

Opportunity Title: Protein Utilization Postdoctoral Fellowship Opportunity Reference Code: ARS-BOACRU-2018-164-0017-0018

Organization U.S. Department of Agriculture (USDA)

Reference Code ARS-BOACRU-2018-164-0017-0018

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. Click Here for detailed information about acceptable transcripts.
- A current resume/CV
- Two references While two references are requested, applications will be considered without reference information. It is preferred that a complete application package contains a minimum of one reference.

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

Description A research opportunity is available with the the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), Eastern Regional Research Center, Biobased and Other Animal Co-Products Research Unit in Wyndmoor, Pennsylvania.

> The Eastern Regional Research Center is home to the Nation's leading scientists and engineers in agriculture solving problems facing the U.S. today and for tomorrow with fundamental, applied, and developmental research on agricultural commodities including milk, meat, poultry, hides, leather, wool, fats, oils, rendered protein, grains, fruits, vegetables, energy crops, and juices.

The Biobased and Other Animal Co-Products Research Unit is primarily engaged in developing bio-based flocculants. Flocculants are substances that aid in purifying water by causing contaminants to agglomerate and settle. Many commercial flocculants are fossil-fuel based polymers. The flocculants being developed are made from by-products of the meat industry, specifically blood and rendered protein. The group is focused on three types of problems:

- · developing inexpensive processes for transforming the raw material into the product
- · improving the performance of the product
- · adapting the technology to meet the needs of different types of end-users

Under the guidance of a mentor, the participant will be involved in one or more of the following: improving flocculant performance through chemical or physical modifications to flocculant protein, characterizing the interactions between flocculants and target contaminants, examining options for industrial production of flocculants, or evaluating the potential and adapting technology of flocculant for particular kinds of end-users. Within certain constraints, the participant will have considerable freedom to determine how the project goals will be achieved.

The research is primarily laboratory based, but pilot plant experiments are also conducted.

This program, administered by ORAU through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and ARS. The initial appointment is for one year,



Generated: 8/25/2024 7:12:05 PM



Opportunity Title: Protein Utilization Postdoctoral Fellowship Opportunity Reference Code: ARS-BOACRU-2018-164-0017-0018

> but may be renewed for an additional year upon recommendation of ARS and is contingent on the availability of funds. The participant will receive a monthly stipend commensurate with educational level and experience. Proof of health insurance is required for participation in this program. The appointment is full-time at ARS in the Wyndmoor, Pennsylvania area. Participants do not become employees of USDA, ARS, DOE or the program administrator, and there are no employmentrelated benefits.

Annual Stipend: \$66,110

Health Insurance Supplement: \$5,679

Relocation Allowance: \$1,500

Travel (most likely conference participation): \$1,800

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

For more information about the ARS Research Participation Program, please visit the Program Website.

Anticipated Appointment Start Date: Spring 2019

Qualifications The qualified candidate should have received a doctoral degree, or be currently pursuing a doctoral degree and will receive the degree by the appointment start date. Degree must have been received within five years of the appointment start date.

Previous experience in one of more of the following areas is desirable:

- · protein biochemistry or analysis
- · polymer chemistry or analysis
- · colloid chemistry
- · chemical engineering process design
- · techno-economic analysis of chemical or food processes
- · wastewater treatment

## Preferred skills:

- Ability to conduct research at a level of independence at least equal to that of a successful
- Experience with critical evaluation of the literature, creative problem solving, effective written and oral communication, and self-discipline
- General experience in a laboratory setting with the capability to critically evaluate their own technique
- · All specific methodologies and techniques can be learned or developed while on appointment

## Eligibility Requirements

- Degree: Doctoral Degree.
- Discipline(s):
  - Chemistry and Materials Sciences (7\_②)
  - Engineering (⁴\_♥)
  - Environmental and Marine Sciences (2.4)
  - Life Health and Medical Sciences (3 )

Generated: 8/25/2024 7:12:05 PM



Opportunity Title: Protein Utilization Postdoctoral Fellowship
Opportunity Reference Code: ARS-BOACRU-2018-164-0017-0018

**Affirmation** I have received a doctoral degree, or are currently pursuing a doctoral degree and will receive the degree by the appointment start date.

Generated: 8/25/2024 7:12:05 PM