

Opportunity Title: Nanotechnology Post-Doctoral Fellowship--FDA NCTR

Opportunity Reference Code: FDA-NCTR-2018-0119

Organization U.S. Food and Drug Administration (FDA)

Reference Code FDA-NCTR-2018-0119

How to Apply A complete application consists of:

- An application
- Transcripts – [Click here for detailed information about acceptable transcripts](#)
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- Two educational or professional references

All documents must be in English or include an official English translation.

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

For more information about the position, please contact Dr. Anil K. Patri, Director, NCTR-ORA Nanotechnology Core Facility/National Center for Toxicological Research:

Anil K. Patri, Ph.D.

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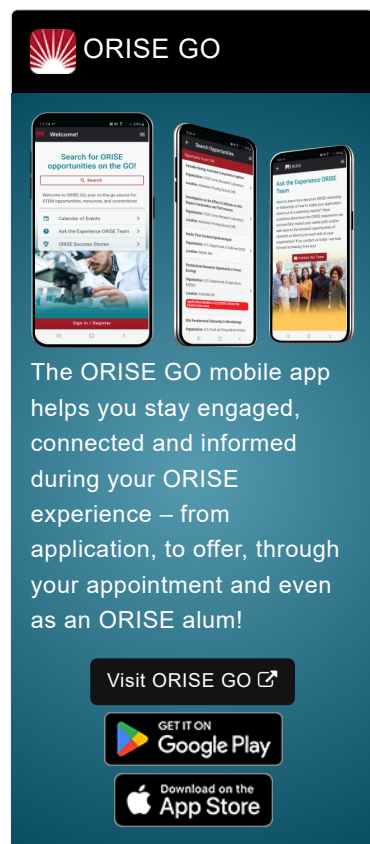
Tel: (870) 543-7580

Description A postdoctoral fellowship opportunity is currently available within the Nanotechnology Core Facility at the National Center for Toxicological Research (NCTR) of the U.S. Food and Drug Administration (FDA), Jefferson Laboratories Campus located in Jefferson, Arkansas.

The Nanotechnology Core Facility was developed to support the technical needs of FDA scientists involved in determining the toxicity, safety, and characterization of nanomaterials. This facility supports research efforts at NCTR and FDA's Office of Regulatory Affairs (ORA), the two laboratories co-located on the campus in Jefferson, Arkansas.

The selected participant will collaborate on multi-disciplinary research efforts that may include:

- Synthesis and functionalization of Nanoscale material
- Development of novel methods for the physicochemical characterization and detection of nanoscale materials
- Characterization of nanoscale materials and quantifying the biological



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distribution in a variety of in vitro and in vivo biochemical and toxicology studies

- Development and validation of novel methods to isolate and identify nanomaterials in complex matrices.

Through this project, the participant will develop skills in: Chromatography (HPLC, SEC, AFFF) inductively coupled plasma-mass spectrometry (ICP-MS), X-ray diffraction (XRD), particle size analysis (multiple methods including dynamic light scattering, photon cross correlation spectroscopy, and particle tracking analysis), spectroscopy (FTIR, UV/VIS, fluorescence, XRF, Raman), atomic force microscopy (AFM), high resolution mass spectrometry (HRMS), and electron microscopy (transmission and scanning) with elemental analysis capabilities.

This program, administered by ORAU through its contract with the U.S. Department of Energy to manage the Oak Ridge Institute for Science and Education, was established through an interagency agreement between DOE and FDA. 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 NCTR in Jefferson, Arkansas. Participants do not become employees of FDA or the program administrator, and there are no fringe benefits paid.

- Qualifications**
- A doctoral degree in synthetic chemistry, analytical chemistry, materials science or physics with a strong emphasis in nanotechnology, received within the last five years.
 - Experience in the characterization of nanomaterials using spectroscopy, chromatography microscopy, or other current published methodologies is preferred.

- Eligibility Requirements**
- **Degree:** Doctoral Degree received within the last 60 month(s).
 - **Discipline(s):**
 - **Chemistry and Materials Sciences** ([12](#) )
 - **Life Health and Medical Sciences** ([13](#) )
 - **Science & Engineering-related** ([1](#) )