**Accelerator Physicist I Standard Job Description**

**Classification Title:** Accelerator Physicist I

**FLSA Exemption Status:**Exempt

**Pay Grade:** Commensurate

**Minimum Pay:** $79,422.00

**Job Description Summary:**

The Accelerator Physicist I works collaboratively with Cyclotron staff and faculty to implement facility upgrades, as well to facilitate improvements and repairs to the existing particle-accelerator devices housed at the Cyclotron Institute. These devices include cyclotrons, ion sources, beam-line components, as well as spectrometers and associated detectors. Provides advice, calculations, design, and operation of both existing and envisioned systems.

**Essential Duties/Tasks:**

**40% Operation and Maintenance of Accelerator Equipment**

* Operates ion sources, cyclotrons, beam line elements, and accelerator equipment for the science and applied physics programs.
* Works with staff to maintain a safe and efficient work environment.
* Troubleshoots and reports problems with accelerator equipment.
* Assists in the maintenance, operation, implementation, and improvement of various magnetic spectrometers and associated accelerator equipment.
* Occasionally assists the Radiation Effects Facility project by tuning ion sources and adjusting accelerator devices and beam transport systems.

**20% Scientific Experimentation and Development**

* Participates in various experimental programs to enhance accelerator and detection capabilities and scientific output.
* Learns to tune and adjust accelerator devices and beam transport systems to deliver ion beams of required quality and intensity.
* Learns how to calculate parameters for existing and newly developed accelerator systems and beams.
* Participates in the design, maintenance, and implementation of improved detector systems.

**10% Research and Publication**

* Writes journals and publications on technologies developed in accelerator physics.

**5% Professional Development**

* Continually learns new techniques and best practices in accelerator science and applied physics.

**5% Collaboration and Teamwork**

* Collaborates with Accelerator Technicians and staff to ensure the successful operation of the cyclotron and associated systems.  
  Assists in the development of improved processes and systems for the lab's scientific programs.

**20% Duty Title (for the department's use)**

* Remaining Percentage Can Be Determined by Department to Meet Business Needs or Can Be Incorporated into Percentages Above.

**Qualifications:**

**Required Education:**

* PhD in Physics, Chemistry or Engineering or closely related field from an Accredited College or University or an equivalent combination of education and experience.

**Required Experience:**

* None

**Required Licenses and Certifications:**

* None

**Required Knowledge, Skills, and Abilities:**

* Ability to multitask and work cooperatively with others.

**Additional Information:**

**Machines and Equipment:**

* Computer
* Telephone

**Physical Requirements:**

* None

**Other Requirements and Factors:**

* This position is security sensitive
* This position requires compliance with state and federal laws/codes and Texas A&M University System/TAMU policies, regulations, rules and procedures
* All tasks and job responsibilities must be performed safely without injury to self or others in compliance with System and University safety requirements

**Is this role ORP Eligible? If so, it needs to meet the criteria on the** [**Rules and Regulations of the Texas Higher Education Coordinating Board**](https://reportcenter.highered.texas.gov/reports/data/user-friendly-version-of-ch-25/)**.**

**Yes**

**No**

**Does this classification have the ability to work from an alternative work location?**

**Yes**

**No** 