

Information about SHUG and Research Opportunities at ORNL

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Neutron Scattering Division, ORNL

SHUG-EC, Secretary

ORNL is managed by UT-Battelle, LLC for the US Department of Energy

PART 1: SNS-HFIR user group (SHUG)

- SHUG consists of all persons interested in using the neutron scattering facilities at Oak Ridge

<https://neutrons.ornl.gov/shug>

- Input to NScD management on user concerns
- Make recommendations to NScD management for new neutron scattering capabilities and instruments
- Forum for keeping the community informed of issues and progress at these facilities

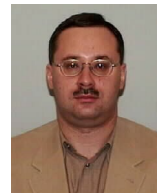
SHUG: integral part of shaping neutron sciences at ORNL

Topics important to SHUG

- User support from instrument teams
- New capabilities for existing instruments
 - Data acquisition and analysis software
- Sample environment equipment and support
- Planning for new instruments at SNS, HFIR, and the STS
 - And more...

SHUG Executive Committee

- Olivier Delaire (Duke University) – Chair
- Martin Mourigal (Georgia Tech) – Vice Chair
- Adam Aczel (ORNL) - Secretary
- Michelle Dolgos (University of Calgary) – Past Chair
- Marc Janoschek (LANL)
- Allyson Fry-Petit (Cal State University - Fullerton)
- William Ratcliff (NIST)
- Jarek Majewski (NSF)
- Eugene Mamontov (ORNL)
- Dvora Perahia (Clemson University)
- Stephen Wilson (University of California, Santa Barbara)
- **Sudipta Gupta (Louisiana State University) – Postdoc/Grad Student Representative)**



SHUG Executive Committee Activities

- Monthly conference call with NScD management: information exchange and activity planning
- Organize an ORNL on-site meeting every two years: talks, tutorials, panel discussions, town hall meeting
- Recent activities organized by SHUG-EC:
 - 2019 SHUG on-site meeting at ORNL
 - ORNL new instrumentation workshop at the 2018 ACNS
 - Webinars - Proposal writing tutorial; data reduction, visualization, and analysis topics

Providing feedback to SHUG-EC is important

- ✧ End of experiment survey questions
- ✧ SHUG email address (shug-ec@email.ornl.gov)
- ✧ Online comment card:
<http://neutrons.ornl.gov/shug-online-comment>
- ✧ LinkedIn page: <http://tinyurl.com/SHUG-neutron>
- ✧ Other suggestions?

Part 2: Research opportunities at ORNL

Graduate Student Opportunities across DOE

- US Department of Energy Office of Science Graduate Student Research Program
 - google “DOE SCGSR”; <https://science.osti.gov/wdts/scgsr>
- Facilitates “in-residence” stays at DOE Office of Science Laboratories for collaborative research; typically key component of thesis work
- Graduate student stipend provided by DOE during national lab appointment
- Stays must be 3 - 12 months in duration
- Research must be aligned with a DOE priority area
 - Neutron scattering science and instrumentation
- Restricted to **US Citizens** and **Legal Permanent Residents**
- Strict application schedule established by DOE

DOE SCGSR Program

Key Dates

The SCGSR Program Key Dates are noted below. At the submission deadline (shown in red), the online application system will close after which no additional materials will be accepted. **The online application system closes at 5:00 PM Eastern Time, so please plan accordingly.**

SCGSR Project Periods	2018 Solicitation 2	2019 Solicitation 1	2019 Solicitation 2***
On-line Application Opens	August 23, 2018	February 14, 2019	August 2019
Applications Due	November 15, 2018 5:00 PM ET	May 9, 2019 5:00 PM ET	November 2019
Offer Notification <i>Period Begins on or around</i>	March/April 2019	August/September 2019	March/April 2020
<i>Earliest*</i> Start Date for Proposed Project Periods	June 3, 2019	October 28, 2019	June 1, 2020
<i>Latest**</i> Start Date for Proposed Project Periods	September 30, 2019	March 2, 2020	October 5, 2020

*Proposed project periods may not begin before this date, and may be 3 to 12 consecutive months in duration.

** Proposed project period must begin no later than this date, and may be 3 to 12 consecutive months in duration.

***All Dates are tentative.

Graduate Student Opportunities more specific to ORNL: HERE program

- Higher Education Research Experiences (HERE) at ORNL through ORAU
 - Google “HERE at ORNL”;
<https://orise.orau.gov/ornl/hereatornl/graduate-students.html>
 - Allows graduate students to work closely with ORNL scientists and use unique resources of ORNL to perform scientific research
 - More of a learning experience not necessarily coupled directly to thesis work
 - Flexible appointment duration (2 months – 1 year)
 - Graduate student stipends and housing allowance provided by ORAU/ORNL
 - Restricted to **US Citizens** and **Legal Permanent Residents**
 - Applications accepted by ORAU year round

Graduate Student Opportunities more specific to ORNL: ASTRO program

- Advanced Short-Term Research Opportunity (ASTRO) at ORNL through ORAU
 - Google “ASTRO at ORNL”;
<https://orise.orau.gov/ornl/astro/default.html>
 - Participants engage in research or technical projects related to DOE’s ongoing research and development programs under the guidance of ORNL scientists
 - Initial appointments are 3 – 12 months, with possibility of renewal up to 24 months total
 - Graduate student stipends and housing allowance provided by ORAU/ORNL
 - **No citizenship restrictions!**
 - Applications accepted by ORAU year round

Graduate Student Opportunities more specific to ORNL: GO! program

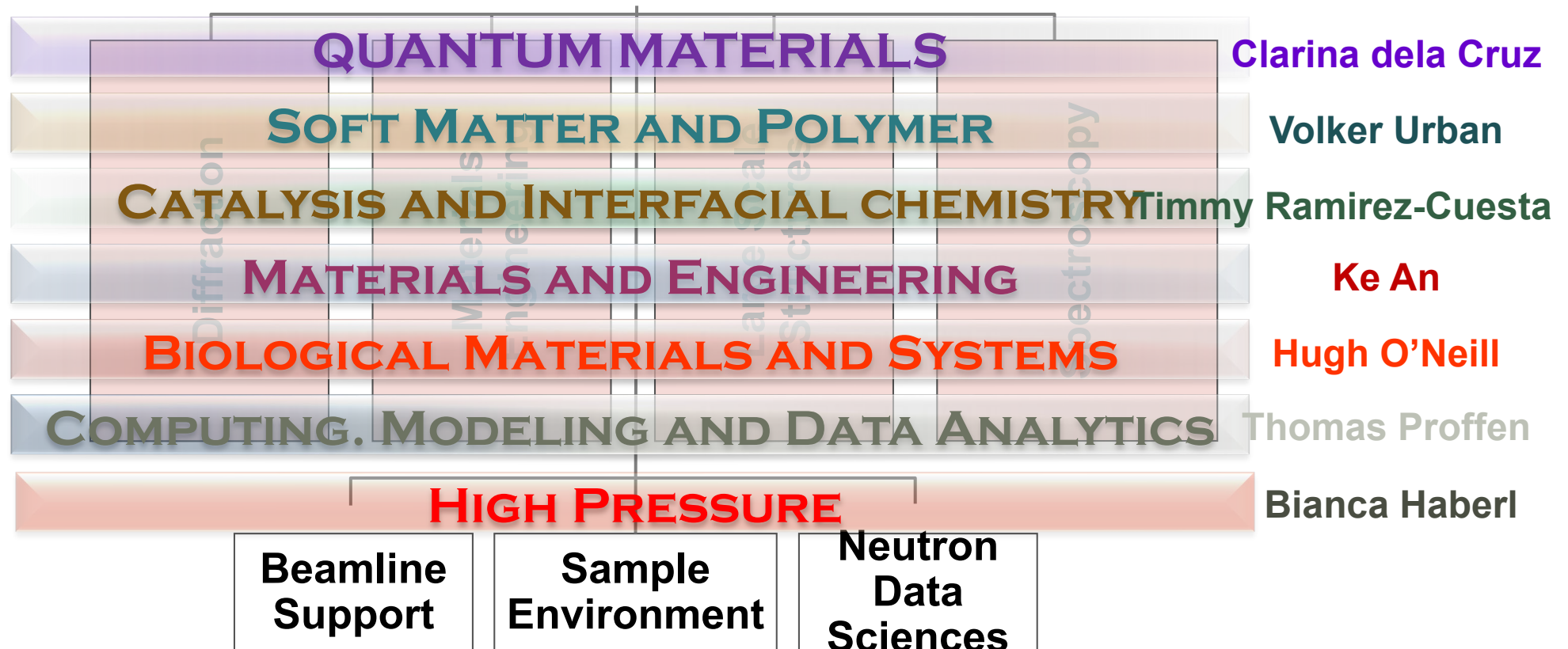
- Google “ORNL GO! Program”; <https://www.ornl.gov/content/graduate-opportunities>
- Students carry out world-leading research at ORNL while earning a Ph.D. degree from their home institution
- Time spent at ORNL: 1 – 3 years
- Students are funded by ORNL during their residency period
- **No citizenship requirement**, but only students from particular universities are eligible to participate
- Coursework must be completed at host university before student residency period at ORNL begins
- Agreement reached between ORNL and host university
- Point-of-contact: Crystal Schrof, schrofca@ornl.gov

ORNL GO! Program: Partner Institutions

- Boston University
- Colorado School of Mines
- Florida State University
- Georgia Tech
- Michigan State
- Michigan Tech
- Middle TN State
- NC State
- Ohio State
- University State
- Purdue
- Rensselaer
- Rice
- TN Tech
- Texas A&M
- UC-Davis
- Univ. FL
- UIUC
- Univ. Memphis
- Univ. Missouri
- Nebraska–Lincoln
- Univ. TN Chattanooga
- Univ. TN Knoxville
- UVA
- Wisc.-Madison
- UNLV
- Vanderbilt
- Virginia Tech
- Washington State
- (always open to new partnerships)

ORNL Neutron Scattering Division Postdoc Program

- Organized through the seven science initiatives in NSD
- 30 postdoc positions in the division; 3 year maximum term; 10 new hires every year; job postings at <https://jobs.ornl.gov/>
- Staff members compete internally for funds via science proposals



ORNL Distinguished Staff Fellowship Program

- Lab-wide competition for special research positions, including the Wigner, Weinberg, and Russell fellowships
- Additional benefits: higher salary, more prestigious, permanent staff position
- Typically, strong candidates already have some postdoctoral experience, but not always
- Strong candidates bring unique skillset to ORNL: Example – Joe Paddison, New Wigner Fellow – diffuse scattering analysis expert
- For more information, please see:
<https://www.ornl.gov/careers/distinguished-fellowships>

Questions?