



OAK RIDGE NATIONAL LABORATORY
NEUTRON SCIENCES



PRESH: Publications Reporting Neutron Experiments at SNS and HFIR



Shelly Ren, Al Ekkebus, Anna Galyon, Judy Trimble, and
Gabrielle Boudreau

NOBUGS -- Oct 12, 2010



1. Introduction

2. Project Requirements

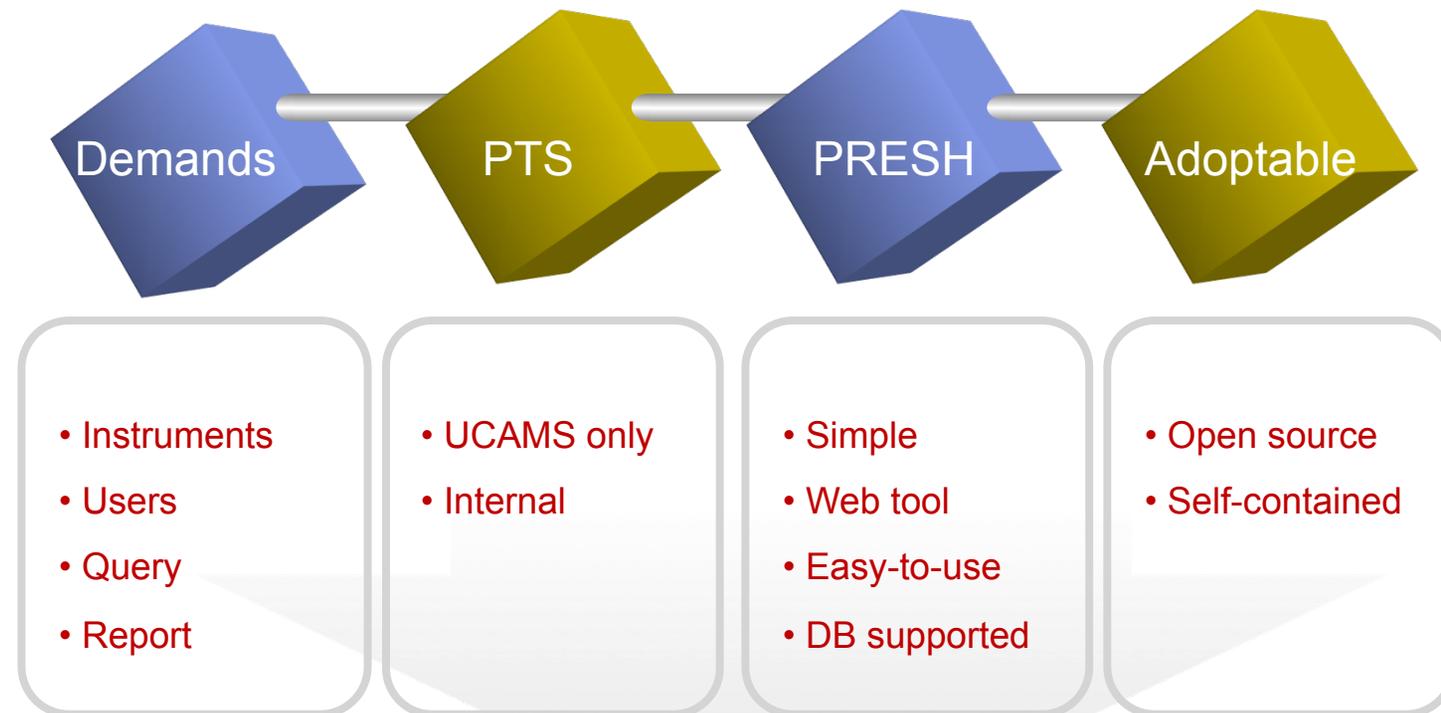
3. Demo

4. Software Tools

5. Future Work



Introduction



Mission: To facilitate collecting publication information directly from users who have conducted neutron scattering experiments at SNS and HFIR



Project Requirements - Phase I

For General Users:
No login



- by beam line
- by author
- by pub type
- by pub name
- by pub year

- beam line
- author
- pub type, name, year
- instrument
- by DOI

Submission

Browse

Search

Stats



New Publication

Browse

Search

Stats

We need to collect published documents from neutron scattering experiments conducted at SNS and/or HFIR.

Beamline and Proposal Information

Beamline : SNS-BL-2 *

Publication Details

Title : *

Authors : *

Scientific Discipline : Biological and Life Sciences *

Publication Year : 2010 *

Publication Month : APR

DOI or URL :

Publication Type : Conference Proceeding *

Publication Type Details

Conference Name : *

Proceeding Name :

Submission Information

Submitted By : *

Email Address : *

Comments :

Submit

Required fields are indicated with a red asterisk (*)

Upon submission, users are notified of a review process by a verification screen that states that "the data will be moderated by SNS/HFIR admins and pushed to the database weekly."



New Publication **Browse** Search Stats

Select a Group: **Ungrouped**

Title	Author	Publication Name	Year	Beamline	Instrument Name	DOI
The origin of the dyn	Khodadadi S., Pawlus S., Roh J. H., Garcia Sakai V., Mamontov E., Sokolov A. P.	Journal of Chemical Physics	2008	SNS-BL-2	BN	
Magnetic Dispersion in Lightly Doped La ₂ -xSrxCuO ₄	Matsuda M., Wakimoto S., Fernandez-Baca J. A., Tranquada J. M.	Physical Review Letters	2008	HFIR-HB-1	Polarize	
The Macromolecular Neutron Diffractometer (MaNDI) at the Spallation Neutron Source: enhanced optics design, high-resolution neutron detectors and simulated diffraction	Coates L., Stoica			SNS-BL-11B	MANDI	1107/S0021889810008
NPDGamma: a measurement of the parity violating directional gamma-ray asymmetry in polarized cold neutron capture on hydrogen	For				FNPB	
Parity violation in neutron-proton capture - The NPDGamma experiment	Gericke			SNS-BL-13		
Nab: Measurement principles, apparatus and uncertainties	Barron L., Bowman			SNS-BL-13		
Design, Manufacturing and Performance of a Pair of Superconducting Solenoids for a Neutron Spin-Echo Spectrometer at the SNS	Pocanic D., Alarcon R., Alonzi L. P., Baessler S., Balascuta S., Bowman J. D., Bychkov M. A., Byrne J., Calarco J. R., Cianciolo V., Crawford C., Frlez E., Gericke M. T., Greene G.	Nuclear Instruments and Methods in Physics Research	2009	SNS-BL-13	FN	
Resolution of VISION, a crystal-analyzer spectrometer	Walter W., Boffo C., Borlein M., Kozielowski T., Monkenbusch M., Ohl M., Paul A., Schrauth B., Sikler G., Tiemann C.	IEEE Transactions on Applied Superconductivity	2009	SNS-BL-15	NSE	
Atomic pair distribution function analysis from the ARCS chopper spectrometer at the Spallation Neutron Source	Seeger P. A., Daemen L. L., Larese J. Z.	Nuclear Instruments and Methods in Physics Research	2009	SNS-BL-16B, SNS-Other	VISION, Other	http://dx.doi.org/10.1016/j.nima.2009.03.204
Phonon density of states and heat capacity of La ₂ -xTe ₄	Bozin E. S., Juhas P., Zhou W., Stone M. B., Abernathy D. L., Huq A., Billinge S. J. L.	Journal of Applied Crystallography	2009	SNS-BL-18	ARCS	http://dx.doi.org/10.1107/S0021889809023504
ARCS: a wide Angular-Range Chopper Spectrometer at the SNS	Delaire O., May A. F., McGuire M. A., Porter W. D., Lucas M. S., Stone M. B., Abernathy D. L., Ravelli V. A., Firdosy S. A., Snyder G. J.	Physical Review B	2009	SNS-BL-18	ARCS	TEXT
Two-Dimensional Resonant Magnetic Excitation in BaFe _{1.84} Co _{0.16} As ₂	Abernathy D. L.	Notiziario Neutroni e Luce di Sincrotrone	2008	SNS-BL-18, SNS-Other	ARCS, Other	
Phonon Density of States of LaFeAsO _{1-x} F _x	Lumsden M. D., Christianson A. D., Parshall D., Stone M. B., Nagler S. E., MacDougall G. J., Mook H. A., Lokshin K., Egami T., Abernathy D. L., Goremychkin E. A., Osborn R., McGuire	Physical Review Letters	2009	HFIR-HB-3, SNS-BL-18	TAX, ARCS	
	Christianson A. D., Lumsden M. D., Delaire O., Stone M. B., Abernathy D. L., McGuire M. A., Sefat A. S., Jin R., Sales B. C., Mandrus D., Mun E. D., Canfield P. C., Lin J. Y. Y., Lucas	Physical Review Letters	2008	HFIR-HB-3, SNS-BL-18	TAX, ARCS	

You may group publications by Author, Beamline, Publication Year, Type, or Name

You may sort any column in ascending or descending order by clicking the column head

Print Preview



New Publication **Browse** Search Stats

Select a Group: Author

Last Name Index: A B C D E F G **H** I J K L M N O P Q R S T U V W X Y Z

Title	Authors	Publication Name	Year	Beamline	Instrument Name	DOI
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Hagen M.

BASIS: A New Backscattering Spectroscopy			2008	SNS-BL-2, SNS-Other	BASIS, Other	
Observation of high-temperature dynamic protein hydration water and its relation to thermal denaturation of lysozyme			2009	SNS-BL-2	BASIS	

2 Title(s)

Hagiwara M.

Chiral and Collinear Ordering in a Distorted Triangular Antiferromagnet	Smirnov A. I., Svistov L. E., Prozorova L. A., Zheludev A., Lumsden M. D., Ressouche E., Petrenko O. A., Nishikawa K., Kimura S., Hagiwara M., Kindo K., Shapiro A. Y., Demianets	Physical Review Letters	2009	HFIR-HB-1, HFIR-HB-1A	Polarized TAX, Fixed-Incident-Energy TAX	
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1 Title(s)

Hal Lee W. T.

Highlights from the Magnetism Reflectometer at the SNS	Lauter V., Ambaye H., Goyette R., Hal Lee W. T., Parizzi A.	Physica B-Condensed Matter	2009	SNS-BL-4A	MR	
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1 Title(s)

Halbert C. E.

Time-Resolved High Resolution Neutron Imaging Studies at the ORNL Spallation Neutron Source	Nagarkar V. V., Penumadu D., Shestakova I., Thacker S. C., Miller S. R., Ankner J. F., Bilheux H. Z., Halbert C. E.	IEEE Transactions on Nuclear Science	2009	SNS-BL-4B	LR	
The SNS Liquids Reflectometer	Ankner J. F., Tao X., Halbert C. E., Browning J. F., Kilbey II S. M., Swader O. A., admun M. S., Kharlamova E., Sukhishvili	Neutron News	2008	SNS-BL-4B, SNS-Other	LR, Other	

Print Preview

You may get to an author quickly by selecting their last name index



New Publication Browse **Search** Stats

Search

You may search by title, author, publication name, year, and/or beamline; Just click the cell right above the corresponding column name and type your search key:

	<u>Mamontov</u>					
Title	Authors	Publication Name	Year	Beamline	Instrument Name	DOI
The origin of the dynamic transition in proteins	Khodadadi S., Pawlus S., Roh J. H., Garcia Sakai V., Mamontov E., Sokolov A. P.	Journal of Chemical Physics	2009	SNS-BL-2	BASIS	
Direct observation of a nuclear spin excitation in Ho2Ti2O7	Ehlers G., Mamontov E., Zamponi M., Kam K. S.	Physical Review Letters	2009	SNS-BL-2	BASIS	
Diffusion Dynamics of Water Molecules in a LiCl Solution: A Low-Temperature Crossover	Mamontov E.	Journal of Physical Chemistry B	2009	SNS-BL-2	BASIS	
Proton Dynamics in N,N,N',N'-Tetramethylguanidinium Bis(perfluoroethylsulfonylethyl)imide Protic Ionic Liquid Probed by Quasielastic Neutron Scattering	Mamontov E., Luo H., Dai S.	Journal of Physical Chemistry B	2009	SNS-BL-2	BASIS	
Dynamic susceptibility of supercooled water and its relation to the dynamic crossover phenomenon	Zhang Y., Lagi M., Fratini E., Baglioni P., Mamontov E., Chen S. H.	Physical Review E	2009	SNS-BL-2	BASIS	

Type a search keyword

Title(s)

Details

Print Preview

id:	1
Title:	The origin of the dynamic transition in proteins
Authors:	Khodadadi S., Pawlus S., Roh J. H., Garcia Sakai V., Mamontov E., Sokolov A. P.
Beamline:	SNS-BL-2
Instrument Name:	BASIS
Proposal Id:	
Scientific Discipline:	
Publication Name:	Journal of Chemical Physics
Publication Additional Name:	
Publication Type:	Journal Article
Volume:	128
Page:	195106

Print Preview



Print of Sample Search Results:

Print Preview
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Search

You may search by title, author, publication name, year, and/or beamline; Just click the cell right above the corresponding column name and type your search key:

Title	Authors	Publication Name	Year	Beamline	Instrument Name	DOI
BASIS: A New Backscattering Spectrometer at the SNS	Mamontov E., Zamponi M., Hammons S., Keener W. S., Hagen M., Herwig K. W.	Neutron News	2008	SNS-BL-2, SNS-Other	BASIS, Other	
Electrostatic Swelling and Conformational Variation Observed in High-Generation Polyelectrolyte Dendrimers	Liu Y., Chen C. Y., Chen H. L., Hong K., Shew C. Y., LiX, Liu L., Melnichenko Y. B., Smith G. S., Herwig K. W., Porcar L., Chen W. R.	Journal of Physical Chemistry Letters	2010	HFIR-CG-2	GP-SANS	http://dx.doi.org/10.1021/jz1006143

Details

id: 31

Title: BASIS: A New Backscattering Spectrometer at the SNS

Authors: Mamontov E., Zamponi M., Hammons S., Keener W. S., Hagen M., Herwig K. W.

Beamline: SNS-BL-2, SNS-Other

Instrument Name: BASIS, Other

Proposal Id:

Scientific Discipline:

Publication Name: Neutron News

Publication Additional Name:

Publication Type: Journal Article

Volume: 19

Page: 22-24

Issue: 3

Year: 2008

Month:

DOI:

ORNL Division: NSSD

Submitted By:

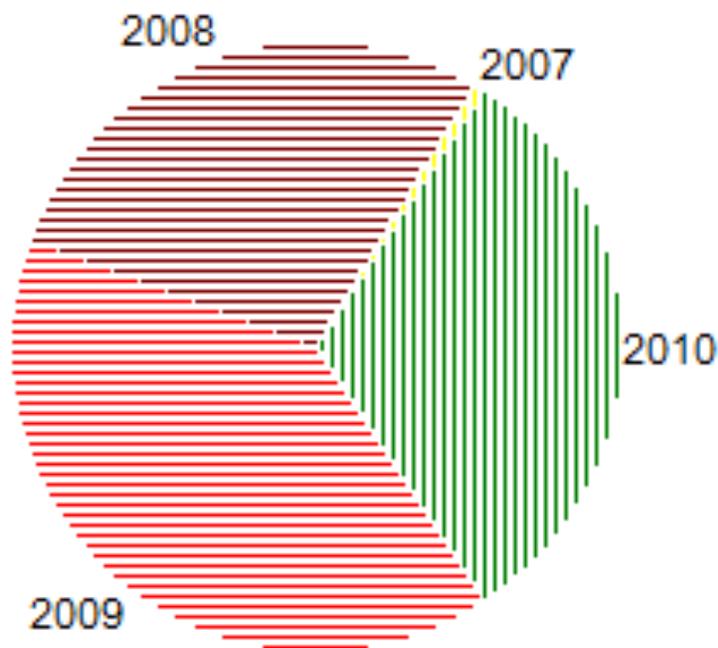
Email:

Comments:

Last Updated: Tue Oct 05 00:00:00 EDT 2010



Sample Pie Chart: SNS/HFIR Publications by Year



More pie charts are under development:

- By Beamline
- By Scientific Discipline
- By Authors



Project Requirements - Phase II

For SNS/HFIR Admins:
You have to login



- list of beam lines
- list of scientific disciplines
- list of journal names
- publication entries

All features
available for
users

Moderation

To prevent duplicate,
erroneous, incomplete,
or fraudulent entries

Update

Export
Import



Software Tools



UI (Smartawt)

- Open Source
- Widget Collections
- Data Source Integration
- Browser Independent



App (Web Service)

- Restful WS
- JPA



ORACLE

DB (Oracle)

- Oracle SQL Developer for data import
- Procedure to parse authors and beam lines for initial load

Glassfish
(open source application server)



PRESH Future Work

For admins

- **Continue to develop the PRESH admin version to deliver advanced functionalities for SNS/HFIR internal users from communication, instrument, and user office.**

Exportable

- **Make PRESH data exportable to the major citation management software such as EndNote Web, a Web-based reference organizer and writing tool.**

Adoptable

- **ORNL CNMS is very interested in piggybacking this project.**



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The authors wish to thank Betty Lou Alspaugh, Derek Browlee, Steve Miller, Tom Swain, Ken Herwig, and Kyle Johnson for valuable suggestions and comments during the project development.



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