

**Opportunity Title:** Postdoctoral Research Opportunity - Microwave Engineering

**Opportunity Reference Code:** ARS-QSARU-2014-0024

**Organization** U.S. Department of Agriculture (USDA)

**Reference Code** ARS-QSARU-2014-0024

**How to Apply** A complete application consists of:

- An application
- Official transcript(s) – [Click here for detailed information about acceptable transcripts](#)
- A current resume/CV

If you have questions, send an email to [USDA-ARS@orau.org](mailto:USDA-ARS@orau.org). Please include the reference code for this opportunity in your email.

**Description** A Postdoctoral Research opportunity is available with the U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS) Quality and Safety Assessment Research Unit in Athens, Georgia.

The selected applicant will:

- Develop density-independent algorithms for accurate moisture determination of raw and pelleted biomass as a function of their microwave dielectric properties.
- Develop suitable microwave sensors for measuring the dielectric properties of biomass on conveyors and in pipes.
- Implement the developed sensors in industrial biomass production facilities.

The appointment is full-time for one year and may be renewed upon recommendation of the ARS and availability of funding. The participant must show proof of health and medical insurance. Health insurance can be obtained through ORISE. **The participant does not become an employee of the ARS or ORISE.**

While participants will not enter into an employment relationship with ARS, this position may require a pre-employment check and a full background investigation.

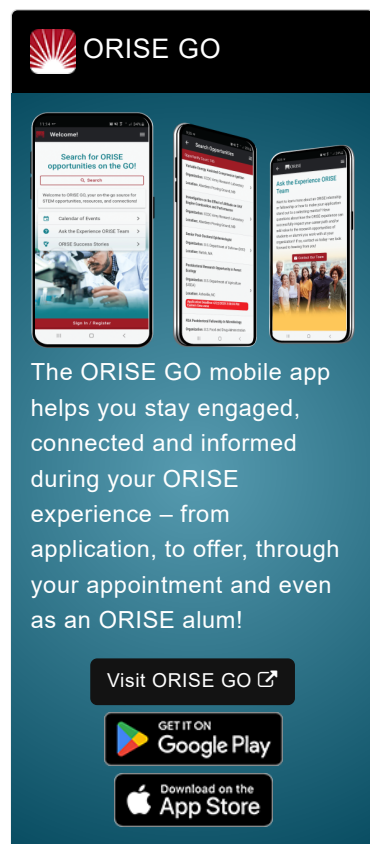
This opportunity is available to U.S. citizens, Lawful Permanent Residents (LPR) and foreign nationals.

This is an equal opportunity program open to all qualified individuals without regard to race, color, age, sex, religion, national origin, mental or physical disability, genetic information, sexual orientation, or covered veteran's status.

For additional information about the ARS Postdoctoral Research Program, please visit <http://www.orise.orau.gov/usda-ars>.

**Qualifications** To be eligible, applicants must have received a doctorate degree in microwave engineering.

The ideal candidate will have knowledge and experience in the design of microwave components and circuits for heating, drying, and sensing



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applications, knowledge and experience with electromagnetic packages such as Microwave Studio and COMSOL and their use for the design and realization of hardware, experience and training in radio-frequency measurement techniques, and experience testing with vector network analyzer. Excellent verbal and written communications skills are highly desirable.

- Eligibility**
- Requirements**
- **Degree:** Doctoral Degree.
  - **Academic Level(s):** Postdoctoral.
  - **Discipline(s):**
    - **Engineering** ([1](#)👁)