

# Public Relations Working Group 3-Way Meeting, APS, 2-3 June 2003

Report given by A. Freund

## *Participants:*

Richard (Rick) Fenner (APS)

“Technical communications at the APS”

Andreas Freund (ESRF)

“Communication at the ESRF”

Dean Haeffner (APS)

“APS Outreach Activities: How to Attract Users?”

Masahiro Hara (Spring-8)

“Activity of Public Relations Division”

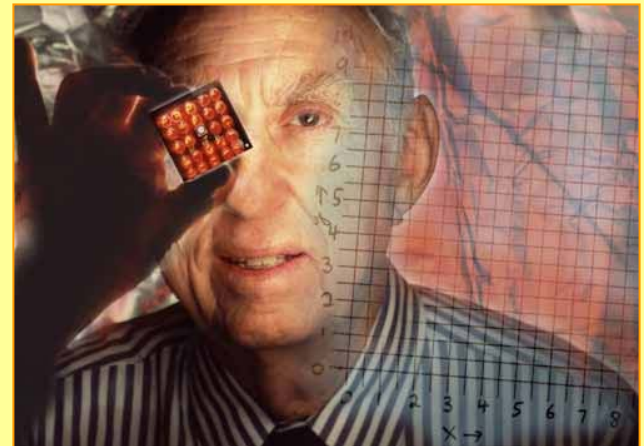
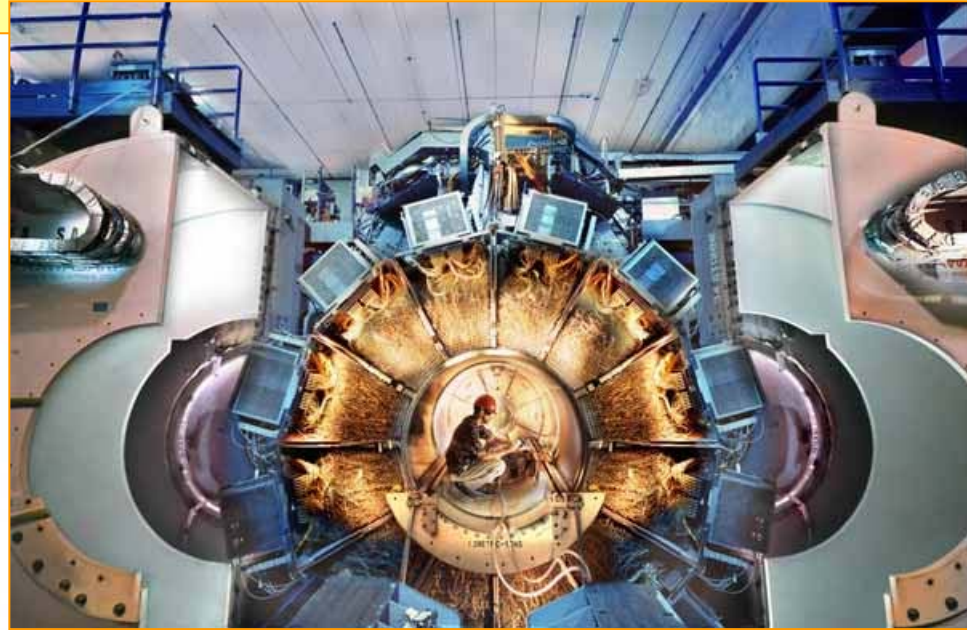
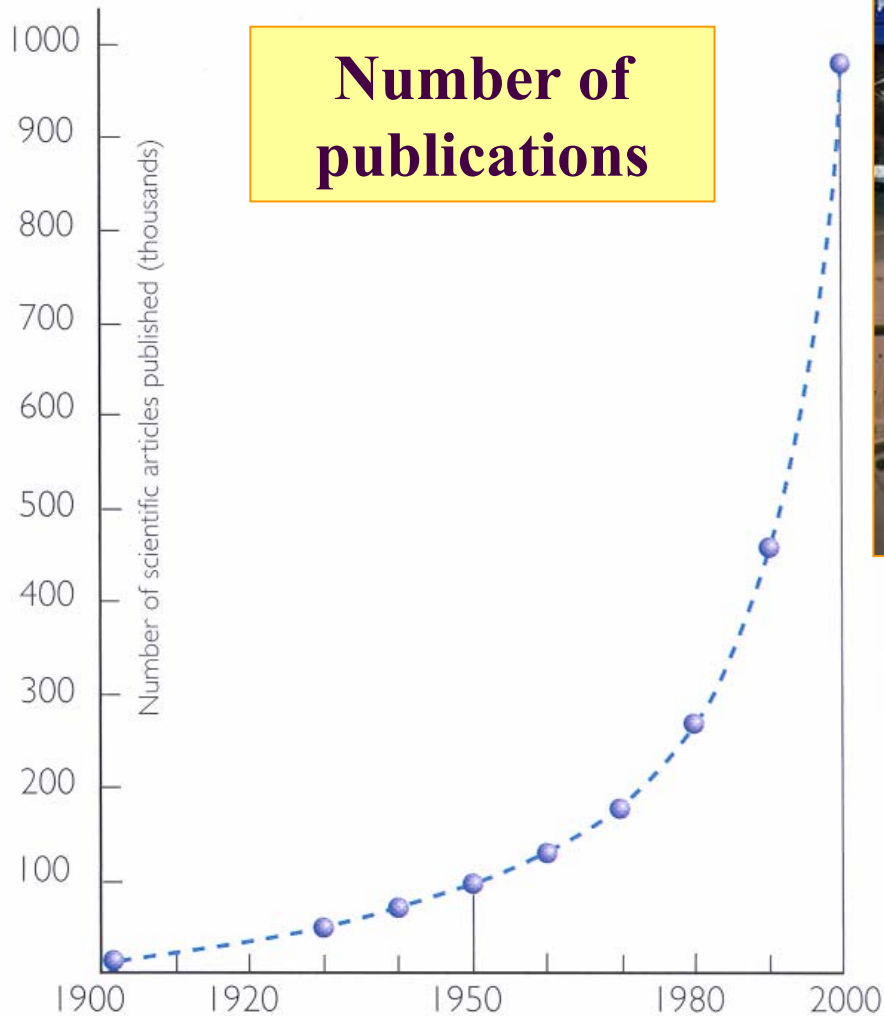
Marlene Nowotarski (APS)

Hideo Ono (Spring-8)

# Questions and Issues

- Prologue: On the role and responsibility of scientists.
- Why communication?
- What kind of communication?
- Communication targets.
- Communication tools.
- Resources.

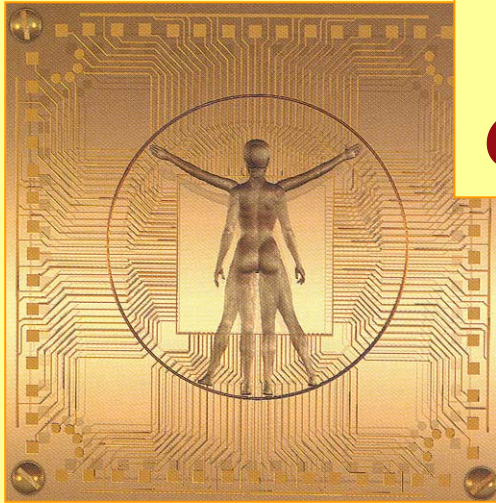
# Scientific production increases dramatically: return of information to the taxpayer?





# Important ethical issues

*Computer vs. man – implications?  
Gene manipulation, health issues, etc.*

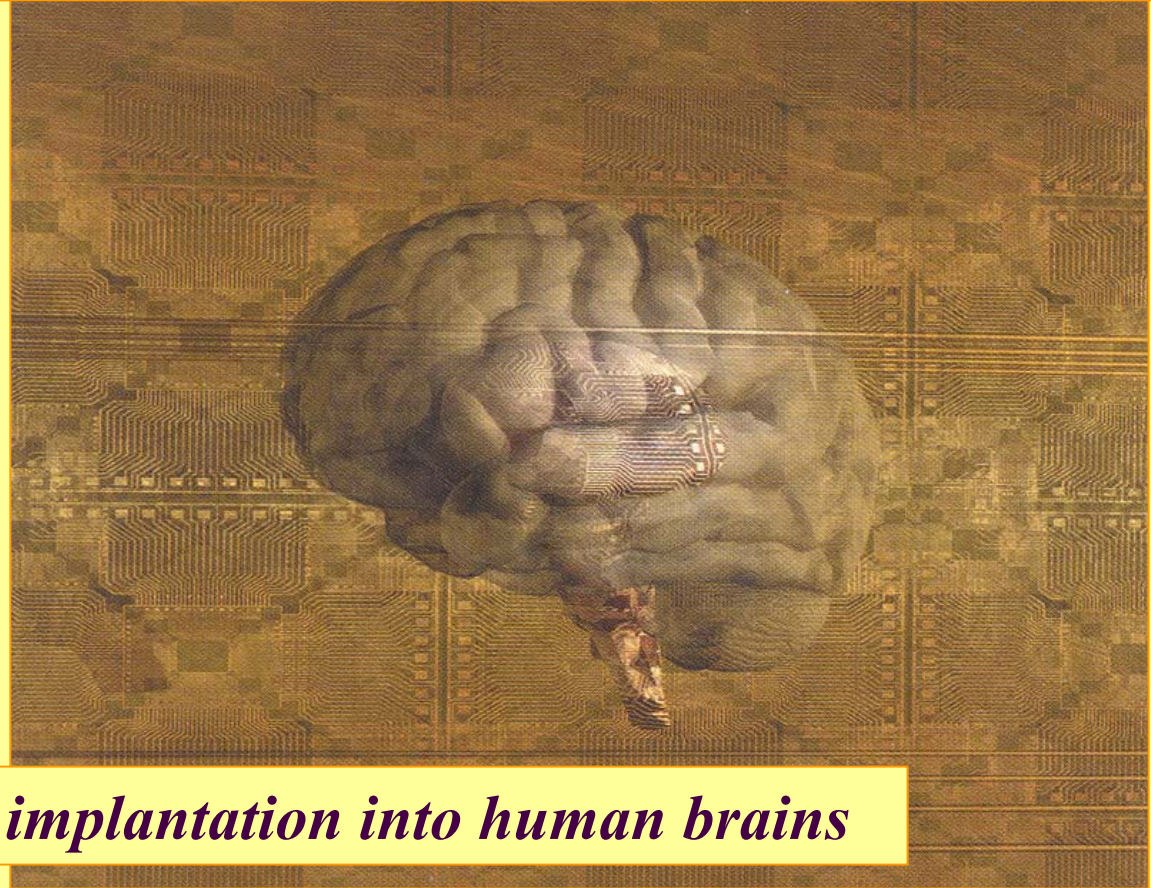


WHEN COMPUTERS EXCEED  
HUMAN INTELLIGENCE

THE AGE OF  
SPIRITUAL  
MACHINES



RAY KURZWEIL



*Chip implantation into human brains*

# Science and scientists accused

*“Scientists are men and women whose knowledge brings them **power**. They are a very special professional group over whose activities – due to ethical implications – **society must exercise a strict control.**”*



*“Our future is seriously endangered by all the destructive power in a world **dominated by science and technology.**”*

*“Scientists are **responsible for the misuse of their discoveries** by others”*

*Public opinion:  
**50% YES, 50% NO***

*“A **merely scientific approach of life** is responsible for present and future catastrophes.”*

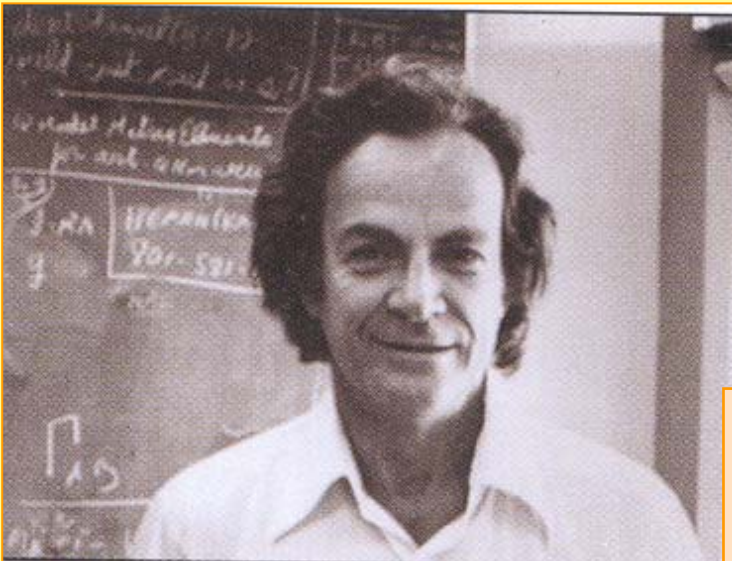
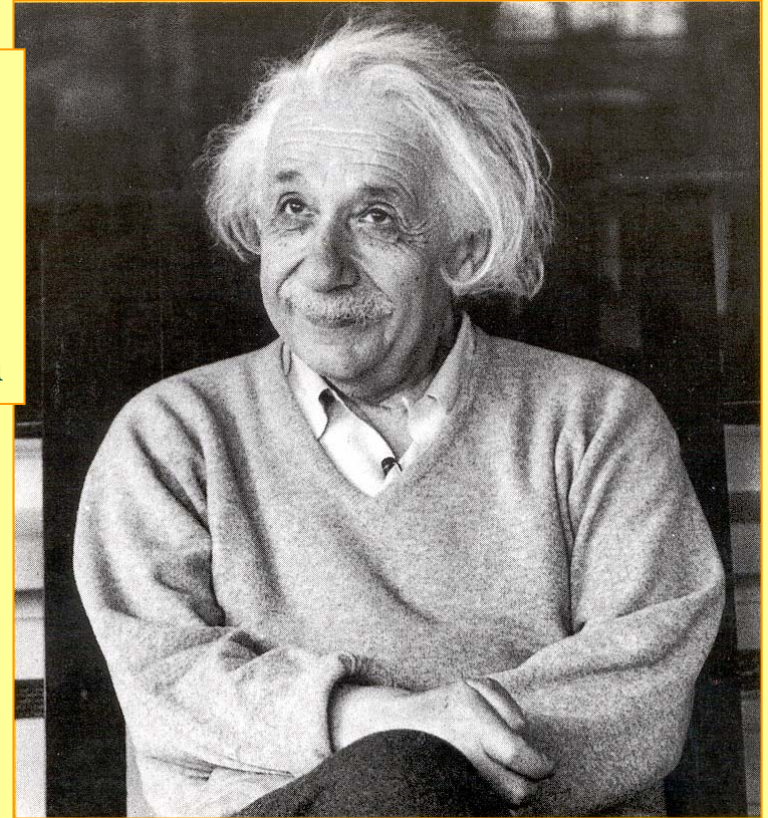
***Who is really responsible?***



# The role and responsibility of scientists

*“Gravitation cannot be held responsible for the fact that one falls in love”.*

Albert Einstein



*“Science is believing in the ignorance of experts”.*

Richard Feynman

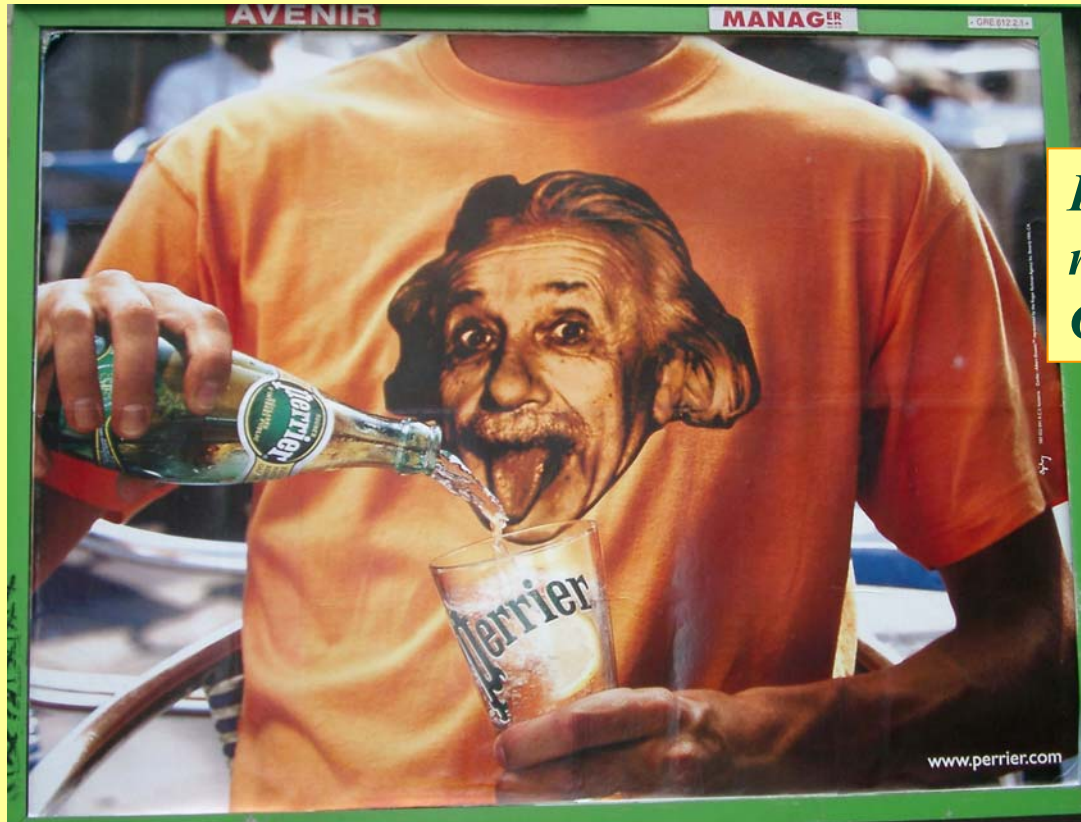
# Who are scientists?

- *They are not on a higher level of evolution than other human beings,*
- *They are under severe career constraints,*
- *They work very hard,*
- *They must publish:*  
*“publish or perish”.*



*Today **science** has become a production-oriented activity*  
*- that must prove its usefulness (=> marketing) and*  
*- that depends increasingly on **industrial applications**.*

# Economical issues



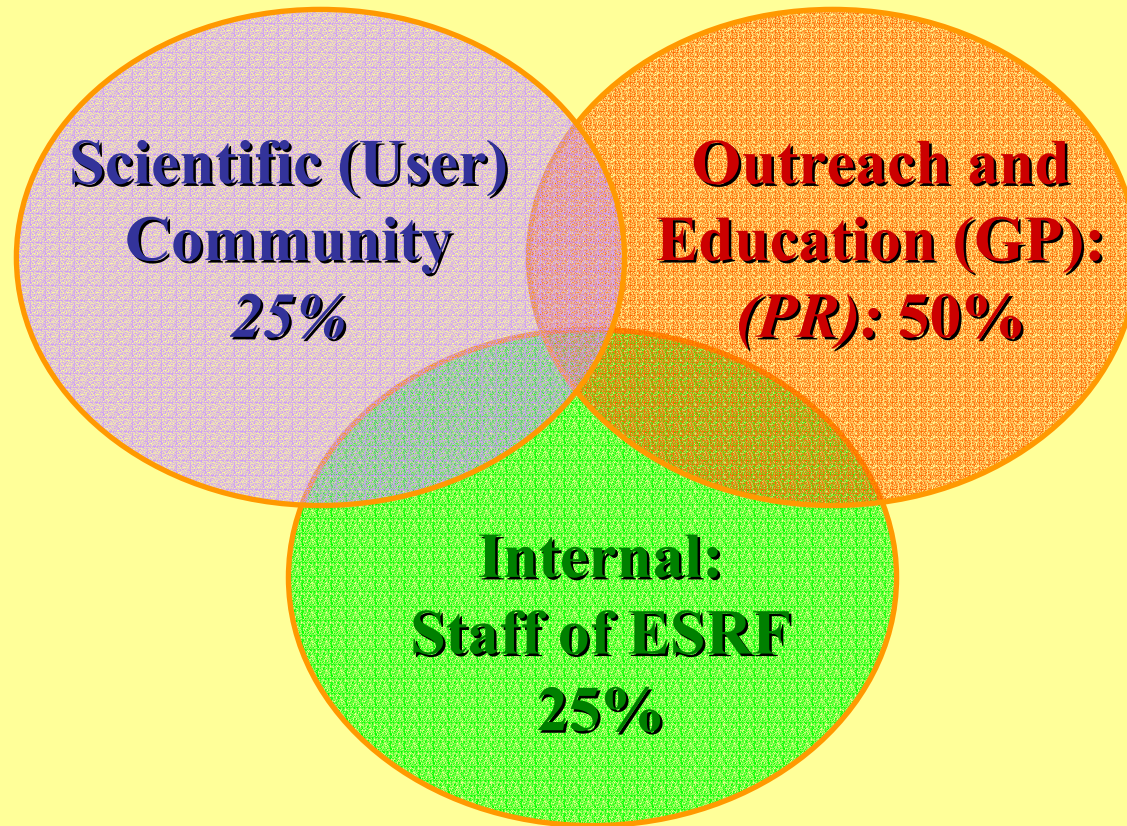
*Publicity  
recently seen in  
Grenoble...*

*Reduction of public funding:*

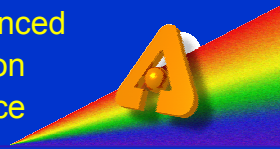
- ⇒ increasing importance of industrial income,*
- ⇒ increasing control of science by industry?*



# Communication targets and areas



*Public relations (PR) is a strategic policy tool. Properly used it can further the interests of the organization and the scientific communities. It is a long-term investment.*



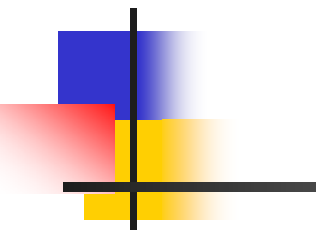
## Goals:

- Inform the APS community
- Inform the worldwide x-ray research community
- Inform the public

## Requirements:

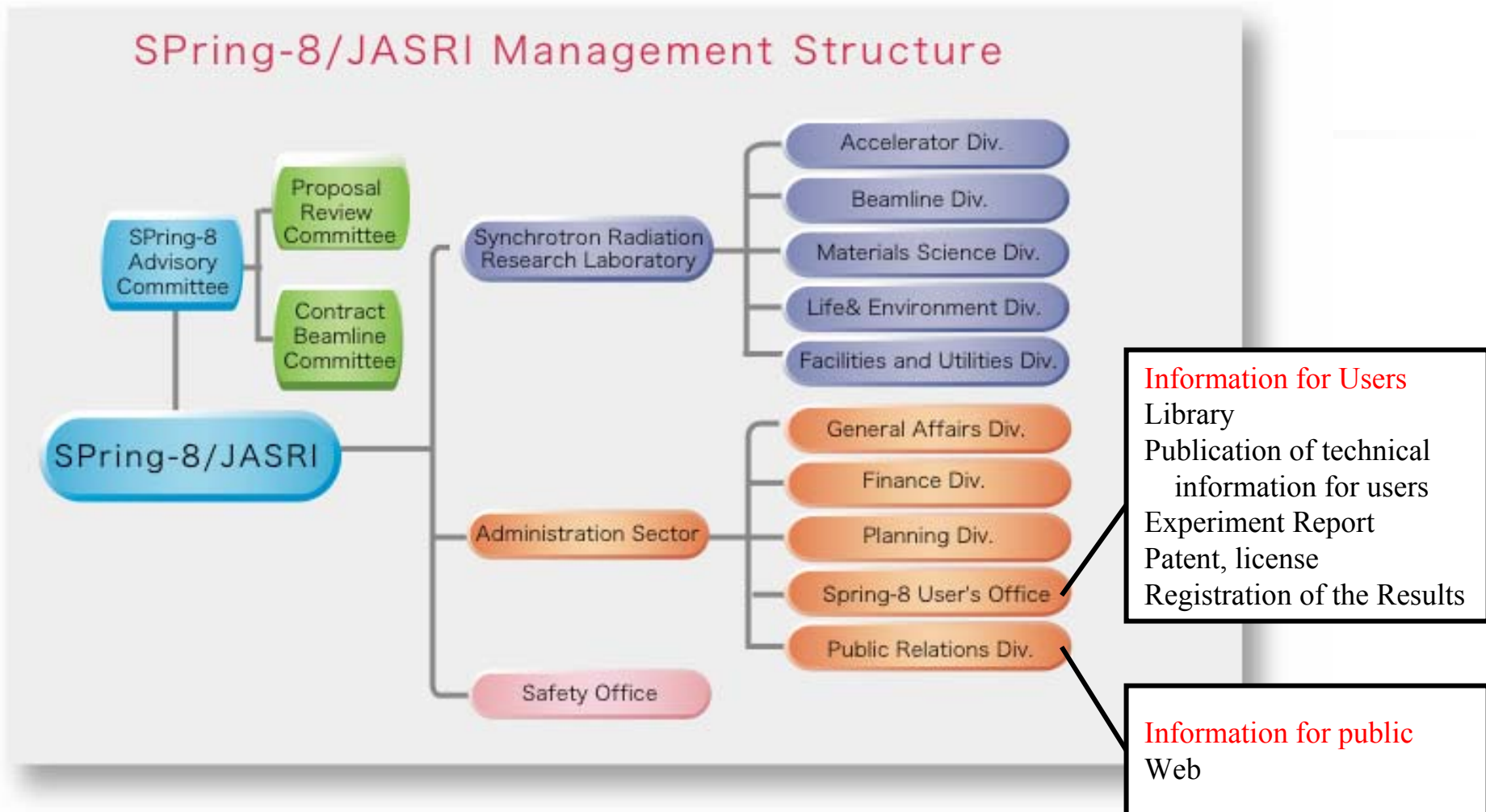
- Be timely
- Be efficient
- Be effective

## Brief History

- 
- 1997 Mar Start of Commissioning of Storage Ring
  - Oct Open for User Experiments with 10 BLs
  - 1998 Jan Public Relations Office organized
  - 1999 May Public Relations Division  
staff total 7
  - 2000 April Public Relations Center open  
Exhibition hall 20% area of PR Center
  - 2001 April Staff total 8 including WEB
- ANNUAL BUDGET: 300 k\$**



# SPring-8/JASRI Management Structure



**Public Relations Center**      **Constructed in 2000, Space : 1600 m<sup>2</sup> , Staff : 8,**  
**Exhibition hall 20 %**



## Outline of Activities

### 1. Media Relations and News

Response to wide range of press inquiries (newspaper, TV, radio, periodicals, and publications)

News releases regarding SPring-8 activities, information, and research to help better and right understanding of SPring-8

#### a) Press Release of research results or the information

**10** cases in 2002 (with and without lecture)

#### b) Press Inquiries (interview or photographing of Newspaper, TV or periodicals)

**41** cases in 2002 + Serialized topics on SPring-8 in Newspaper(**25**)

#### c) Filing of the reported news and pictures on SPring-8

about **240** articles / year are filed



## Outline of Activities (2) continued



### 2. Receiving visitors to SPring-8 and guiding

Planning a tour of SPring-8 for many people and Receiving visitors to Public Relations Center of SPring-8

**Always receiving visitors except a few days a year**

9:30 - 17:00 week day, 10:00 - 16:00 Saturday & Sunday

Total number of visitors was **19,619** in 2001.

**20,695** in 2002.

### 3. Management of exhibition

Designing and manufacturing of exhibits and panels

**Standing wave linac model** and

**2-dimensional crystallization model** are newly made and displayed

## S Band Klystron E3712



## Aluminum Model of 5-cell Cavity for Synchrotron



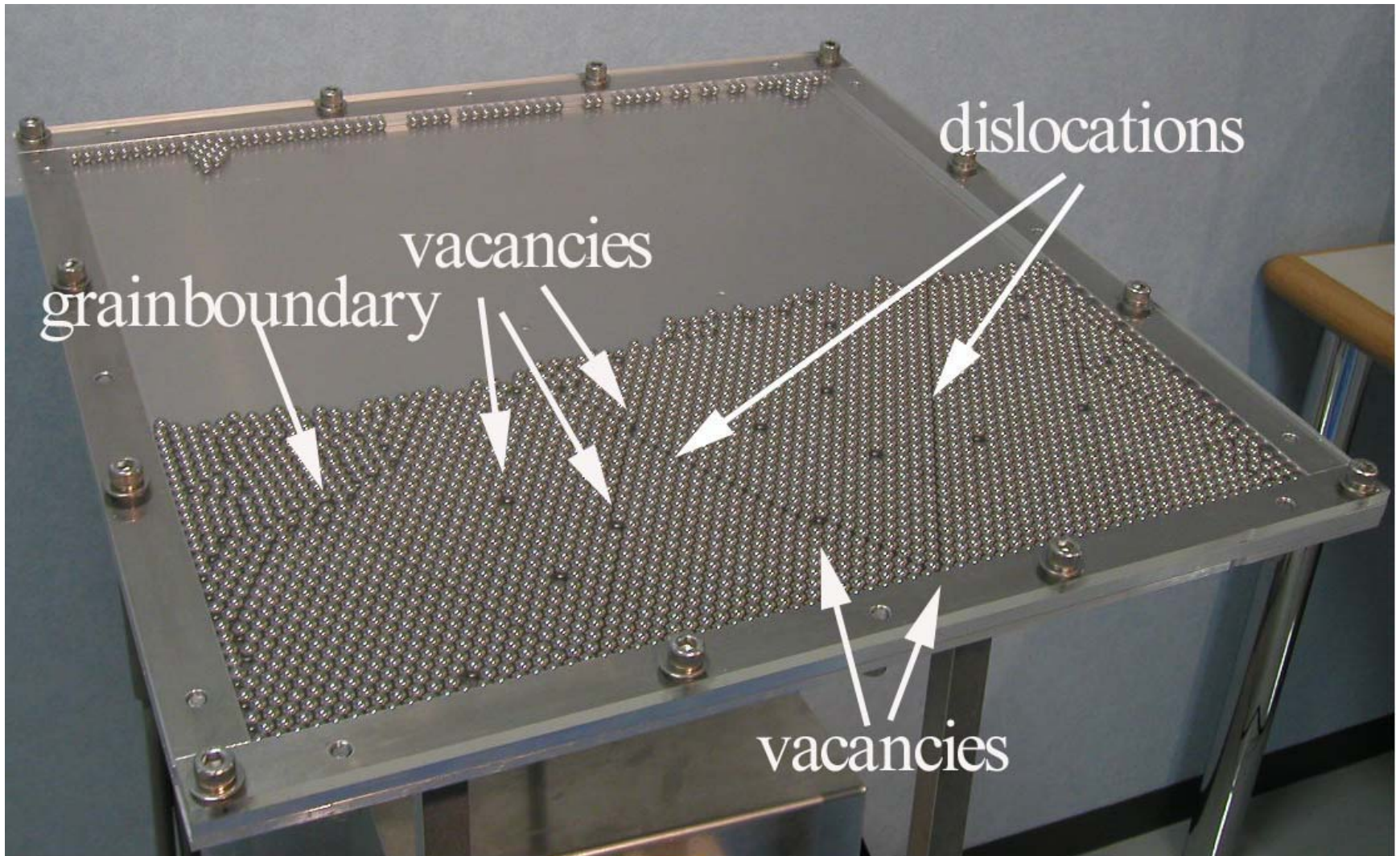
## Bending Magnet for Synchrotron and Vacuum Chamber for Storage Ring



## Undulator



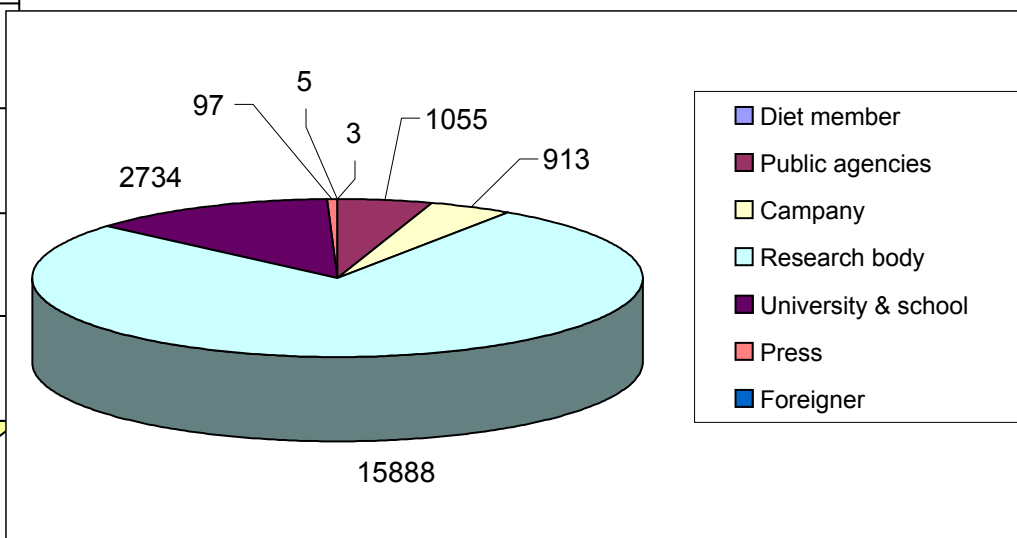
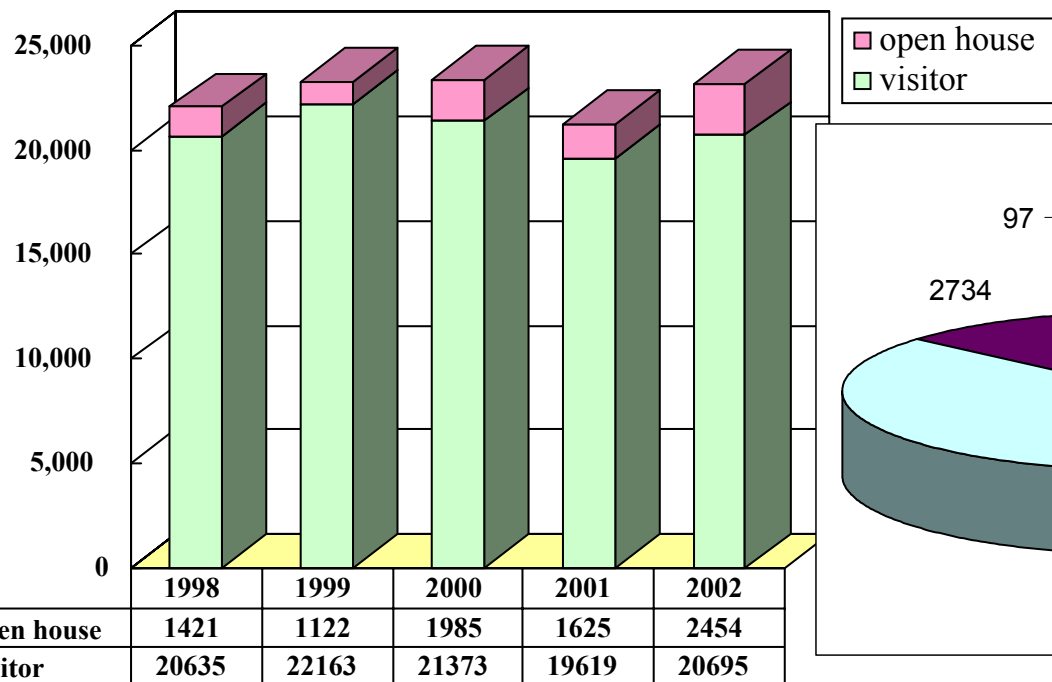
## 2-dimensional crystallization model



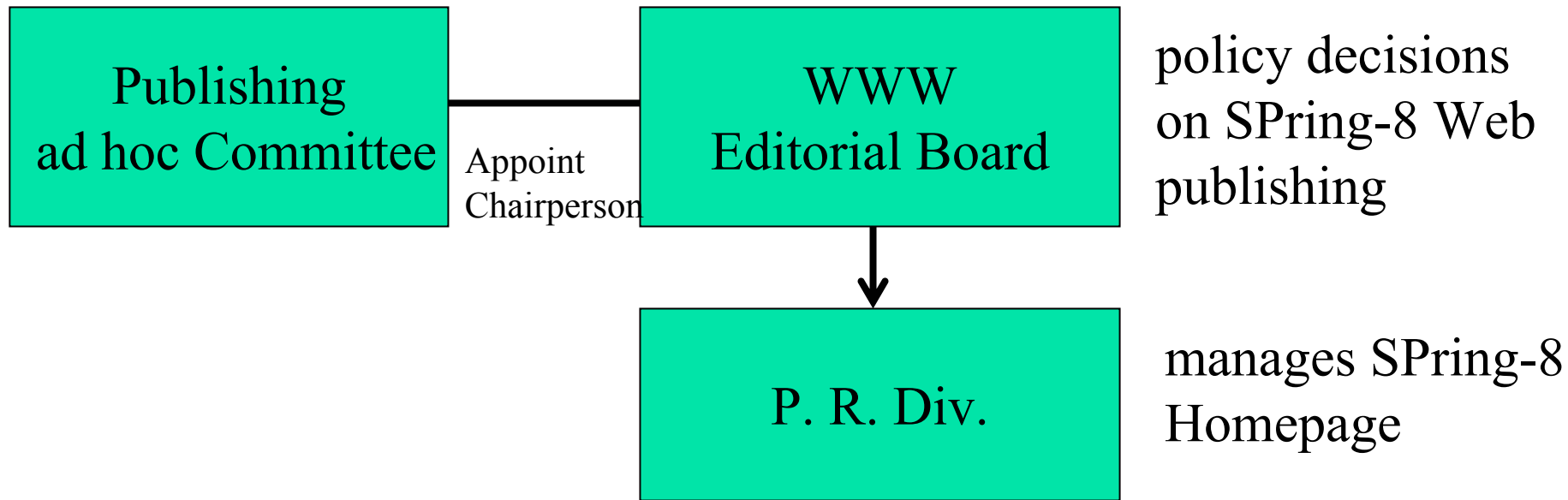


# Numbers of Visitors to SPring-8

(number)



# Management of SPring-8 Web Publishing



JASRI's WWW Editorial Board makes policy decisions on SPring-8 Web publishing and JASRI's Public Relations Division manages SPring-8 Homepage. WWW Editorial Board is under JASRI's Publishing Ad Hoc Committee, which appoints Chairperson of the Board. Chairperson appoints the members of the Board.

## WWW Editorial Board

**Chair person**

**Director  
of PR Div.**

**11 members from JASRI's 11 divisions and  
2 members from JAERI and RIKEN respectively**

## SPring-8 Web Managing Staff

**A Webmaster: Public Relations Division**

**An assistant: Public Relations Division**

**A person in charge of the Beamline's Website: BL Division**

**A Webserver master: Information Network Team, BL Division**

Public Relations Division is responsible for designing the structure of SPring-8 Website and for managing over all Web contents. The Webserver master: Information Network Team, Beamline Division, is in charge of the hardware maintenance and the security control of the Webserver .

# Contents of SPring-8 Web publishing



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## General Information

- Special Topics including Press Release
- Announcements
- Overview of SPring-8
- Access Guide
- Campus Guide
- Contact Information etc
- JASRI's Information Disclosure



## **Contents of SPring-8 Web publishing** continued

### **Information for Users and researchers/scientists to be users**

- **User Info**

- **Call for research proposals**
- **Operation Schedule**
- **Operation Status**
- **Beamline Info**
- **Scientific Meeting Calendar**
- **SPring-8's Scientific Paper Search**

- **Web-based Publications (PDF version)**

- **SPring-8 Information (in Japanese; bimonthly)**
- **User Guide**
- **Beamline Handbook**
- **User Experiment Report etc.**

## **Contents of SPring-8 Web publishing** continued

### **Information for the general public**

- **Introduction to Synchrotron Radiation (Japanese only)**
- **Introduction to SPring-8 (Video by means of Streaming)**
- **Web-based Publications (PDF version)**
  - **SPring-8 News (in Japanese; bi-monthly)**
  - **SPring-8 Research Frontiers (SPring-8's research highlights; annual)**
  - **SPring-8 Annual Report (in Japanese)**

## Outline of Activities (4) continued

### 5. Public events

planning and carrying out various public events to spread the scientific knowledge and the usefulness of SPring-8 widely.

participate in the external exhibitions and send the SPring-8 information.

- a) **Open house:** a participation event in Science & Technology Week.

SPring-8 facility is opened to the public. **All staff helps!**

26 April 2003, 2866 attendants.

- b) **Science Summer Camp** for high school students about 20 students

3 day-science program (site tour, lectures, experiments)

- c) **Science Summer Seminar** for high school students

about 750 high school students (site tour & lectures)

- d) **Science Adventure School**



**Laser Holography**



**Inside of Storage Ring**



**Moving Heart of a Frog**



**Action of enzyme**



## Science Adventure School □ SAS □

- A scientist in SPring-8 goes to an elementary school and talks and makes some simple experiments on science in response to the request of the elementary school on site.
- The children are provided with an opportunity to touch and feel science by some scientists in SPring-8.
- Total 60 children from 3rd grades to 6th grades
- 6 times a year, 2 days a time, 2 hours a day



## **Outline of Activities (5) continued**

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### **5. Public events -- continued**

#### **d) Exhibition**

**Nano-tech Fair in Tokyo, Harima Industrial Relay Fair 2002 etc.**

#### **f) Collaboration**

**Lend models and panels, scientific lectures to the public**

**Science Satellite in Osaka, Special Week for SPring-8,**

**Desy & Bessy travelling-wave linac model**

## **Outline of Activities (5) continued**

### **5. Briefing Session on the Research Results from SPring-8 To Press**

### **6. Publication of materials for Public Relations various brochures, videos for explanation**

**SPring-8 Brochures (Japanese and English)**

**SPring-8 Brochures folded in three (Japanese and English) and single sheet type**

**JASRI Brochure**

**SPring-8 News every two months**

**Video Large-scale Synchrotron Radiation Facility / 15 minutes**

**SPring-8 Construction Record (Japanese, English /20minutes)**

**News Highlights in 1999, in 2000**

### **7. Administration for Information Disclosure**

# European initiatives

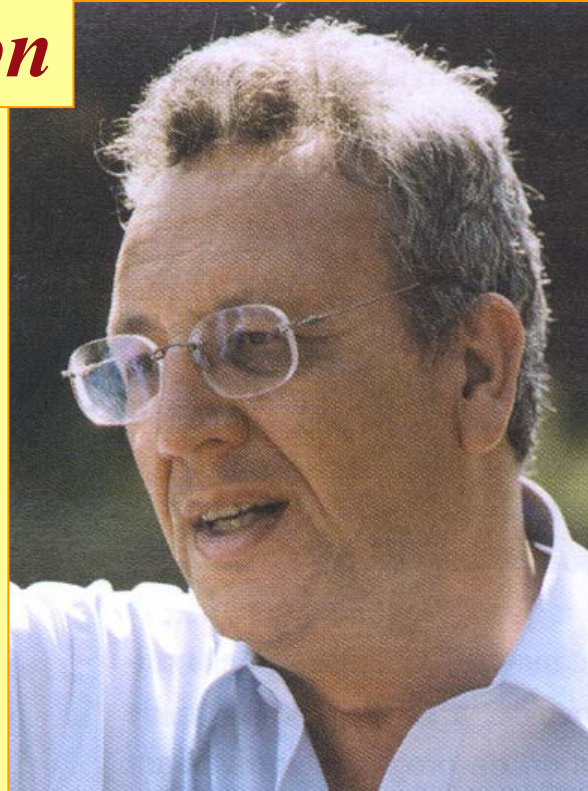
*...building the European Research Area (ERA)*

## *Outreach & Education*

*“In a knowledge-based society a democratic and well informed governance must provide the citizens with the means to participate, ..., in the scientific and technical progress and in the responsibility to make the right choices.”*

Commissioner Ph. Busquin: «*Science Generation: for a dialog between science and society*», Brussels, 4 July 2002.

*Scientific openness leads to public awareness.*



Funds foreseen in the 6th framework program (2002-2006):

*1,6% or 285 MEuros*

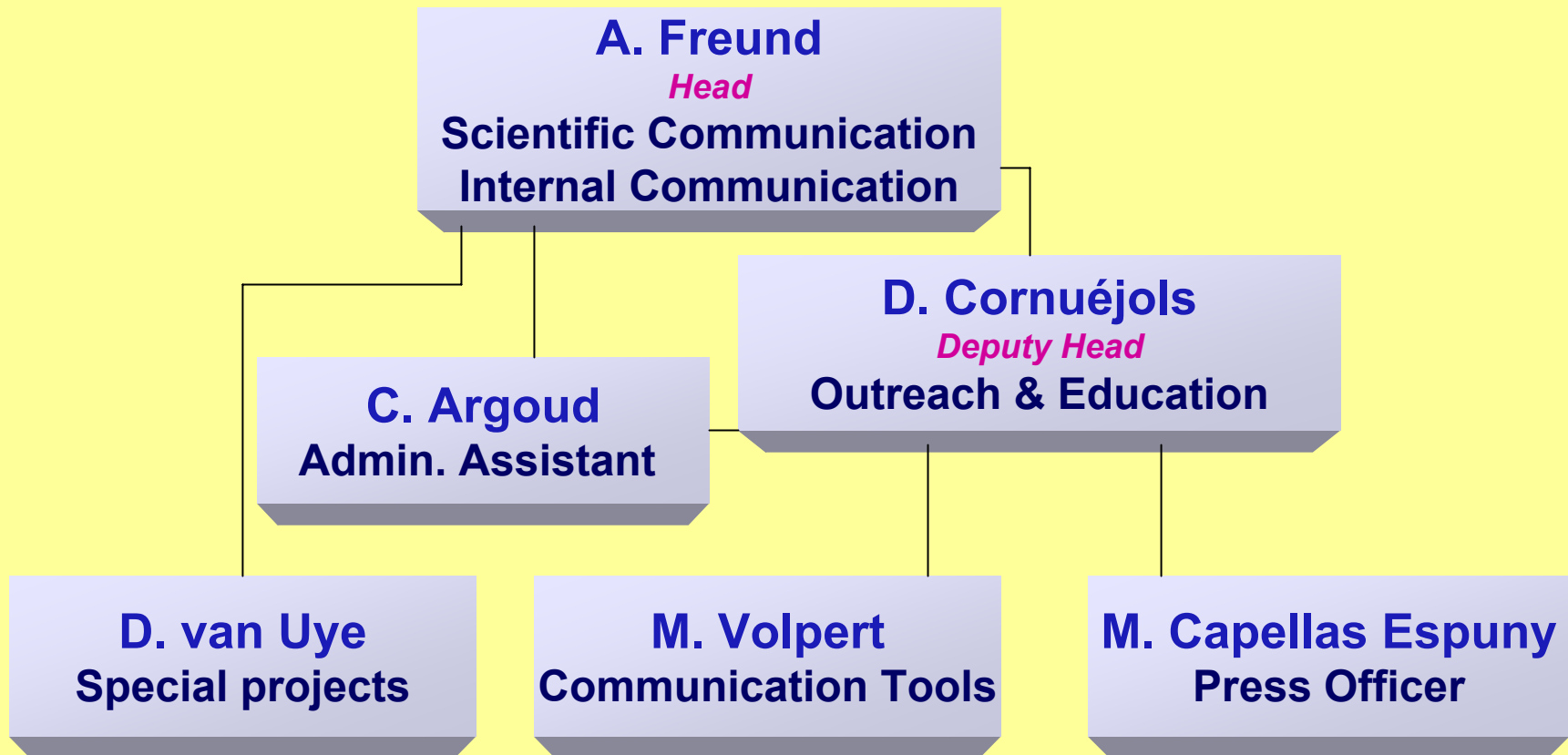
*Recommendation:*

*1% of budget should be spent on O&E*

*“...and I do not speak of technical know-how, but of a whole pedagogical wisdom by means of which scientific knowledge will recover its rank of universal value”.*



# The ESRF Communication Unit



*Annual Budget: 160 kEuro (ESRF: 73 MEuro) => < 1%*

# Mission of the Communication Unit

- Inform the scientific community (SC), the general public (GP) and the ESRF Staff Members (who, what, what for...).
- Increase the visibility of the ESRF.
  - Also together with and with respect to its 6 EIRO partners CERN, ESA, EMBL, ESO, EFDA, ILL.
- Support the “corporate image” of the ESRF both internally and externally by underlining its mission:
  - To provide outstanding service to the European scientific community
    - as a world class center of scientific and technical excellence
    - as a customer and partner of industry.
- Show the usefulness of science with synchrotron light.

Particularities (=> advantages and specific problems):

  - Multidisciplinary: many scientific communities, industrial applications.
  - Multinational (17 countries): management, finance and economy.
  - Multicultural: language, education.

# Communication tools & activities

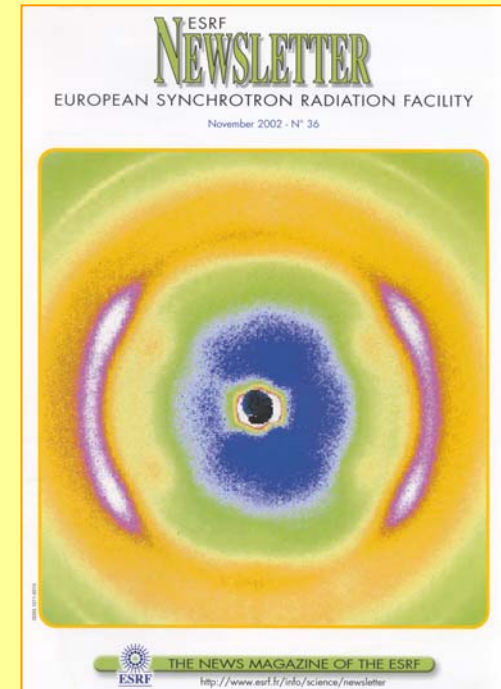
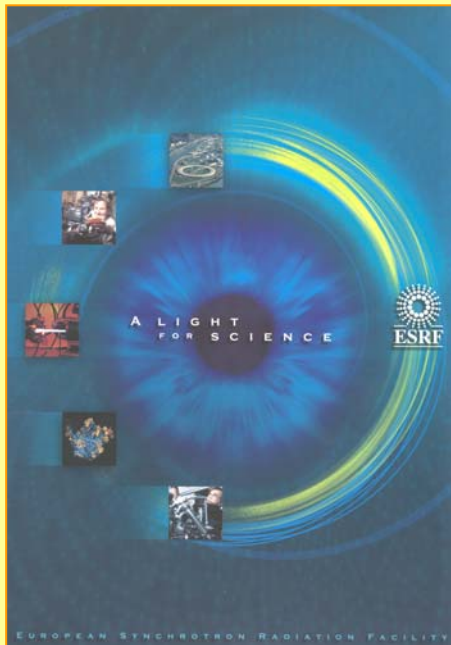
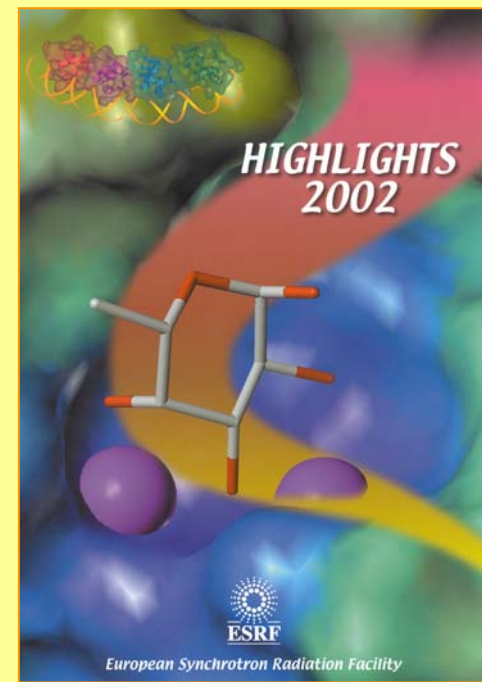
- Specifically internal communication
  - ESRFLASH,
  - Intra-website:

Social news & events, management decisions, personnel matters, etc.
  - Open Days.
  - Collecting news from groups for internal and external communication (difficult task).
  - Seminars, presentations to staff members.

# Communication tools and activities ctd.

## ■ Printed matter

- Newsletter (SC): twice per year, about 24 pages, 11000 copies.
- Highlights (SC): once per year, about 120 pages, 11000 copies.
- Brochure (SC, GP): new in 2002, seven languages.
- Press releases (SC, GP): about 14 in 2002.
- Posters (SC, GP): 6 for FP6 in Brussels, a new series to be produced this year.
- Flyers for employment, open days, various other events.

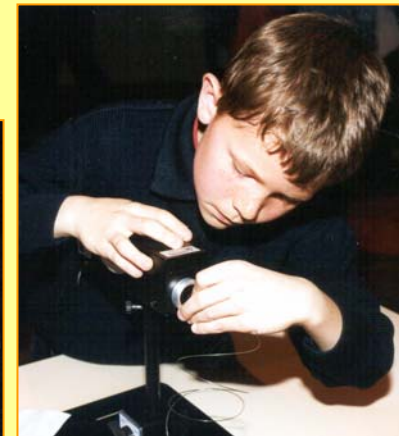






# Communication tools & activities ctd.

- Video material
  - Two videos in one year: medical imaging and microscopy (SC, GP).
- Events
  - FP6, Brussels, November 2002, (SC, GP)
  - Open Days, March 2003, 1700 visitors, every three years (GP).
  - “Science Festival”, Grenoble, Oct. 2002, 20,000 visitors (GP).



.... ESRF

**Journées  
Portes Ouvertes**

**22 et 23 mars 2003**

**ESRF**

**INSCRIPTION OBLIGATOIRE**  
au 04 76 88 20 56  
ou par internet  
[www.esrf.fr/PortesOuvertes/](http://www.esrf.fr/PortesOuvertes/)

Venez visiter le synchrotron  
de Grenoble, la source de  
rayons X la plus puissante  
d'Europe.

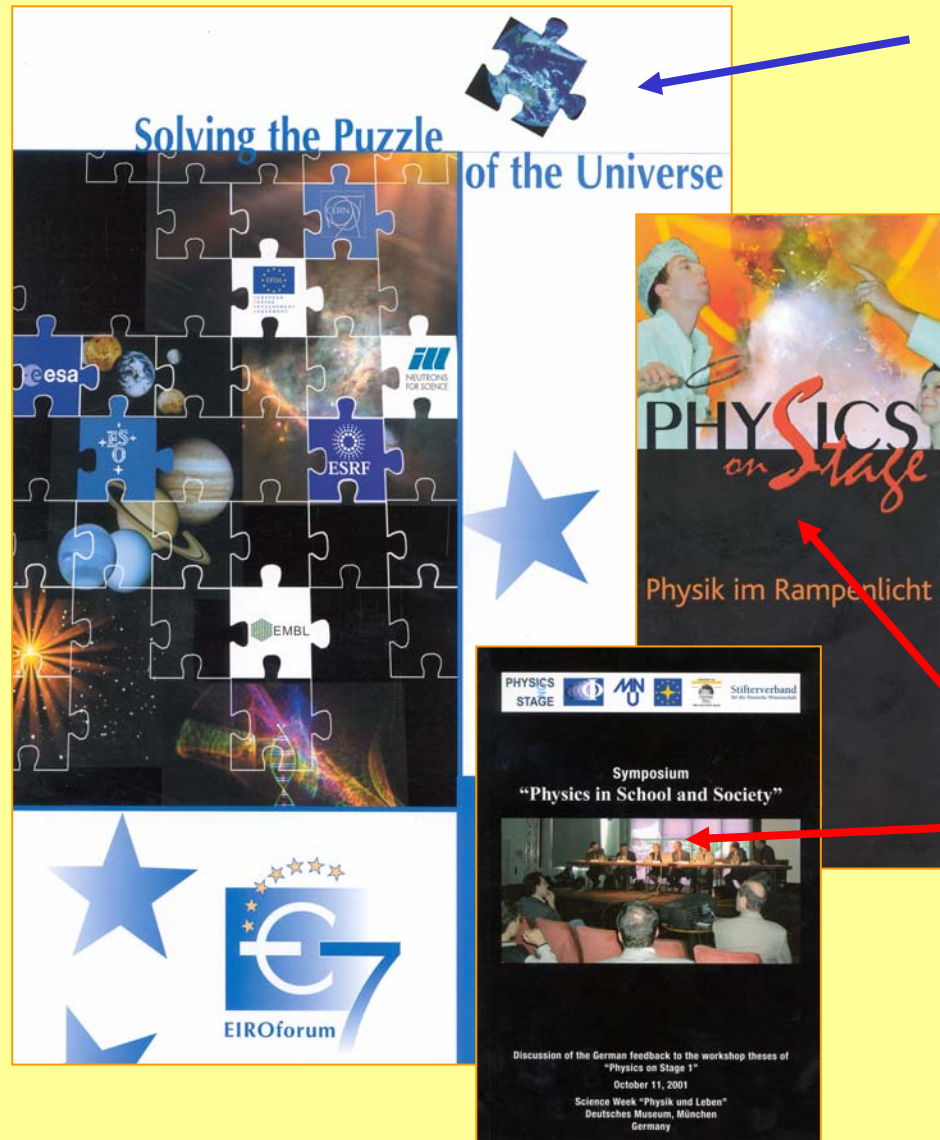


# Communication tools & activities ctd.

- Public talks, seminars, interviews.
  - Local communities, radio stations, TV (GP).
  - ESRF staff.
- Exhibitions.
  - External: FP6, Brussels, November 2002 (GP, SC).
  - Internal: Mini-Beamline, machine parts (dipole, undulator) in ESRF lobby (2003, project under way) (GP, SC).
- Visits.
  - About 2000 visitors/year (GP, SC).
- Web activities (=> similar functions as SPring-8)
  - Work shared with Computing Services (2 staff members).
  - New website last year.
  - More than 30,000 pages. (GP, SC).

# European collaborations

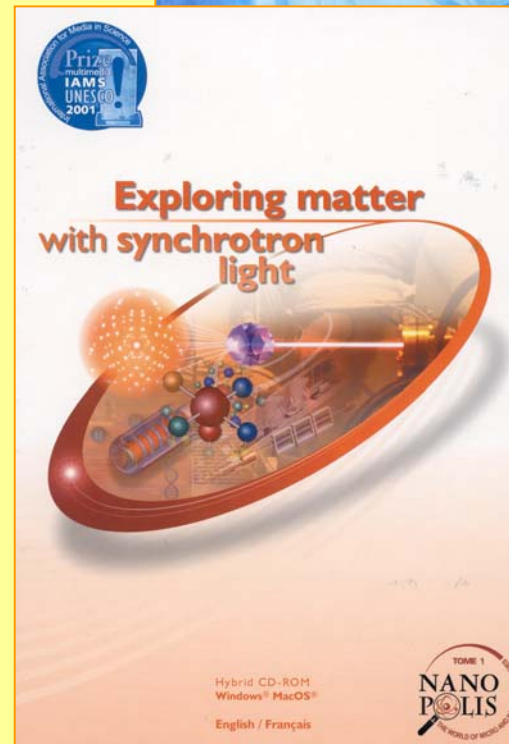
- EIROforum\*: WG on Outreach & Education
  - Physics on Stage 2003 (Physics and Life) at ESA in Noordwijk, The Netherlands
  - Science on Stage 2004 in Grenoble (ESRF/ILL)
  - ESTI Project: European Science Teachers Initiative
- Science Teaching Fair, 30 European Countries, financed by EC+EIROs
- \*CERN, ESA, ESO, EFDA, EMBL, ESRF, ILL



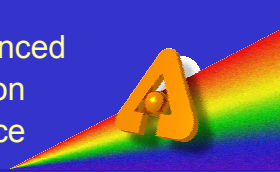


# Other Activities & Collaborations

- Educational:
  - CD-Rom on Synchrotron Radiation: new edition.
  - Training station on BM beamline: project.
- Meetings with PR staff from other facilities:
  - First meeting with people from Diamond, Soleil, Desy, Hasylab, Swiss Light Source, PSI.
  - Collaboration with DESY.





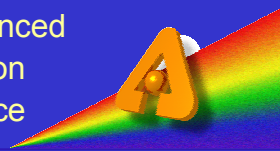


## Challenge

- Learning of results in a timely fashion

## Response

- Talk to our users!
- Encourage use of APS Publications Database  
<http://www.aps.anl.gov/aps/science-publications.html>
- Incentives to tell APS about results:
  - ☐ Publish annual report  
Highlights chosen from Publications Database
  - ☐ Post highlights on APS Web site
  - ☐ Feature highlights in ANL/APS publicity



## Challenge

- **Make efficient use of resources**

## Response

- **APS management has:**
  - ❑ Made known its objectives and support
  - ❑ Established budget to meet objectives: **300 k\$/year**
  - ❑ Added staff (1 FTE): **Two full staff members**  
**Directly attached to the Associate Laboratory Director**
- **Find cost savings:**
  - ❑ Use non-commercial printing methods
  - ❑ Buy skilled help as needed

# Communicating APS Science

Advanced  
Photon  
Source



## Challenge

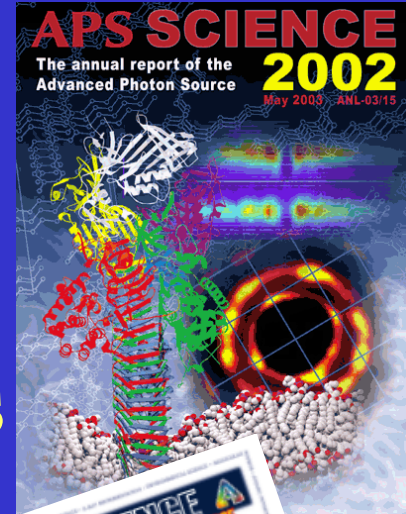
- Communicate effectively

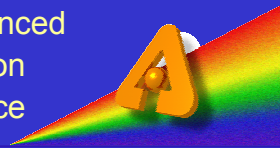
## Response

- Develop audience-specific materials

- Annual report for research community
- Printed and Web highlights for public\*
- Selection of ANL press-release topics
- Educational materials

\* “Public” includes  
policy makers, etc.



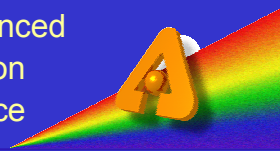


## APS annual report for the research community

- ❑ First issue
- ❑ Research highlights from “Top 5” selected by user-group management
  - Written by professional science writers (outsourced)
- ❑ Facility highlights written by staff
- ❑ Next issue: 04 users’ meeting
  - We’re starting now



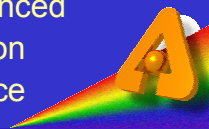




## APS activity reports for the research community

- ❑ Solicited every year
- ❑ Latest research
- ❑ Edited in-house and posted as PDFs on Web  
([http://www.aps.anl.gov/aps/activity\\_reports/webars.html](http://www.aps.anl.gov/aps/activity_reports/webars.html))
- ❑ Available only on Web and CD

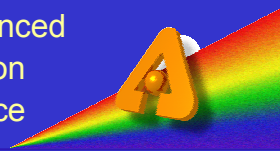




## Printed & Web highlights for public

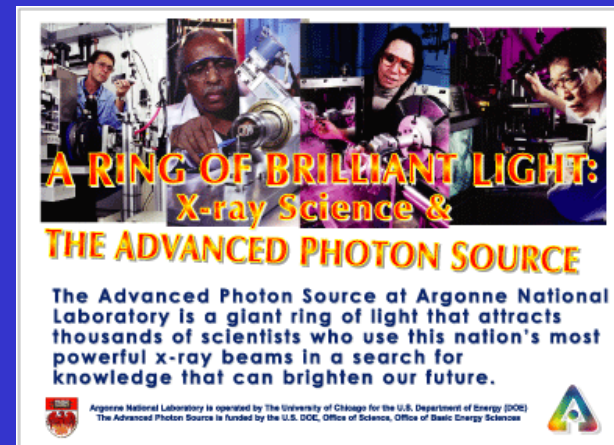
- ❑ Based on annual report highlights
- ❑ Available in APS atrium for tour groups
- ❑ Available to staff for visitors, talks, etc.
- ❑ Produced and printed in-house (cost savings)
- ❑ Posted on APS Web site

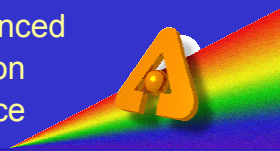





## Educational materials

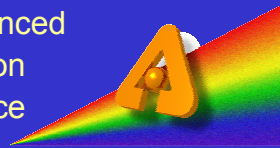
- ❑ APS poster sent to >3,000 high-school science teachers in Midwest
- ❑ Supported contest for design of hands-on exhibits for APS atrium
- ❑ Winners announced last month
- ❑ Excellent local press coverage
- ❑ Contest expanded to all of ANL





## What's next?

- ❑ Better communication with user institutions on cooperative publicity initiatives (light-source web site can help)
- ❑ Foster beneficial interactions with scientific press
- ❑ Develop new information products
- ❑ Expand Web presence 
- ❑ Collaborate with other light sources



## Communicating with each other is also important...

Science communicators from 4 US-DOE synchrotron sources met during APS users' meeting, end of April.

### First such meeting

Attendees:

N. Calder (SLAC)

R. Fenner (APS)

C. Knotts, Lisa Dunn (SSRL)

L. Miller (NSLS)

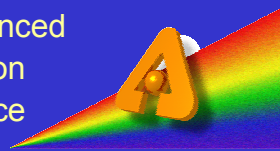
M. Nowatarski (APS)

A. Robinson (ALS)

(L. Moxon [ALS] to participate in future)

Resulted from discussions between Robinson & Fenner



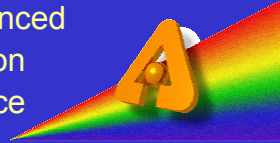


## US-DOE Light Source Communicators'

### Mission Statement (draft):

“To promote understanding, appreciation, and support for synchrotron radiation research.”

The first step toward fulfilling our mission is...



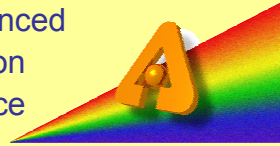
**A light-source Web site modeled after the HEP Web site “Interactions”** (<http://www.interactions.org/> not fully implemented yet, but the prototype is excellent)

**Light-source Web site will allow us to:**

- Share news
- Share resources
- Eliminate replication of effort (educational tools, etc.)
- Provide focal point for info collection and dissemination

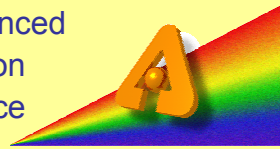
**All light sources are welcome to participate!**

**Send e-mail to Art Robinson ([alrobinson@lbl.gov](mailto:alrobinson@lbl.gov))**



# Conclusions

- We have common goals (as expected).  
We agree that communication on all levels is of increasing importance:
  - to inform, in particular the public at large,
  - to ensure appropriate funding, in particular after our construction phase,
  - to attract new users and staff, in particular young scientists,
  - to involve more researchers from industry in synchrotron x-ray techniques.
- We have common problems (no surprise):
  - Collecting information.
  - Limited resources => more efforts are needed.
  - Getting higher visibility in the media.



# Conclusions ctd.

- We have common and different approaches.
  - Spring-8 is most active in outreach and education.
- We can share experience, exchange information and material. Examples:
  - Explaining synchrotron related science and technology in a simple language (FAQ and Answers Catalog).
  - Lending, co-creating material for exhibitions (posters, models, videos).
  - New edition of CD-Rom on SR.
  - Common SR website (Rick Fenner, Art Robinson).
  - ETC.
- The meeting was very fruitful and much appreciated by all participants. Should be continued.