

AMMRL Meeting at the 47th ENC

Monday, 7pm to 9pm in the Chapel





Charlie Fry, Chair – Introduction

Speaker Session:

- Ken Visscher – Open-Access Laboratories in Industry
Eli Lilly, Indianapolis
- Nick Burlinson – Design and Installation of a Departmental NMR Facility
at the University of British Columbia
- Eugene DeRose – Problems and Protections for Pumped Magnets
National Institute of Environmental Health Sciences ([M-W P 090](#))
- Josh Kurutz – A Survey of Business Models for Academic Facilities
University of Chicago ([Th P 031](#))
- David Vander Velde – Cryoprobes and Money (a.k.a. Losing Money)
University of Kansas
- Klaas Hallenga – Practical Tips and Tricks with Cryogenic Probes
University of Wisconsin – NMRFAM ([Th P 084](#))

AMMRL Meeting at the 47th ENC

Who:

-  Managers of (or directing) magnetic resonance facilities.
-  Typically one person per facility.
-  Colleagues post and receive emails through that person.
-  Currently >1000 members worldwide.

AMMRL Meeting at the 47th ENC

Goal:



To assist one another in providing the best resources possible for research and applications using magnetic resonance spectroscopy, through exchange of information and experience.

AMMRL Meeting at the 47th ENC

Organization:



Nothing formal, but there is a Steering committee:

Rainer Haessner (TU Munich)

Shaw Huang (Harvard)

Vera Mainz (U Illinois)

Steve McKenna (Innovene, Chicago)

Rudi Nunlist (UC-Berkeley)

Rich Shoemaker (U Colorado)

Karen Ann Smith (U New Mexico)

Bill Stevens (Southern Illinois U)

Jane Strouse (UCLA)



There are no mechanisms currently in place to deal with Working Groups, or similar issues.

AMMRL Meeting at the 47th ENC

Operations:



AMMRL meetings at the ENC.



Primarily through the email list-server, managed by **Rich Shoemaker** at U Colorado.

Assistance is provided by the AMMRL Junta:
Jeff Simpson, Letitia Yao, Karen Ann Smith (+ Rich)

AMMRL Meeting at the 47th ENC

Listserver rules:

(see also <http://chemnmr.colorado.edu/ammrl/archives/ammrl-faq.txt>):

- E-mail is sent as-is; no editing is done to legitimate posts.
- No attachments. Post figures and other pages on your own website, and include URL in email.
- Reply (typically) only to original sender (not to full list).
- Original sender provides Summaries (include that word in the Heading) when many responses are provided.
- No advertisements or other commercial activities.

There is a searchable archive at the AMMRL website.

AMMRL: Topics

Facility Design and Planning:

Siting

- elevators
- railroads
- floor vibrations
- building sway
- cell towers/coherent noise
- ESRs, mass specs
- carpeting
- cryogenic accessories
 - type
 - proximity to magnet

Safety

- oxygen sensors
- cryogen handling
- stray fields
 - pacemakers
 - pregnancy
 - posting
- fire/water sprinklers

Mechanical/Electrical

- power
 - UPS (consoles, computers)
- HVAC - temp control
 - new labs
 - existing labs
- gas
 - air or N2
- dryers
- generators
- precoolers

Computers/Networks

- monitors
- wi-fi
- firewalls/routers

AMMRL: Topics

Acquisition and Installation of New or Upgraded Spectrometers

Proposal Writing

- agency guidelines
- matches
- “other equipment”
- faculty interaction
- quotations
- insuring proper configuration
- involving 3rd party vendors

Demos and Evaluation

- strategies
- magnets
- consoles
- probes (cold and warm)
- collegial behavior
- site visits

Purchasing

- competing vendors
- warranties
- delivery time lines
- penalties

Specifications/Installations

- vendor vs custom
- magnet drift
- line shape drift
- time-line
- pumped magnets
- line shape
- sensitivity
- cryogenic probes
- automated tests
- electronic tests
- etc.

**Should these issues be
customer or vendor driven?**

AMMRL: Topics

Facility Operations and Research

Experiments

- implementation
 - which flavor
 - source code/distribution
- education
 - how-to guides
- odd nuclei
- standards

Special Environments

- Open Access
- Automation
- cold vs warm probes
- flow vs tubed probes
- hyphenated techniques

Computers

- security
- home-built, compatibility
- backups
- data exchange

Analysis Software

- desktop availability
- costs/licensing
- graphics exporting

AMMRL: Topics

Facility Business

Staffing

- typical duties
- people/instrument (or MHz)
- engineers
- salary+benefits surveys

Finances

- fees
 - service work
 - cryogenic probes
- expenses
 - cryogenics
 - maintenance (cold probes)
- accounting software

AMMRL: Topics

Professional Communications

Instruction & Training

- level of training
- interaction with faculty
- staff as instructors/faculty

Publishing

- collaborative guidelines
- what is possible
- what is typical

Meetings and Travel

- what is typical

AMMRL

- very active email group
- active(?) ENC meetings

expand to new Internet technologies?

very nice web forum from Perry Pellechia in limbo

Rainer Haessner has a wikipedia site at:

<http://howto.ammrl.org>

AMMRL Meeting at the 47th ENC

Breakout Sessions:

Cryogenic Probes

many

User Training/Competency

many

laptops and security

Rainer Haessner

M-W P 405

wikipedia site: <http://howto.ammrl.org>

Rainer Haessner

do-it-yourself linux hosts

Dave Vander Velde

desktop processing software (cost)

Pathre Sadanand

open-source data integration (NMRpipe)

Michael Gryk

Th P 087

facility computer configuration

Phil Dennison

business issues, open access labs

Tom Stringfellow

sample changers

Tim Burrows

experiments for sample characterization

Steve Huhn

Th P 038

AMMRL Meeting at the 47th ENC

Working Groups:

User Training/Competency (Klika)

Formulate a policy/set of standards regarding topic of level of user competency that could be adopted universally or referred to:

- call for suggested recommendations,
- prepare a set of guidelines representing the consensus of the input, and
- then have the guidelines evaluated by the wider community.

Authorship/Acknowledgments (Singleton)