



## University of the District of Columbia Job Classification Description

**Job Title: Postdoctoral Research Associate**

### **GENERAL DESCRIPTION OF THE JOB:**

**Additive Manufacturing Post Processing Partnership (AMP3)** under school of Engineering and Applied sciences (SEAS) invite applications for multiple postdoctoral associate positions. AMP3 focus on applying micro-nanofabrication and nanoscale characterizations for making coatings, sensors, and devices. AMP3 provide opportunities to work in exciting and high impact research fields with experienced faculty advisors. AMP3 also provide collaborations with resourceful and globally renowned industries and laboratories such as Oak Ridge National Lab. This position is available in Prof. Pawan Tyagi's group who serve AMP3 as the principal investigator (PI) as well.

**SALARY RANGE: 48K – 55K + fringe benefits**

### **ESSENTIAL DUTIES & RESPONSIBILITIES:**

The position is full-time, for at least one year, with the possibility of renewal pending satisfactory performance and funding. Remuneration will be competitive and based on qualifications. The expected start date is October 1, 2019.

A successful postdoctoral scholar will be mainly responsible for

- Conducting experimental research in the area of nanoelectronics devices and sensors.
- Coatings on 3D printed metal parts.
- Closely work with the graduate and undergraduate students and contribute in joint projects.
- Assist in teaching as need arise.
- Utilize computer program to conduct simulation and modelling
- Lead research publications preparation
- Assist in preparing progress report and organizing outreach activities.

### **MINIMUM JOB REQUIREMENTS/ REQUIRED COMPETENCIES:**

A successful postdoctoral candidate is expected to have the following qualifications and skills.

- A doctoral degree in the filed related to topic nanotechnology, nano-micro fabrication,
- Eligible to legally wok in the USA.
- Highly self-motivated, proactive, friendly, attitude with exemplary problem-solving skills.
- Experimental skills in micro nanofabrication with photolithography, thin film depositions.

- Some nanoscale characterization skills with equipment such as, e.g. electrical transport measurement, Atomic Force Microscope (AFM), magnetic, and spectroscopy instruments.
- Proficiency in computer programming with C++ or Python will be big plus.
- Ability to prepare manuscripts including graphs and illustrations for publications.
- Underrepresented candidates are strongly encouraged to apply

**STANDARDS & EXPECTATIONS:**

**1. Expectations of the job:**

The work is hands-on and involves interacting with the PI, students, and interacting with collaborators at federal laboratories and industries. The job consists of a variety of complex multidisciplinary, and inter-related tasks tied to the information conveyed in the above sections. The Incumbent is expected to function with independence on their assignments and to use initiative and seasoned judgment. The candidate may also be engaged in teaching part of engineering course and conduct outreach activities.

**2. Development and Counseling:**

The Postdoctoral Associate will receive career development mentoring from the PI in terms of scholarly activities, including but not limited to research and grantsmanship. The PI will assist in preparing the postdoctoral candidate as per their career ambition.

**3. Training:**

Incumbent may get training for working with different equipment efficiently and safely.

**4. Knowledge of UDC Rules and Regulations:**

The position requires a solid understanding of the policies and procedures of the Board of Trustees, the University, as well as applicable Federal and D.C. government laws.

The university provides all training required by OSHA to ensure employee safety.

The University of the District of Columbia is an Equal Opportunity Employer (EOE).

Note: The University reserves the right to change or reassign job duties as provided in policy and negotiated agreements.

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Employee Signature

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Date

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Print Name

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Date

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Supervisor Signature

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Revised: (insert revision date)