**FORM FOR EMPLOYERS**

**REFERENCE NUMBER: 2-IOE-ZTO-ASBD-19**

**INSTITUTION**: Military University of Technology, Institute of Optoelectronics  
**CITY**: Warsaw  
**POSITION**: Research and teaching assistant, full-time employment  
**DISCIPLINE**: Electronics  
**POSTED**23.12.2019  
**EXPIRES** **23.01.2020**  
**WEBSITE** [www.wat.edu.pl](http://www.wat.edu.pl)**KEY WORDS**: nanomaterials, thin films, pulsed laser deposition (PLD), XPS spectroscopy, AFM microscopy, SEM microscopy.

**DESCRIPTION** (field, expectations, comments):

The candidate should have knowledge and many years of practical experience related to the deposition of thin films using a pulsed laser deposition technique (PLD) and experience in the characterization of thin films, nanomaterials and nanostructures using techniques such as XPS spectrometry, AFM microscopy, and SEM microscopy. In addition, the candidate is also required to have technical knowledge and skills in the field of electronics and design skills for mechanical systems, including systems designed to work in a vacuum.

The applicant's duties will include: PLD system support, performing research with an XPS spectrometer, AFM microscope and SEM microscope. Conducting classes with students including laboratory classes based on the above-mentioned research apparatus and techniques. Development and modernization of the PLD system in terms of the realization of new research projects, development works and cooperation, which involves the candidate having a wide range of technical skills.

**I. Admission requirements:**

* meets the requirements determined in art. 113 of the "Law on Higher Education and Science", July 20, 2018, (Journal of Laws of 2018, item 1668);
* at least a M.Sc. degree;
* professional experience in the work at technical university;
* professional interests consistent with the research profile - nanotechnology and modern nanomaterials;
* the ability to teach classes in Polish language;
* publication achievements - at least thirty-five publications in journals from list A of the Ministry of Science and Higher Education, including at least ten publications in which the results of XPS spectroscopy studies conducted by the candidate;
* ability to use software such as: Microsoft Office tools (Word, Excel ...), Origin or related, Photoshop or related, CasaXPS v.15-v.19, AutoCAD v.2106;
* programming skills in C ++ and C languages and in Delphi environment;
* at least eight years of experience in working with HV and UHV vacuum apparatus, including the ability to operate systems for deposition of layers using the pulsed laser deposition (PLD) method, the XPS spectrometer vacuum system and experience in the field of vacuum apparatus maintenance and minor repairs;
* at least eight years of experience in the field of thin film deposition from various materials using the pulse laser deposition technique (PLD);
* at least eight years of experience in the characterization of different types of materials using an XPS spectrometer and analysis of results in the CasaXPS software;
* experience in measuring morphology of nanostructures and nanolayers using an atomic force microscope (AFM);
* the ability to perform measurements by SEM electron microscope confirmed by a certificate;
* the ability to design mechanical systems in AutoCAD software and prepare technical documentation of designed details;
* the ability to design, build and run simple digital and analog electronic systems to control and monitoring layer deposition processes in the PLD system;
* willingness to participate in scientific and research works;
* participation in at least eight research and development works financed from Polish and international funds;
* teaching experience: minimum 60 hours spent on any subject at the technical university;

**II.** **The competition application should include:**

* a letter of application to the Rector of the Military University of Technology,
* candidate’s questionnaire,
* CV,
* copies of diplomas and other documents confirming / proving the candidate's   
  qualifications,
* a declaration of consent to process personal data included in the job application in accordance with the Data Protection Act,
* a statement that the candidate/applicant has full capacity to act according to the law   
  in force,
* a declaration of no charges within a final judgment of a deliberate crime,
* a declaration of no charges within the disciplinary procedure of the deprivation of rights to practice the profession of academic teacher on a permanent or fixed-term  
  basis/contract,
* a declaration on the full use of civil rights,
* a declaration stating whether MUT is the core or non-core workplace for the applicant.

Document templates available on the website:

<https://bip.wat.edu.pl/index.php/praca/wzory-dokumentow-dla-kandydatow>

**III. Documents should be submitted till 23.01.2020**

- **in person:** to the secretary's office of the Institute of Optoelectronics at the front   
desk, Military University of Technology, Warsaw, 2 gen. Sylwestra Kaliskiego St,   
building 136, room 114;

- **by post**: at the Military University of Technology, Institute of Optoelectronics, 00-908 Warsaw, 2 gen. Sylwestra Kaliskiego St.;

Formal defects that constitute an absolute ground for the rejection of a tender are lack of documents mentioned in point II.

**The application should have a reference number: 2-IOE-ZTO-ASBD-19**

**IV. Additional information can be obtained by telephone: (+48) 261 83 96 96**

The competition will be adjudicated within two weeks from the deadline for submission of offers.

The competition is the first stage specified in the Statute of the Military University of Technology of employment procedure as an academic teacher, and its positive resolution is the basis for further progress. The final decision on employing a person selected in the course of the competition is made by the Rector. The Military University of Technology reserves the right not to resolve the competition without giving a reason. The University does not provide accommodation.

At the end of the recruitment process, offers that do not meet the formal requirements and all other offers except the offer of the selected candidate are destroyed after one month from the day of the competition procedure completion.