

Opportunity Title: Cotton Fiber and Yarn Quality and Its Impact on Fiber Processing and Products

Opportunity Reference Code: ARS-CSQR-2015-0131

Organization U.S. Department of Agriculture (USDA)

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How to Apply A complete application package consists of:

- An application
- Transcript(s) – For this opportunity, an unofficial transcript or copy of the student academic records printed by the applicant or by academic advisors from internal institution systems may be submitted. Selected candidate must provide proof of completion of the degree before the appointment can start. Proof must be sent to ORISE directly from the academic institution including graduation date and degree awarded. All transcripts must be in English or include an official English translation.
- A current resume/CV

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

Description A Postgraduate research opportunity is available with the U.S. Department of Agriculture (USDA) Agricultural Research Service (ARS), Cotton Structure and Quality Research (CSQR) in New Orleans, Louisiana.

The incumbent will conduct research and, if necessary, modify instrumentation to characterize essential physical properties of cotton fiber relative to product quality and textile processing and to establish the relationships among the properties of fiber, yarn, and fabric. The results from the developed techniques will be compared using statistics/statistical modeling to results from standard and non-standard cotton fiber quality measurements and instrumentation (HVI, AFIS, imaging, etc.).

The appointment is for one year and may be renewed based upon recommendation of the ARS and availability of funding. The selected applicant will receive a stipend as support for their living and other expenses during this appointment. Stipend rates are determined by ARS officials, and are based on the applicant's academic and professional background. The participant must show proof of health and medical insurance. Health insurance can be obtained through ORISE. The participant will not enter into an employee/employer relationship with ORISE, ORAU, USDA, ARS, or any other office or agency. Instead, the participant will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment.

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

This opportunity is available to U.S. citizens, Lawful Permanent Residents (LPR), and foreign nationals. Non-U.S. citizen applicants should refer to the [Guidelines for Non-U.S. Citizens Details](#) page of the program website



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for information about the valid immigration statuses that are acceptable for program participation.

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

For more information about the ARS Research Participation Program, please visit the [Program Website](#).

Qualifications To be eligible, applicants must have received a doctorate degree within five years of the desired starting date. Knowledge of and/or experience with applications of image analysis and microscopy; practical simulation of particular engineering processes by analytical, numerical, or hybrid computer models; and /or applications of system modeling, knowledge discovery (artificial neural networks, fuzzy logic, etc.), and/or database development programs are preferred. Knowledge of and/or experience with fiber and yarn testing, textile processing, and/or textile/fiber science and technology are desired.

- Eligibility Requirements**

- **Degree:** Doctoral Degree.
 - **Discipline(s):**
 - **Chemistry and Materials Sciences** ([1](#) )
 - **Communications and Graphics Design** ([1](#) )
 - **Computer, Information, and Data Sciences** ([1](#) )
 - **Engineering** ([5](#) )
 - **Life Health and Medical Sciences** ([3](#) )
 - **Mathematics and Statistics** ([10](#) )
 - **Physics** ([16](#) )