

"lightsources.org ... a light-sources information Web site, with news, education, and user information content areas...



Discussion between light-source "communicators" about Web space where communicators could communicate with each other....



...evolved into a Web site that will serve as a focal point for news, information, and education resources about and from the world's light sources.



# Organization

# **Light Source Communicators Group**

Representatives of any accelerator-based light source facility, either operating or under construction...

## <u>lightsources.org Management Group</u>

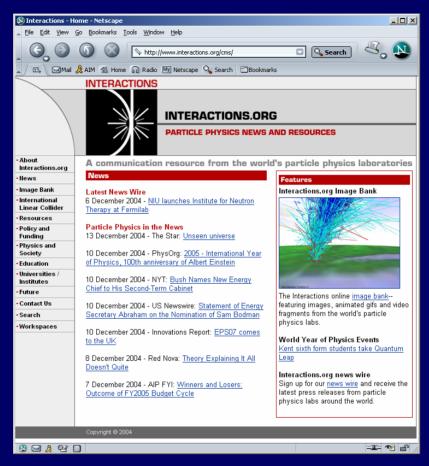
Members of the Light Source Communicators Group whose facility director has agreed to financial support of the lightsources.org Web site...

# <u>lightsources.org</u> Editorial Board

Drawn on a rotating basis from the lightsources.org Management Group...



# "Interactions.org" (HEP web site) was starting point....



Used Interactions.org CMS developed by Xeno Media (saved > \$40K in development costs)



# Some differences, tho...

# Interactions.org

- 2 labs (SLAC, FNAL)made all decisions
- FNAL paid the bills
- Site, then collaboration
- Resource for HEP, then others

# lightsources.org

- Multiple labs at start (Design etc. by committee)
- Multiple labs pay the bills
- Collaboration, then site
- Resource for Is's & others



# Three content categories:

# 1. News

- Press coverage of Is-related stories
  - Discoveries
  - Facility-related news
  - Relevant news from funding agencies, govts., etc.
  - CMS notifies members of article, etc.
- Press releases from user institutions & facilities
  - Developing database of user institution PR offices
- "NewsFlash" sends latest news to subscribers
  - No fee
- Image Bank provides Is-related photos, graphics



# 2. Facility Information

- Resources for users (current & future) & others
  - Comprehensive beamline & technique information
  - User-run schedules
  - Proposal submission dates
  - Links to publications databases
  - Info about light source facilities
  - Facility descriptions
  - Links to job postings
  - Meetings (user & otherwise)
  - Special events

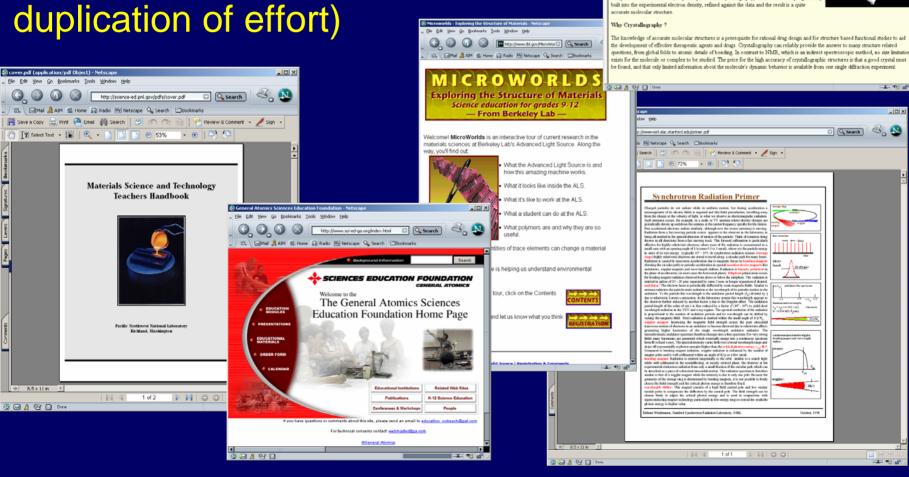
(Contacting user offices for ideas and to see how we can help them)



# 3. Education

-Links to educational web pages

-Coordinate development of educational resources (avoid



Crystallography 101

What is X-ray Crystallography ?

An Introductory Course by Bernhard Rupp - click here for Comments

X-ray crystallography is an experimental technique that exploits the fact that X-rays are diffracted by crystals. It is not an imaging technique. X-rays have the proper wavelength (in the Ångström

range,  $-10^{-2}$  cm) to be scattered by the electron cloud of an atom of comparable size. Based of the diffraction pattern obtained from X-ray scattering off the periodic asterniby of molecules or atoms in the crystal, the electron density can be reconstructed Additional phase saformation must be extracted either from the diffraction data or from supplementing diffraction experiments to complete the reconstruction (the chain experiment part of the property of the complete of the construction of the chain experiments of the complete the reconstruction (the chain experiments to the complete the reconstruction (the chain experiment crystal area of the chain experiments).

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Letter signed by facility directors Gibson (APS) & Stirling (ESRF) sent to other facility directors worldwide outlining lightsources.org proposal & requesting support



# Members of the lightsources.org collaboration (so far)



ALS, APS, CLS, ELTTRA, ESRF, HASYLAB, JEFLab, NSLS, NSRRC, PAL, Photon Factory, SLS, SPring-8, SRC, SSRL, SURF III

\$4,500 USD/yr/facility



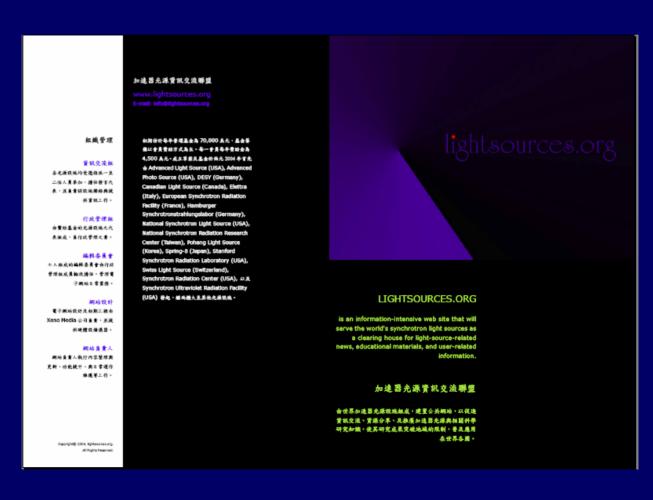
# But: Is.org is NOT "members only"

lightsources.org will disseminate news and information from ALL light sources, not just those that have paid the sponsor fee



Thanks to D. Lin (NSRRC), N. Usami (Photon Factory) lightsources.org promotional brochure (English version by U. Arp, SURF III) translated and published in Chinese & Japanese...

... site will also have weekly Chinese-language news digest – hoping for Japanese...



# The beta lightsources.org web site (so far):





# Open to the public February '05

# The lightsources.org webmaster: Amaya Muñoz (CARS)





# Spreading the word....

- Is.org board members giving talks at user mtgs., conferences
- Notices in JSR facility information pages
- Article in next SRN
- Displays at conferences

The U.S. DEPARTMENT OF ENERGY'S **ADVANCED PHOTON SOURCE** ARGONNE NATIONAL LABORATORY



### The Center for Nanoscale Materials Breaks Ground



The Center for Nanoscale Materials (CNM) is one of lanoscale Science Research Centers funded by the U.S. separtment of Energy's (DOE's) Office of Basic Energy Sciences (BES) and constructed at the DOE's nation Sciences (8E5) and constructed at the DOE's national laboratories. The CNM is a \$72M federal/state-of-illinois partnership for designing, synthesizing, fabricating, and characterizing materials at the nanoscale. The CNM will provide the scientific community with a broad complement of pols for advanced nanocharacterization, nanolithography, and synthesis. A centerpiece of the CNM will be the Nanoprob-beamline, the facility's premier nanocharacterization tool designed to afford capabilities for fluorescence, diffraction

and transmission imaging at a spatial resolution of 30 nm o unding for the Nanoprobe beamline is provided by DOE-BES. The Nanoprobe is expected to advance the state of the art in nanoscience by providing the highest-spatial-resolution hard x-ray beamline in the world ormal groundbreaking ceremonies for the CNM are scheduled for this fall.

### The BSL-3 Biosafety Facility at BioCARS

A new facility at the APS will allow studies of a wide range of viruses and toxins. The facility, part of the Consortium for Advanced Radiation Sources BioCARS beamlines, can accommodate work with materials classified as Biosafety Level (BSL)-2 agents (i.e., meastes and hepatitis B) or BSL-3 agents, such as tuberculosis, encephalitis, and West Nile virus. BioCARS is now the only functioning synchrotron-based x-ray diffraction laboratory in the U.S. that can be used for the safe study of these types of samples.

Utmost attention has been paid to safety, with all U.S. safety requirement

met for handling BSL-2- and BSL-3-level materials. The equipment added to the BioCARS research station at APS sector 14 includes infrastructure such as HEPA filters and air-handling units



At the APS, our door is open to experimenters from all scientific disciplines. whose research requires the highest-brilliance hard x-ray beams in the Western Hemisphere.

Seneral-user proposals for beam time during Run 2005-2 are due by March 11, 2001.
are due by March 11, 2001.
Information on access to beam time at the APS is at:
this://www.aps.anl.gov/warefbeamtime/ayt\_beam.html
ordact Dr. Dennie Mills, DMM@aps.anl.gov, 630/252-568

beamline capabilities is at: ww.aps.anl.gov/user/beamtime/get\_beam.htm

### lightsources.org

stors from light source facilities wor collaboration to develop a World Wide Web site called lightsources.or (http://www.lightsources.org/). This site will serve the general public, the media government decision makers, and the international light source research community as a source for news, facility information, and light-source-relate facilities from Europe, North America, and Asia. The collaboration expects t launch lightsources.org before the end of 2004. For more information or to ma suggestions, contact us at info@lightsources.org



Argonne National Laboratory,
a U.S. Department of Energy Office of Science laboratory,
is operated by The University of Chicago.
The Advanced Photon Source is funded by the U.S. Department of Energy,



# Is.org Management Board (12.13.04)

ALS: L. Moxson & A. Robinson

APS: R. Fenner & M. Nowotarski

CLS: S. Ribeiro & K. Warden

**ELETTRA: M. Bertolo** 

ESRF: D. Cornuéjols & A. Freund

HASYLAB: P. Folkerts
Jefferson Lab: L. Ware

Photon Factory: Y. Morita & N. Usami

NSLS: S. Giordano & L. Miller

NSRRC: C.-H. Hsu & D. Lin

Pohang: I.S. Ko

Spring-8: TBD

SSRL: N. Calder & C. Knotts

SURF III: U. Arp

SLS: H.-J. Weyer

SRC: C. Moore

