

NUCL Strategic Plan

2015-2020

12/3/2014

Mission

The Division serves to advance the understanding of nuclear chemistry and radiochemistry and their practical applications by serving the diverse communities involved in nuclear science and related technologies.

Vision

As the preeminent organization for professionals in the fields of nuclear chemistry, radiochemistry, and related technologies, the Division will provide enhanced opportunities for education, networking, and outreach, while maintaining its excellence in diverse programming.

Goal 1*Education and Workforce Development*

Develop the next generation of nuclear chemists and radiochemists to meet national workforce needs in both basic and applied nuclear science and related technologies, with focus on education, hands-on training, and mentoring of young scientists (e.g., undergraduates, graduate students, and young professionals).

Goal 2*Awards, Recognition and Membership*

Offer networking and professional growth opportunities for members. Recruit, engage, and recognize nuclear chemists and radiochemists working in interdisciplinary fields. Actively pursue and publicize the professional achievements of members at the local, regional, divisional, and national levels.

Goal 3*Expertise and Communication*

Develop and facilitate events and communication tools that enhance nuclear chemistry and radiochemistry outreach, provide expert information on historical achievements and recent advances, and emphasize the value and importance of practical applications of nuclear science in all aspects of society.

Goal 1. Education and Workforce Development: Strategies, Activities and Tasks

- Strategy 1.1. Advancing Divisional Advocacy
- Strategy 1.2. Increasing Divisional Networking and Communication
- Strategy 1.3. Augmenting Cross-Disciplinary Programming

Strategy 1.1. Advancing Divisional Advocacy

Activity 1.1.1. Continued advocacy for the Nuclear and Radiochemistry Chemistry Summer Schools (NCSS)

Task 1.1.1.1. NCSS National Director collects and disseminates data that demonstrate the value of the NCSS to workforce development in nuclear and radiochemistry.

Task 1.1.1.2. Division members asked to contact funding agencies and government officials requesting a reinstatement of funding for the NCSS.

Task 1.1.1.3. Executive Committee establishes an education task force.

Task 1.1.1.4. Education task force identifies and develops alternate methods for achieving some of the goals of the NCSS programs as contingency plans for the immediate future.

Activity 1.1.2. Advocate for National Laboratory policy changes

Task 1.1.2.1. Executive Committee establishes a one-time national lab policy task force to interface with the next Committee of Visitors (COV).

Task 1.1.2.2. Task force collects comments, prioritize concerns, and suggest recommendations in a written report in advance of the next COV and the upcoming NSAC long-range plan.

Activity 1.1.3. Advocacy for Educational initiatives within the smaller ACS Divisions

Task 1.1.3.1. Executive Committee establishes an education task force, not only to advocate for the NCSS (above), but to advocate for new nuclear chemistry educational initiatives within the ACS.

Task 1.1.3.2. Education task force investigates the possibility of NUCL accreditation for academic courses in nuclear and radiochemistry?

Task 1.1.3.3. Education task force assesses various online and distance-learning options in nuclear science, and make recommendations on NUCL division support for the best proposals.

Task 1.1.3.4. Education task force contacts other ACS committees concerned with education (SOCED) and professional training (CPT) to advocate for increased prominence of nuclear and radiochemistry in curriculum guidelines.

Strategy 1.2. Increasing Divisional Networking and Communication

Activity 1.2.1. Maintain an active center of undergraduate research opportunities in nuclear science

Task 1.2.1.1. Executive Committee identifies an Education “Chair” with a fixed term who oversees such activities as undergraduate and graduate student awards and both educational and research opportunities nationally.

Task 1.2.1.2. Education Chair annually collects information about undergraduate research opportunities.

Task 1.2.1.3. Webmaster will post opportunities to the NUCL website.

Task 1.2.1.4. Education committee, when requested and when possible, provides assistance to undergraduates with common applications.

Task 1.2.1.5. The Education Chair and Education Committee commit to deliberately target underrepresented groups in nuclear chemistry, for which there is often ancillary funding available.

Activity 1.2.2. Maintain an active center of graduate research opportunities in nuclear science

Task 1.2.2.1. Education Chair annually collects information about graduate school opportunities in nuclear and radiochemistry.

Task 1.2.2.2. Webmaster maintains an updated list of graduate opportunities on the NUCL website.

Task 1.2.2.3. Education Chair collects a comprehensive listing of nuclear and radiochemical training facilities to accommodate future proposals for distributed workforce development efforts.

Task 1.2.2.4. Webmaster maintains an updated list of nuclear and radiochemistry training facilities on the NUCL website.

Task 1.2.2.5. Education Chair annually reminds Ph.D. mentors to have their graduating students hand-write Nuclear and/or Radiochemistry in the “other” space of the Survey of Earned Doctorates (SED) questionnaire.

Activity 1.2.3. Develop networking activities to engage and track students exposed to nuclear science

Task 1.2.3.1. Executive Committee develops social and professional online networks, and will work with the Education Chair to ensure that participants in the NCSS are enrolled in these social and professional networks.

Task 1.2.3.2. Education Chair maintains an NCSS alumni database as a workforce development tool, and to assess the program’s success in attracting students to the field.

Strategy 1.3. Augmenting Cross-Disciplinary Programming

Activity 1.3.1. Increase intentional cross-disciplinary programming at ACS meetings with NUCL

Task 1.3.3.1. Executive Committee establishes a Programming committee to increase programming diversity and member involvement.

Task 1.3.3.2. Programming committee encourages cross programming and co-sponsorship of symposia between NUCL and the divisions of Analytical Chemistry, Chemical Education, Colloids, Environmental Chemistry, and Computational Chemistry.

Task 1.3.3.3. Programming committee establishes external interactions and cross programming with American Nuclear Society and Health Physics Society (outside the ACS). Such activities may also impact educational programs that are moving towards multi-disciplinary programs.

Activity 1.3.2. Explore the possibility to bring other small conferences into the ACS national or regional meeting system

Task 1.3.2.1. Programming committee actively reaches out to organizations that host smaller symposia that are relevant to nuclear and radiochemists (e.g. Plutonium Futures) to see if some of these meetings could be brought into the ACS National or Regional meeting structure.

Activity 1.3.3. Develop activities (outreach, etc.) together with other nuclear science organizations such as American Physical Society's Division of Nuclear Physics, the radiomedical community, and American Nuclear Society

Task 1.3.3.1. Executive Committee identifies target organizations with similar outreach and educational goals for potential collaborations through the innovative project grant program or external grant funding.

Task 1.3.3.2. Executive Committee identifies a leader for outreach activities, who will be a member of the Education committee, empower him/her to coordinate and communicate NUCL outreach efforts.

Task 1.3.3.3. Education Committee establishes the practice of recruiting members to annually submit articles about nuclear and radiochemistry topics to the Journal of Chemical Education.

Goal 2. Awards, Recognition and Membership

Strategy 2.1. Sustaining the Seaborg Award

Strategy 2.2. Retaining Members

Strategy 2.3. Growing the Membership

Strategy 2.1. Sustaining the Seaborg Award

Activity 2.1.1. Empower Division Awards Nomination Committee to solicit and facilitate nominations for the Seaborg Award

Task 2.1.1.1. Newsletter Editor includes a “Call for Nominees” in the NUCL Newsletter.

Task 2.1.1.2. Webmaster includes a “Call for Nominees” on the NUCL web site, along with a link to the ACS awards web site.

Task 2.1.1.3. Awards Nomination Committee encourages NUCL members to nominate individuals identified by the committee as outstanding Seaborg Award candidates.

Activity 2.1.2. Maintain a roster of Seaborg Award nominees

Task 2.1.2.1. Awards Nomination Committee maintains current listing of active nominees with expiration date for application.

Activity 2.1.3. Ensure nominations for Seaborg Award meet ACS requirements

Task 2.1.3.1. Awards Nomination Committee confirms that the minimum number of nominees remains above ACS requirements (5 nominees).

Task 2.1.3.2. Awards Nomination Committee identifies nominees that are highly qualified for the Seaborg Award.

Task 2.1.3.3. Awards Nomination Committee works with nominator to ensure that the Letters of Support for the nominee are from highly respected references.

Task 2.1.3.4. Awards Nomination Committee ensures diverse pool of nominees, based on

- Profession
- Discipline
- Underrepresented persons

Activity 2.1.4. Identify source of funds sufficient to sustain Seaborg Awards

Task 2.1.4.1. Executive Committee reviews the NUCL budget annually to confirm sufficient funding (\$10k) for short-term support of Seaborg Award.

Task 2.1.4.2. Executive Committee to identify long-term funding source(s), potentially from one or more of the following sources:

- Philanthropic
- Industry
- Government (contractor)
- Academia

Strategy 2.2. Retaining Members

Activity 2.2.1. Announce new members in NUCL Newsletter

Task 2.2.1.1. Secretary identifies names of new members and pass along to the Newsletter Editor to include in each Newsletter.

Activity 2.2.2. Assign a "mentor" to new members.

Task 2.2.2.1. Membership Committee establishes and maintains a database of mentors for new members.

Task 2.2.2.2. Membership Committee chair matches new member with current member.

Task 2.2.2.3. Mentor composes and sends a "welcome" email to the new member after ~ 1 month.

Task 2.2.2.4. Mentor composes and sends a follow up "how's it going" email after ~6 months.

Activity 2.2.3. Provide annual anniversary gift to new members

Task 2.2.3.1. Executive Committee identifies anniversary gift

Task 2.2.3.2. Membership Committee Chair procures nuclear-related gifts and obtains reimbursement from the Treasurer.

Task 2.2.3.3. Membership Committee distributes anniversary gift to members on an annual basis for at least their first five years of membership.

Activity 2.2.4. Announce member anniversaries

Task 2.2.4.1. Membership committee reviews NUCL division roster in early January, and identify 5-year anniversaries (5,10,15...).

Task 2.2.4.2. Newsletter Editor lists the 5-year anniversaries in the NUCL Newsletter.

Task 2.2.4.3. Chair recognizes 50-year members at the NUCL Business Meeting at the Spring ACS National Meeting.

Activity 2.2.5. Produce a Features/Advantages/Benefits (FAB) document for NUCL membership

Task 2.2.5.1. Membership Committee composes FAB document.

Task 2.2.5.2. Executive Committee reviews and approves FAB document.

Task 2.2.5.3. Webmaster posts FAB on NUCL website.

Task 2.2.5.4. Membership Committee distributes FAB with gift to new members as a "value proposition."

Activity 2.2.6. Establish a "What are you working on?" section of the NUCL Newsletter

Task 2.2.6.1. Communications Committee chair creates and maintains a list of potential story tellers.

Task 2.2.6.2. Newsletter Editor contacts story teller and request content.

Task 2.2.6.3. Newsletter Editor receives, edits and publishes content in the NUCL Newsletter.

Activity 2.2.7. Nominate members for relevant awards

Task 2.2.7.1. Awards Nomination Committee identifies and facilitates nominations for ACS Fellowship.

Task 2.2.7.2. Awards Nominations Committee identifies and facilitates nominations for other ACS awards.

Task 2.2.7.3. Chair communicates successes to Executive Committee, and the Webmaster and Newsletter Editor for broad dissemination.

Strategy 2.3. Growing the Membership

Activity 2.3.1. Recruitment at professional meetings

Task 2.3.1.1. Communications Committee develops recruiting materials.

Task 2.3.1.2. Membership Committee hosts a member table at professional meetings, and should target specific meetings in both the short and long term. This should include national and international meetings.

Task 2.1.3.3. At ACS National meetings, the Membership Committee identifies opportunities to co-host meet and greet sessions with other divisions.

Activity 2.3.2. Provide NUCL Divisional highlights for inclusion in ACS Corporate blanket e-mail sends

Task 2.3.2.1. Communications Committee and Program Chairs identify newsworthy highlights from ACS National Meeting presentations.

Task 2.3.2.2. Communications Committee Chair forwards highlights to appropriate ACS office:

- inChemistry (ACS student member magazine)
- ChemMatters (High School Teacher focus magazine)
- ACS Network (Social Media tool for ACS)

Activity 2.3.3. Continue to encourage new student members to join the division

Task 2.3.3.1. Nuclear and Radiochemistry Summer Schools National Director completes ACS and division member applications for 24 participating students.

Task 2.3.3.2. Membership Committee reviews list of presenters at “Young Investigator” symposia and confirms their division membership.

Goal 3. Expertise and Communication: Strategies, Activities and Tasks

Strategy 3.1. Increase Outreach Efforts

Strategy 3.2. Facilitate and Enhance Visibility

Strategy 3.3. Provide Outreach to the General Public

Strategy 3.4. Develop Outreach to Engage Young Scientists via Social Media.

Strategy 3.5. Define Roles and Responsibility of Officers

Strategy 3.1. Increase outreach efforts of the division through the development and dissemination of outreach materials through the NUCL-ACS website

Activity 3.1.1. Use Innovative Project Grant (IPG) to purchase outreach kit

Task 3.1.1.1. IPG Contact develops training video for the outreach kit.

Task 3.1.1.2. IPG Contact advertises and/or demonstrates kit at an ACS national meeting.

Task 3.1.1.3. IPG Contact coordinates with the Webmaster to establish a sign-up sheet on the NUCL website to reserve the training kit.

Task 3.1.1.4. NUCL members sign up to borrow the kit for demonstrations at schools.

Activity 3.1.2. Develop a collection of graphics/presentations (e.g. dropbox)

Task 3.1.2.1. Communications Committee solicits content from subject matter experts.

Task 3.1.2.2. Experts provide content (e.g., PowerPoint slides, photos, white papers) via the dropbox.

Task 2.1.2.3. Communications Committee Chair informs NUCL member on how to access the dropbox, with new content advertised on social media.

Strategy 3.2. Facilitate and enhance visibility of nuclear and radiochemistry research including historical and recent advances.

Activity 3.2.1. Develop articles for the Journal of Chemical Education and similar audiences at a rate of 1 article per National Meeting

Task 3.2.1.1. Communications Committee Chair identifies individuals to contact the editor of Journal of Chemical Education and to coordinate review articles with topics planned in future NUCL programming. Example topics:

- Status of the search for super heavy elements. How close are we to the “island of stability” and what does that island look like.
- Discovery of recent new elements
- Production of radionuclides for medical diagnostics and treatment

Task 3.2.1.2. Communications Committee works with the Program Chair to identify willing contributors for the Journal of Chemical Education review article.

Task 3.2.1.3. Communications Committee advertises the journal articles on social media.

Activity 3.2.2. Develop an electronic pamphlet providing short summaries on general topics in nuclear and radiochemistry that are targeted at high school, undergraduate, and general public audiences

Task 3.2.2.1. Communications Committee identifies subject matter experts for pamphlets.

Task 3.2.2.2. Subject matter experts prepare content for the pamphlet.

Task 3.2.2.3. Communications Committee formats content to conform to standard pamphlet template.

Task 3.2.2.4. Communications Committee makes pamphlet available to NUCL members on the dropbox.

Task 3.2.2.5. Webmaster posts the pamphlet on the NUCL website.

Strategy 3.3. Provide educational outreach to the general public improving communication between researchers and policy makers

Activity 3.3.1. Promote opportunities for members to provide public input to US federal government decision making through regulations.gov. Also, publicize when US federal government hearing of interest are available in a streaming format.

Task 3.3.1.1. Program Chair identifies individuals to develop a joint policy/technical symposia at future ACS NUCL meetings.

Task 3.3.1.2. Communications Committee regularly reviews regulations.gov to gather nuclear relevant subjects/laws/regulations.

Task 3.3.1.3. Communications Committee advertises relevant regulations.gov posts via social media.

Task 3.3.1.4. Communications Committee develops suggestions/guidelines for lobbying, using resources available from the ACS National Office.

Strategy 3.4. Develop outreach to engage the younger scientist community through social media.

Activity 3.4.1. Regular online posting on social media

Task 3.4.1.1. Communications Committee identifies volunteers to maintain an active Twitter, Facebook, LinkedIn, and Research Gate accounts

Task 3.4.1.2. Volunteers provide (at least) weekly updates on each account that document advancements in the community to help keep young scientists involved.

Task 3.4.1.3. Volunteers provide the Communications Committee with metrics on access and distribution to content on a monthly basis.

Task 3.4.1.4. Communications Committee compiles metrics on social media access and distribution on a monthly basis.

Task 3.4.1.5. Communications Committee Chair provides a written report on the social media metrics to the Executive Committee three weeks before each ACS National Meeting.

Activity 3.4.2. Establish NUCL group on ACS network to make resources available and facilitate member discussions and involvement beyond the NUCL division

Task 3.4.2.1. Social medial volunteers will highlight online when available.

Strategy 3.5. Define Roles and Responsibility of Officers

Activity 3.5.1. Each officer maintain a living document on their roles and activities.

Task 3.5.1.1. Chair, Chair-Elect, Vice Chair, Immediate Past Chair, Secretary, Treasurer, and Councilor(s) account for their ACS-related activities throughout the year.

Task 3.5.1.2. Officers noted above provide their written accounts to the Secretary by January 15 of each year.

Task 3.5.1.2. A Member-at-Large of the Executive Committee is charged by the Chair to ensure that officers comply with the above tasks.