Post-doc research assistant with PhD – 1 job at Lodz University of Technology, Division of Dynamics – 90-924 Łódź, Stefanowskiego 1/15, Poland

Lodz University of Technology is one of the finest universities of technology in Poland. Its tradition and experience in training professionals and conducting research date back more than 75 years. It is an attractive partner for business. It cooperates with the largest national and international corporations. It conducts research of a European standard, develops new technologies and creates innovation in collaboration with the leading research centres all over the world. One of the pillars of Lodz University of Technology management is equal treatment of staff regardless of their gender, age, race or other demographic and social characteristics. In 2016, LUT was the first technical university in Poland to receive the HR EXCELLENCE IN RESEARCH award certifying that the University adheres to the principles of *the European Charter for Researchers* and *the Code of Conduct for the Recruitment of Researchers*.

1. The requirements to be met by the candidate (detailed description of the knowledge, qualifications, skills, and professional experience).
    - **Education: PhD or equivalent degree in mechanical engineering, physics, or applied mathematics or related disciplines,**
    - **Laboratory experience: dynamical measurements,**
    - **Programming experience: C++, Matlab, Mathematica,**
    - **Publications: at least one publication,**
    - **Languages: English (Fluency in both written and spoken)**

2. Specification of the terms and conditions of employment and authority associated with the position.
    Zatrudnienie jako asystent naukowo-badawczy (doktor – post-doc) przy realizacji projektu OPUS Narodowego Centrum Nauki. Full-time job for 2 years.

3. Description of the expected responsibilities and duties.
    - **Registration of experimental time series, identification of extreme events**
    - **Development of optimum predictors of extreme events directly from data characterizing a system of coupled oscillators.**
    - **Identification of three different dynamical regimes, i.e., chimera, coherent and incoherent using machine learning**
    - **Test various machine learning algorithms based on echo state network**
    - **Development of prediction methods base on the combination machine learning with knowledge-based modeling**

4. List of the required documents:

    1) application for employment to the Rector of Lodz University of Technology;

    2) personal questionnaire for a person applying for employment at Lodz University of Technology, as provided in Annex no. 1.1 to the OTM-R POLICY - OPEN TRANSPARENT MERIT-BASED RECRUITMENT;

    3) Data Privacy Statement as provided in Annex no. 1.2 to the OTM-R POLICY - OPEN TRANSPARENT MERIT-BASED RECRUITMENT;

    4) Consent to the processing of personal data, as provided in Annex no. 1.3 to the OTM-R POLICY - OPEN TRANSPARENT MERIT-BASED RECRUITMENT;

    5) true copies/copies of diplomas;

    6) other documents proving the qualifications.

5. the place, manner, and deadline for submitting the documents (as well as information concerning their return); **June 16, 2023; Division of Dynamics – 90-924 Łódź, Stefanowskiego 1/15, Poland**

6. contact person and postal and e-mail addresses to which documents or scans thereof may be forwarded; **Teodora Kopacka, w1k13@adm.p.lodz.pl**

7. the expected date of the announcement of the decision. **July 10, 2023**

Furthermore, as regards academic staff:

8. It is recommended that the notice include the following information materials for the candidate:

1) a description of the profile of the unit announcing the competition; **Division of Dynamics is a leading unit in Lodz University of Technology working on mechanical engineering problems including nonlinear systems, new methods of their analysis, extreme and synchronization problems.**

2) a description of the leading research undertaken in the unit;

The development of methods for controlling chaos without feedback, the identification and description of new types of bifurcations, the identification of the synchronization mechanism in coupled mechanical oscillators, and the explanation of the origin of randomness in a mechanical system are among his most important scientific discoveries. Synchronization of dynamical systems, chimeric states, stability and areas of attraction of solutions.

3) other information that presents the unit in an appealing way and encourages the candidate to apply, as set out in the official form for employment opportunity advertisers provided as Annex no. 1.4 to OTM-R POLICY - OPEN TRANSPARENT MERIT-BASED RECRUITMENT

Division of Dynamics is a multi-disciplinary research group focusing on application theory of dynamical systems to science and engineering. Main activities apart clearly scientific include the following:

- **realize interactions among applied mathematicians, scientists, and related researchers;**

- **build interaction between the Lodz University of Technology and other universities, industry, and national laboratories;**

- **establish international partnerships, collaborations and associations;**

- **increasing the visibility of the group as a main point for academic excellence.**

9. If documents are to be sent by post, please include the words 'Job Application' on the envelope.

PERSONAL INFORMATION FORM

FOR APPLICANTS FOR EMPLOYMENT AT LODZ UNIVERSITY OF TECHNOLOGY

1. First name(s) and family name ....

2. Date of birth ....

3. Contact details ....
<div align="center">(provided by the applicant)</div>

4. Education (where required for specific duties or jobs) ....
....
<div align="center">(name of school and graduation date)</div>

....
....
<div align="center">(occupation, specialisation, degree, professional title, academic title)</div>

5. Professional qualifications (where required for specific duties or jobs) ....
....
....
<div align="center">(courses, postgraduate education, other forms of further development of knowledge and skills)</div>

6. Employment history (where required for specific duties or jobs) ....
....
....
....
....
<div align="center">(employment periods and jobs held at previous employers')</div>

7. Additional personal information, where the right or the duty to disclose it exists under specific regulations…...
....
....
....

………………………………   ….…………………………………………
(place and date)   (signature of the applicant)

Data Privacy Statement for job candidates

Pursuant to Article 13(1) and (2) of 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, Official Journal of the EU L 119/1), hereinafter referred to as "GDPR", we inform you as follows:

1) Lodz University of Technology with the registered office in Lodz is the Controller of your personal data;

2) We have appointed a Data Protection Officer to supervise the compliance of personal data processing, who can be contacted in matters concerning the protection of your personal data at the following e-mail address: iod@adm.p.lodz.pl; telephone number: 42 631 2039; or in writing to the address of our registered office: Lodz University of Technology, Żeromskiego 116, 90-924 Łódź;

3) As the controller, we will process your data for the purpose of the recruitment process for the position indicated, based on your consent (Article 6(1)(a) GDPR);

4) You have the right to withdraw your consent to the processing of your personal data at any time, but such withdrawal shall not affect the lawfulness of the processing effected on the basis of your consent prior to its withdrawal;

5) You have the right to lodge an objection against the processing of the data as set out above at any time. We will cease to process your data for these purposes unless we can demonstrate that there are compelling legitimate grounds for us to do so which override your interests, rights, and freedoms, or that your data will be required for the possible establishment, assertion, or defense of claims;

6) Your personal data provided in the CV, personal information form for the applicant for employment, and copies of documents supporting your professional experience, education, additional credentials and qualifications will be processed for the period in which claims related to the recruitment process may arise, i.e. for 6 months following the conclusion of the recruitment process. For individuals who have given their consent to the processing of personal data for the purposes of future recruitment, for a period of 12 months following the conclusion of the recruitment process during which the consent has been given;

7) Only individuals authorized by the Controller to process your data in the performance of their duties will have access to your data;

8) Your personal data will not undergo automated processing and will not be subject to profiling;

9) Under GDPR, you shall further have:

   a) the right to access your data and to receive copies thereof,

   b) the right to rectification (amendment) of your data,

   c) the right to erasure/to be forgotten, restriction of data processing,

   d) the right to data portability,

   e) right to file a complaint to the supervisory authority - President of the Personal Data Protection Office, Stawki 2, 00-193 Warsaw.

………………………………….
(date and signature of the candidate)

Consent of the candidate to the processing of personal data
(pursuant to Article 7 GDPR)

I consent to the processing of my personal data by Lodz University of Technology, the Controller of the data included in the following documents that I have submitted:

....

....

for the purpose of recruitment/employment*.

I hereby declare that I have been informed of the right to withdraw my consent at any time, effective as of the date of submission of the withdrawal of consent.

The Controller (or an authorised representative) has also informed me that the withdrawal of consent does not affect the lawfulness of the processing performed on the basis of the said consent prior to its withdrawal.

....
(date and signature of the candidate)

* delete as appropriate