

# NCNR/NIST RESIDENT STAFF AND VISITING SCIENTISTS

## CENTER OFFICE (856)

Rowe, J. M., Director  
Weiss, S. H., Deputy Director  
Hill, J. M., Secretary  
Sullivan, D. A., Admin. Off.  
Neal, S. L., Admin. Asst.  
Clutter, L. K., User. Coord.  
Barker, J. G.  
Cappelletti, R. L.  
Kamitakahara, W. A.  
Prask, H. J.

## REACTOR OPERATIONS & ENGINEERING

Raby, T. M., Chief  
Torrence, J. F., Deputy  
Poole, L. M., Secretary

### Operations

Beasley, R.D.  
Bickford, N. A.  
Bobik, P. A.  
Cassells, M. G.  
Clark, F. C.  
Dilks, H. W.  
Flynn, D. J.  
Guarin, E. L.  
Lindstrom, L. T.  
McDonald, M. J.  
Mueller, W. W.  
Myers, T. J.  
Pierce, S. C.  
Ring, J. H.  
Slaughter, S. G.  
Sprow, R. P.  
Stiber, R. F.  
Thompson, R. G.  
Toth, A. L.  
Wilkison, D. P.  
Wright, K. D.

### Engineering

Suthar, M. A., Chief  
Beatty, J. A.  
Boyd, J. M.  
Brady, D. E.  
Hall, K. D.  
Liposky, P. J.  
Reilly, G. D.  
Shuman, L.A.

### Guest Researchers

Anderson, D. A.  
Dahan, S.  
Cunningham, W. C.  
Yee, K.

## NEUTRON CONDENSED MATTER SCIENCE GROUP

Rush, J. J., Leader  
Runkles, C. L., Secretary  
Bowen, M. L., Automat. Asst.  
Berk, N. F.  
Yildirim, T.

### Chemical Physics of Materials

Copley, J. R. D.  
Dimeo, R. M.  
Forstner, K. T.  
McLaughlin, J. C.  
Neumann, D. A., Team Leader  
Tsai, A. M.  
Udovic, T. J.

### Crystallography

Reisner, B. A.  
Santoro, A.  
Stalick, J. K.  
Toby B. H., Team Leader

### Magnetism and Superconductivity

Borchers, J. A.  
Erwin, R. W.  
Gehring, P. M.  
Lynn, J. W., Team Leader  
Santodonato, L.

### Macromolecular and Microstructure

Butler, P. D.  
Glinka, C. J., Team Leader  
Hammouda, B.  
Hernandez, Y.  
Kline, S. R.  
Munter, A. E.  
Rosov, N.

### Surfaces and Interfaces

Dura, J. A.  
Krueger, S. T.  
Ivkov, R.  
Majkrzak, C. F., Team Leader  
Satija, S. K.

### Guest Researchers

Adams, C.  
Broholm, C.  
Brown, C. M.  
Bu, Z.  
Choi, S.-M.  
Cook, J.  
Dender, D.  
Gnäupel-Herold, T.  
Gulseren, O.  
Ho, D.  
Huang, Q. Z.  
Lee, S.-H.  
Lin, M. Y.  
Meyer, A.  
Nieh, M.  
Papanek, P.  
Pagoda, C.  
Park, S.  
Prince, E.  
Raebiger, J.  
Rathgeber, S.  
Sitepu, H.  
Tarek, M.  
Trevino, S. F.  
Ulrich, C.  
Vasiliu-Doloc, L.

## RESEARCH FACILITY OPERATIONS

Gallagher, P. D. Leader  
Ruhl, K. J., Clerk Typist  
Baltic, G. M.  
Bostian, C. D.  
Brand, P. C.  
Clarkson, A. W.  
Clem, D. L.  
Clow, W. R.  
Dickerson, W. E.  
English, M. C.  
Fravel, D. H.  
Fulford, D.  
Greene, G. C.  
Heald, A. E.  
Klosowski, P.

Knill, W. C.  
Kopetka, P. H.  
Kulp, D. L.  
LaRock, J. G.  
Maliszewskyj, N. C.  
Pierce, D. J.  
Reardon, J. P.  
Rinehart, M. J.  
Schröder, I. G.  
Slifer, S.  
Thai, T. T.  
Tobin, P. J.  
Williams, R. E.  
Ziegler, J. B.

### Guest Engineers

Brocker, C. W.  
Christman, R.  
Kenney, J. T.  
Moyer, J. J.  
Murbach, M.  
Wrenn, C. W.

## OTHER NIST GROUPS

### NEUTRON INTERACTIONS & DOSIMETRY GROUP (846)

Gilliam, D. M., Leader  
Chin, C. R., Secretary  
Adams, J. M.  
Arif, M.  
Clarkson, N.  
Dewey, M. S.  
Gentile, T. R.  
Huffman, P. R.  
Jacobson, D. L.  
Nico, J. S.  
Thompson, A. K.

### Guest Researchers

Brome, C. R.  
Butterworth, J.S.  
Chowdhuri, Z. S.  
Doyle, J. M.  
Dzhosyuk, S. N.  
Eisenhauer, C. M.  
Hansen, G. L.  
Ioffe, A.  
Jones, G. L.  
Mattoni, C. E. H.  
McKinsey, D.  
Rich, D. R.  
Schwartz, R. B.  
Snow, W. M.  
Weitfeldt, F. E.

## NUCLEAR METHODS GROUP (839)

Greenberg, R. R., Leader  
Wilson, J. M., Secretary  
Becker, D. A.  
Chen-Mayer, H. H.  
Demiralp, R.  
Lamaze, G. P.  
Langland, J. K.  
Lindstrom, R. M.  
Mackey, E. A.  
Mildner, D. F. R.  
Paul, R. L.  
Porter, B. J.  
Zeisler, R. L.

### Guest Researchers

Berger, A.  
Bishop, R. L.  
Blackman, M. J.

## HEALTH PHYSICS (354)

Slaback, L. A., Leader  
Thomas, C. L., Secretary  
Brown, D. R.  
Campbell, C. D.  
Cassells, L. H.  
Clark, J. S.  
Deardorff, G. E.  
Fink, L. E.  
Mengers, T. F.  
Shubiak, J. J.

## RESEARCH AND ENGINEERING STAFF

J. G. Barker  
SANS instrumentation and research  
Microstructure of materials  
N. F. Berk  
Condensed matter theory  
Scattering theory for microstructure analysis  
Computer software for graphics and data analysis  
N. A. Bickford  
Reactor operations  
Reactor irradiations  
Reactor utilization  
J. A. Borchers  
Magnetism  
Thin-film analysis  
Artificially modulated materials  
D. E. Brady  
Electrical/electronic engineering  
Nuclear reactor instrumentation  
NDE diffraction methods  
P. C. Brand  
Engineering physics  
Materials engineering  
Neutron residual stress measurements  
J. M. Boyd  
Electrical/electronic engineering  
Nuclear reactor instrumentation  
P. D. Butler  
Microstructure of complex fluids  
SANS instrumentation  
R. L. Cappelletti  
Dynamics of disordered solids  
Condensed matter physics  
Science information management  
J. R. D. Copley  
Time-of-flight spectrometer development  
Neutron instrumentation  
Conceptual design  
Condensed matter physics  
W. E. Dickerson  
Neutron scattering instrumentation  
Microcomputer interfacing  
Nuclear and engineering physics

- R. M. Dimeo  
Condensed matter physics  
Cold neutron instrumentation  
Molecules in porous media
- J. A. Dura  
Combined molecular beam epitaxy and neutron reflectivity  
Instrumentation  
Surface, interfacial, and epitaxial physics
- M. C. English  
Electrical engineering  
Instrument development  
Facility operations
- R. W. Erwin  
Magnetic materials  
Phase transformations  
Cryogenics
- K. T. Forstner  
Instrumentation  
Monochromator development
- D. B. Fulford  
Mechanical engineering
- P. D. Gallagher  
Neutron instrumentation  
Interfacial phenomena in polymer systems and complex fluids  
Phase transitions and critical phenomena
- P. M. Gehring  
Back-scattering and triple-axis instrumentation  
Transitions in magnetic and ferroelectric materials  
Dynamics of high  $T_c$  materials
- C. J. Glinka  
Microstructure characterization by SANS  
CHRNS project director  
Cold neutron instrument development
- G. C. Greene  
System and user software for cold neutron instrumentation  
Spectrometer and data acquisition systems interfaces
- B. Hammouda  
SANS from polymers, liquid crystals, and colloids  
Dynamics of polymers in solution  
Scattering from sheared fluids
- Y. Hernandez  
Chemical technology  
Sample preparation and characterization
- A. E. Heald  
Design engineering  
Neutron instrumentation  
Shielding
- W. A. Kamitakahara  
Dynamics of disordered solids  
Condensed matter physics  
NCNR user program
- S. R. Kline  
Microstructure of colloids and microemulsions  
Novel surfactant systems  
SANS instrumentation
- R. Ivkov  
Dynamics of filled polymers and polymer composites  
Neutron reflectometry  
Structure of polymer and protein solutions, polymer brushes thin films
- P. Klosowski  
Scientific data visualization  
Numerical computer modeling  
Data acquisition software and hardware
- P. A. Kopetka  
Mechanical engineering  
Cold source design  
Electro-mechanical systems
- S. T. Krueger  
Structure of biological materials  
SANS and neutron reflectometry methods  
Computer software development
- J. G. LaRock  
Mechanical engineering  
Neutron instrumentation design
- P. J. Liposky  
Design engineering  
Nuclear systems and components
- J. W. Lynn  
Condensed matter physics  
Magnetic and superconducting materials  
Neutron scattering methods
- C. F. Majkrzak  
Condensed matter physics  
Polarized neutron scattering and instrumentation development  
Neutron reflectivity measurements
- N. C. Maliszewskyj  
Computer software development  
Time-of-flight instrumentation  
Condensed matter physics
- J. C. McLaughlin  
Materials chemistry  
Neutron scattering  
Nanoscale properties of cements
- A. E. Munter  
Neutron SANS and reflectometry  
Computer software development
- T. J. Myers  
Reactor operations  
Safety analysis
- D. A. Neumann  
Molecular and layered materials  
Condensed matter physics  
Neutron and X-ray scattering instrumentation
- D. J. Pierce  
Mechanical engineering  
Neutron instrumentation design
- H. J. Prask  
Residual stress measurement methodology  
Neutron NDE applications and instrumentation
- T. M. Raby  
Reactor operations and standards  
Nuclear engineering  
Nuclear systems and components
- G. D. Reilly  
Design engineering  
Nuclear systems and components
- B. A. Reisner  
Solid state chemistry  
Crystallographic methods  
Neutron scattering
- N. Rosov  
Spin echo techniques  
Phase transformations  
Magnetic materials
- J. M. Rowe  
Orientationally disordered solids  
Cold source development  
Cold neutron research and instrumentation
- J. J. Rush  
Catalysts and molecular materials  
Hydrogen in metals  
Inelastic scattering methods
- L. Santodonato  
Condensed matter physics  
Cryogenics
- A. Santoro  
Crystal structure of oxide ceramics  
Theory of crystal lattices  
Powder diffraction methods
- S. K. Satija  
Low-dimensional molecular systems  
Fractal aspects of microporous media  
Neutron reflectometry
- I. G. Schröder  
Cold neutron instrumentation development  
Nuclear and engineering physics  
Optical devices for neutron transport
- J. K. Stalick  
Neutron and X-ray diffraction  
Inorganic chemistry  
Crystal database development
- M. A. Suthar  
Design engineering  
Nuclear systems and components
- B. H. Toby  
Neutron and synchrotron X-ray diffraction  
Zeolite crystallography  
Structure determination methods
- J. F. Torrence  
Reactor supervision  
Reactor maintenance  
Nuclear engineering
- A. M. Tsai  
Biochemical engineering  
Dynamics of biological systems  
Inelastic neutron scattering
- T. J. Udovic  
Neutron time-of-flight instrumentation  
Properties of catalysts and adsorbates  
Hydrogen in metals
- S. H. Weiss  
Reactor operations and standards  
Reactor licensing and regulations  
Electrical Engineering
- R. E. Williams  
Cold neutron source development  
Nuclear engineering  
Reactor physics simulations
- T. Yildirim  
Condensed matter theory  
Neutron scattering methods  
Solid state synthesis
- J. B. Ziegler  
Electrical engineering  
Electronic design  
Instrument development