

Lilly E. Linden

National Chemistry Week

An Outreach Opportunity in Academic Libraries

I started my library career as a college science librarian at an undergraduate-only small liberal arts college. The scope of the job was broad, and being part of a small library team meant that it was all hands on deck when it came to most projects. There wasn't as much time to devote exclusively to any out-of-the-box department-specific programming. I did, however, have the uncommon advantage of having been a part of the faculty body which definitely had an impact on the success of my general outreach efforts, an advantage that I knew was unlikely to carry over to future jobs. So when I moved from my first librarian position, I was heavily invested in outreach and wanted to hit the road running.

National Chemistry Week

As a liaison to a smaller subset of STEM disciplines in my new position, I decided to explore more discipline-specific opportunities for outreach across the different stakeholder groups involved. The American Chemical Society (ACS) National Chemistry Week (NCW) seemed like an opportunity to connect with members of the chemistry department in my new role at an R1.¹ The ACS Office of Science Outreach has set an annual theme and released promotional materials to support NCW annually during the third week of October since 1994.² The week, which also tends to overlap with Mole Day (commemorating Avogadro's number), is used globally as an opportunity to educate the general public on the myriad ways in which chemistry research is a part of everyday life. Most of these opportunities usually initiate within academic departments. With some quick research and asking around, I was able to determine that the chemistry department in question hadn't done prior NCW programming at the department level.

Laying the Groundwork

Still learning the lay of the land, I started with the incorrect assumption that the patrons (especially faculty and graduate students) in the department would be busy and wouldn't have time to engage with the creation of any programming. After setting up a schedule of relevant topics/resources (SciFinder - n, Reaxys, NIST WTT, a Book Arts Workshop on



Flyer from 2022 National Chemistry Week celebrations.

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natural dyes, CRC Handbook of Chemistry and Physics) for each day of NCW 2022, I reached out to the chair of the department. My plan included a daily online thirty-minute drop-in session, which would include a short overview followed by an open discussion about the tool or resource in question. For context, the theme in 2022 was “Fabulous Fibers: The Chemistry of Fabrics.”³ Coincidentally, the Book Arts Workshop in the library was offering a natural dye-making class during that week, which fit the theme beautifully. The chair of the department responded promptly and suggested reaching out to the entire department to gauge interest in participation.

Planning for the Event

With the chair’s approval in hand, I connected with the department administrator to make sure that they were looped into the conversation. We then reached out to the entire department, and enthusiastic replies came back very quickly. It was gratifying to connect with different stakeholder groups, including faculty, graduate students, and even postdocs who were interested in participating in some way during the week. In collaboration with the department administrator, I set up timelines and structures to organize events during different days and time slots of the week. We decided to create a Google website to keep track of the various activities and labs participating during the events to use for outreach.⁴ We also had some faculty members connect with local middle schools to arrange chemistry demonstrations in the schools during the week.

While neither the library nor the department had accounted for any material costs in the annual budget, the department was able to support some expenses, including the cost of liquid nitrogen, half and half, vanilla concentrate, and sugar used to make ice cream, which has since become a popular way to have community members stop by to interact with members from the department. In 2022, all the programming was held inside the chemistry department building and was distributed across three days during the third week of October.

Sustainability

Although the first iteration of the program helped us set up a workflow and got members of the department excited, it was clear that there wasn’t as much foot traffic inside the department as we had hoped for. We started the planning process for NCW 2023 in late summer. This time around, with student and faculty input, we settled on a single two-hour outdoor session in a popular student corridor on campus. The event was a success, with more than 200 students stopping by to interact with members from the department across the two-hour window. However, the event setup and takedown, access to electricity, clean up, and so on was time consuming for the core organizing team (grad students and department admin) and the librarian (me).

While the programming around these events had helped build good connections with different stakeholders across the department, it was clear that it was time for me to step back and to pass ownership of the event to the department administration and the broader chemistry community. The chair



Fabric dyeing station from NCW 2022.

and others in the department recognized that the event offered a chance for the Dartmouth community to engage with research being done in the chemistry department. It increased the visibility of the department locally and gave its graduate students an opportunity to develop their science communication skills, in addition to meeting requirements of their funders.⁵ The event planning also created the space to have conversations about departmental programming continuity and clear documentation of workflows, especially for the graduate students who were thinking about how to pass the baton on to their successors. These conversations allowed us to talk about the importance of metadata, institutional continuity, commenting out code and readme files, and so on. Finally these events also increased communication and collaboration across labs within the department, which was an additional win.

In 2024, a small group of chemistry graduate students, the department administrators, and some key faculty members organized the whole event successfully. This time the planning group chose to set up all the demonstrations right outside the main chemistry department building, which reduced the distance that equipment had to be transported. After following up with the organizers, it seems that the department was happy with the scale of the events of the 2024 iteration, and they plan to continue with this format going forward. The 2025 NCW, themed “The Hidden Life of Spices,” was successful as well.⁶ Figure 1 outlines ideas for anyone planning to start disciplinary events.

National Chemistry Week and Other Event Ideas to Explore	Potential Collaborators
1. SciFinder - n 2. Reaxys 3. NIST WTT 4. CRC Handbook of Chemistry and Physics 5. History of the American Chemical Society 6. History of the Royal Society of Chemistry 7. National Chemistry Week website 8. Lab safety groups on campus 9. Any other database used frequently by the patrons 10. Any other large disciplinary publisher/society/organization 11. Any proprietary tool that is used in the discipline 12. Institutional Review Board and/or Institutional Animal Care and Use Committee	1. Your supervisor—for support and to ask whether any library funding is available 2. Department chair—for funding 3. Department administrator 4. Faculty and researchers 5. Undergraduate or graduate student clubs 6. Communications folks (whether in the department, the library, or the university/college) 7. Folks who work in facilities, both at the department and at the campus level, depending on scale of the event 8. Events coordinators at local schools

Figure 1. Quick checklist for programming for National Chemistry Week celebrations or similar at your institution.

Conclusion

I anticipate that this annual event, now four years strong, will continue on, with members of the chemistry department leading the charge to organize the planning efforts in collaboration with the chemistry librarian. Being a part of the planning committee gave me the opportunity to have informal conversations unrelated to the events with the department chair, administrators, faculty, and graduate students of the department, creating pathways for uninhibited exchange in other aspects of library work. The patrons in the department know that I am an approachable resource available to support their research, collections access, and teaching efforts. I am also able to have transparent, data-driven communication with members of the department around collections decisions (both additions and deaccessions).

Although they can be intensive time commitments, I strongly recommend developing and cohosting discipline-specific programming as a part of outreach strategies, especially when starting a new liaison position or charge. I hope to continue exploring such discipline-specific

outreach events to create opportunities for deep relationship building as a liaison librarian. Other events that I will be exploring include a local bioblitz with the biological sciences department and a game night at the mathematics department. *~*

Notes

1. American Chemical Society, "About - National Chemistry Week (NCW)," accessed February 6, 2025, <https://www.acs.org/education/national-chemistry-week/about.html>.
2. American Chemical Society, "Science Outreach," accessed February 27, 2025, <https://www.acs.org/education/outreach.html>.
3. American Chemical Society, "About - National Chemistry Week."
4. "National Chemistry Week 2024," accessed February 27, 2025, <https://sites.google.com/dartmouth.edu/national-chemistry-week-2024/home>.
5. "The Chemistry of Creativity and Collaboration | Dartmouth Libraries," accessed February 27, 2025, <https://www.library.dartmouth.edu/news/chemistry-creativity-and-collaboration>.
6. "In Pictures: National Chemistry Week at Dartmouth | Department of Chemistry," October 28, 2025, <https://fas.dartmouth.edu/news/2025/10/pictures-national-chemistry-week-dartmouth>.