

Newsletter

OCTOBER 27, 2017

VOLUME 1, NUMBER 1

Welcome to this Newsletter!

An AAD Newsletter has been discussed by the Executive Committee over the last few years, and has been recently approved because it is one effective way to improve Division communications.

This biannual Newsletter will post information from past Executive Committee meetings and the focus of future ones, make announcements of future Society and Division events, an AAD-related spotlight feature, summary of current division leadership and demographics, and contact information.

Grand Challenges Announced

At the ANS Annual Meeting in San Francisco, President Andy Klein announced nine ANS Nuclear Grand Challenges that need to be resolved by 2030. They are:

1. Establish the scientific basis for modern low-dose radiation regulation.
2. Transform the way the nuclear technologies sector thinks about public engagement.
3. Close the nuclear fuel cycle.
4. Ensure continuous availability of radioisotopes.
5. Rejuvenate the nuclear technology infrastructure and facilities.
6. Accelerate development and qualification of advanced materials.
7. Accelerate utilization of simulation and experimentation.
8. Expedite licensing and deployment of advanced reactor designs.
9. Expedite nuclear education and knowledge transfer.

We are pleased to note that two challenges submitted by AAD, "Dispose of spent nuclear fuel using Accelerator Driven Systems" (Yosury Gohar lead), and "Accelerate new materials licensing for nuclear applications using ion beam irradiation" (Peter Hosemann lead) were generalized and incorporated in Challenges 3 and 6. Good work, Yosury and Peter!

President Klein identifies AAD as a primary sponsor of Challenge 6, along with Aerospace Nuclear Science & Technology Division, Fusion Energy Division and Materials Science & Technology Division. It is now AAD's immediate challenge to help answer the Challenge as primary sponsor.

Scholarship, Honors, Award, Support Recipients

2016 Scholarship Recipient

Samantha Michael – North Carolina State University

2017 Student Conference Awards:

Leslie Ann Alasagas et al. – US Naval Academy

- 5th place as a Best Overall Paper
- AAD Best Podium Presentation

AccApp'17 student travel awards:

Tommaso Stefano Carzaniga, Albert Einstein Center for Fundamental Physics (AEC) and Laboratory for High Energy Physics (LHEP), Switzerland

David Alexander Bruton, University of Huddersfield, UK

Eunjoong Lee, Korea Advanced Institute of Science and Technology (KAIST)

Jesse M. Brown, Rensselaer Polytechnic Institute, NY

Thank You, TechSource Inc.!!

At AccApp'17, TechSource Inc. announced a one-time \$2000 Corporate Scholarship to be administered by AAD. Applications due in January 2018.

Congratulations, Gary Was!!

At the [2017 ANS Annual Meeting](#) AAD member Gary S. Was (Professor, University of Michigan) was presented the Mishima Award.

Mark Your Calendars!

[2017 ANS Winter Meeting and Nuclear Technology Expo](#)

The Accelerator Applications Executive Committee meeting will be Monday, October 30, 11:30 AM – 1:30 PM. The location is Park 8228.

[2018 American Nuclear Society \(ANS\) Annual Meeting](#), June 17-21, 2018, Philadelphia, Pennsylvania

[Topical Meeting of the Radiation Protection & Shielding Division of ANS \(RPSD-2018\)](#), August 26-31, 2018, Santa Fe, New Mexico

2018 American Nuclear Society (ANS) Winter Meeting, November 11-15, 2018, Orlando, Florida

2019 American Nuclear Society (ANS) Annual Meeting, June 9-13, 2019, Minneapolis, Minnesota

Accelerator Applications Spotlight on:

The [Facility for Rare Isotope Beams](#) (FRIB) will be a scientific user facility for the Office of Nuclear Physics in the U.S. Department of Energy Office of Science (DOE-SC). FRIB is funded by the DOE-SC, MSU and the State of Michigan. Supporting the mission of the Office of Nuclear Physics in DOE-SC, FRIB will enable scientists to make [discoveries](#) about the properties of rare isotopes (that is, short-lived nuclei not normally found on Earth), nuclear astrophysics, fundamental interactions, and [applications for society](#), including in medicine, homeland security, and industry. Beams of rare isotopes will be produced in 400 kW beam operations using heavy ions ranging from oxygen to uranium.

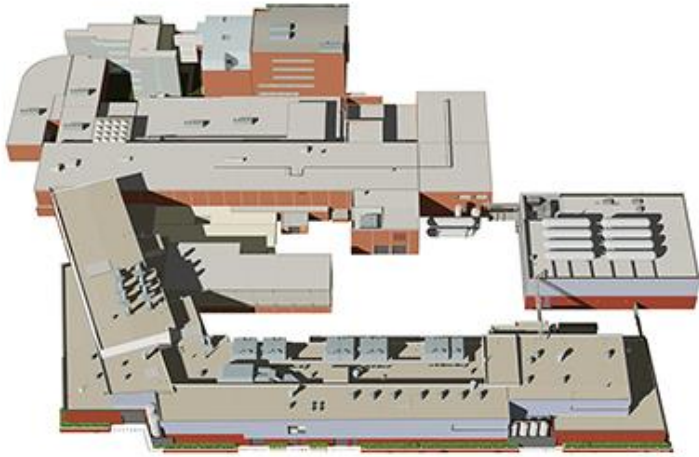


Figure 1 An architectural rendering shows the baselined conventional facilities design of the Facility for Rare Isotope Beams.

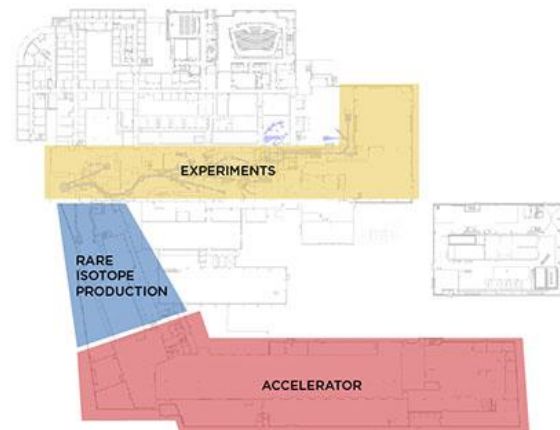


Figure 2 FRIB scope.



Figure 3 This is a camera view from the south showing the FRIB construction area from a camera located at MSU's Molecular Plant Sciences Building.

Some 2017 FRIB Milestones

RFQ assembled and tuned in FRIB tunnel 27 January

FRIB Project installs first superconducting cryomodule on beamline 03 March

Civil construction achieved beneficial occupancy on 24 March

FRIB installs vertical beamline 30 May

FRIB places first matching cryomodule 21 July

First Front-End Accelerator Readiness Review held 25-27 July

Current AAD Leadership

Division Officers

Reginald Ronningen Chair/Vice Chair [email](#)

William C. Horak Secretary [email](#)

Gregory E. Dale Treasurer [email](#)

Executive Committee

3 year term

2020

[John D. Galambos](#)

[Michal Mocko](#)

[Lin Shao](#)

2019

[Philip L. Cole](#)

[Ross F. Radel](#)

[Richard C. Lanza](#)

2018

[Gary P. Barbin](#)

[Alexander Barzilov](#)

[Gregory E. Dale](#)

[Mohamed Yousry Gohar](#)

[William C. Horak](#)

[Reginald M. Ronningen](#)

Staff Liaison

[Valerie Vasilievas](#)

Board Liaison

Todd Allen

Ex Officio

[Hans D. Gougar](#)

[Charles T. Kelsey IV \(Past Chair\)](#)

Past Chairs

2016-2017 Charles T. Kelsey IV

2015-2016 James F. Stubbins

2014-2015 Philip L. Cole

2013-2014 Bradley J. Micklich

2012-2013 Jeffrey O. Johnson

2011-2012 Philip Cole

2010-2011 Nolan Hertel

2009-2010 Phillip Ferguson

2008-2009 Tom Ward

2007-2008 Eric Pitcher

2006-2007 Anthony Hechanova

2005-2006 Laurie Waters

2004-2005 Mario Carelli

2003-2004 Paul Lisowski

2002-2003 John Ireland

2000-2001 Warren Funk

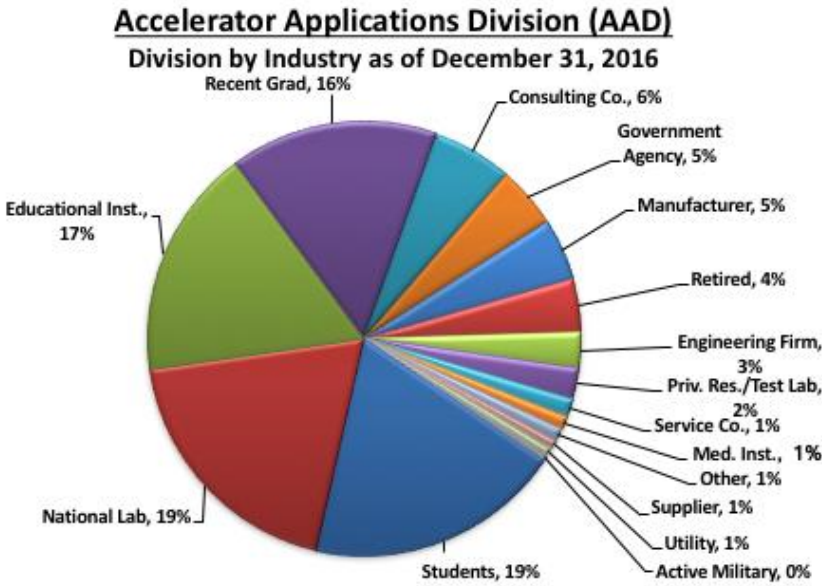
1999-2000 Laurie Waters

1997-1999 Gregory Van Tuyle

Current AAD Committee Chairs

Technical Programs:	TBD
Newsletter:	Reg Ronningen
Honors and Awards:	Peter Hosemann
Liaison with Societies:	None (not required in bylaws)
Nominating:	Charles Kelsey
Webpage:	Charles Kelsey, Peter Hosemann
Scholarship:	Yaron Danon
Young Members Liaison:	TBD

Demographics



Contact Information

For more information about AAD: [Contact Us](#)

Web links

[AAD Web Page](#)

[ANS Collaborate for AAD](#)
