or to lodge an objection to data processing. More information is available on the Institute's website.