NextTech
Student Network

Student Handbook

NextTech Student Network is a network of student groups formed to promote science, technology, and innovation. This handbook provides the general framework for the operation of university chapters.

NextTech Student Network

Promoting Science, Technology & Innovation

The United States is predicted to face shortages in domestic scientists and engineers in coming years. NextTech Student Network promotes science and engineering across a broad age spectrum to help address this critical national need. Through the connection of student groups, NextTech Student Network.

- raises awareness of current research and potential applications of nano and other emerging technologies,
- builds an interdisciplinary community of students with a focus on future technologies,
- facilitates interactions and connections between faculty, industry professionals, and students, across many levels, and
- promotes opportunities for student research and internships.

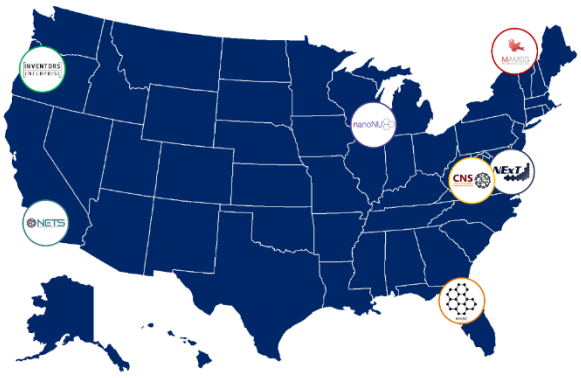
The foundation of the network is student-run clubs at universities and colleges across the country. *Even students enrolled in engineering and science programs are often unaware of the current and potential impact of emerging technologies (especially areas that cross traditional disciplines such as nanotechnology).* Cutting edge examples can provide the spark to attract and retain students of any age to science and engineering.

NextTech Student Network Chapters have the flexibility to build upon local academic culture, e.g. institutions with medical Schools may have an inherently stronger focus on nanomedicine. However, common activities may include:

- *Monthly Seminar Series*
- *Annual Faculty/Student Research Mixer*
- *University, Industry and National Laboratory Facility Tours*
- *Networking opportunities with faculty and industry representatives*
- *Annual Graduate Student Roundtable Dinner*
- *Outreach to Local Schools*

NextTech Chapters are virtually connected (portal, website, mobile app, etc) and meet annually at the TechConnect World Innovation Conference and Expo. At this meeting, chapters report on their annual activities to disseminate best practices and network with the broader innovation community.

NextTech provides the foundation for building a network of engaged students connected to each other across academic disciplines. Furthermore, the organization facilitates interactions to promote valuable opportunities for these students in research, industry, and federal laboratories. Explicit connections are a key aspect of NextTech, not only between professionals and students, but among the students themselves (between education levels) fostering a science and engineering culture through early engagement, outreach, and mentorship.



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Vision

Expand the domestic science, technology, engineering, and mathematics (STEM) workforce to enable the future competitiveness of the United States of America.

NextTech inspires students to become scientists and engineers, with a focus on nano and emerging technologies, by raising awareness of cutting-edge research and advanced technologies; facilitating interactions with faculty and industry; promoting opportunities for undergraduate research and internships; and connecting a growing, interdisciplinary community of students.

The NextTech Student Network Handbook

This handbook serves as a guide to start and operate a NextTech chapter at a university or college, and suggests a general club structure and tips for executing events and activities.

The individual clubs that make up the NextTech Network vary with respect to primary focus area or specific activities based on the local culture of their institution. Some clubs may have been formed prior to joining the NextTech student network—in this case, the handbook serves to provide ideas from other NextTech chapters to consider adding to your current activities.

At the center of the student network lies the vision stated above. Joining chapters should be aligned with this vision with a focus on emerging technologies (nano or others), or technology-based entrepreneurship. Focus areas of clubs involved include molecular biology, chemistry, nanotechnology, unmanned aerial vehicles (UAVs), photonics, and material science. Becoming a part of NextTech benefits a club through connections to a broad network, from students and faculty at other universities across the country, to industry and government officials at events throughout the year and at the annual meeting.

This handbook is intended to be a living document, and students are encouraged to provide content and examples based on their experience to add to the body of knowledge of best practices.

Structure and Key Functions

Depending on a school's culture and rules for clubs, the structure or the responsibilities of the officers may vary. In general, the governing body of a NextTech Chapter is the Executive Committee. The Executive Committee typically consists of the president, vice president, secretary, and treasurer. Other key roles may be addressed through other positions and committees. It is a good idea for the Executive Committee to meet at least once a month and report any action taken to the members at the next club meeting or through email or other communication means.

The Executive Committee should be familiar with the Chapter's Constitution (see the example in Appendix A) and other requirements outlined in this handbook. The chapter should be represented by the president, or designee, at all NextTech network calls or events.

Beyond the execution of core events and activities, the Executive Committee should develop projects, events and activities based on the interest of the members to advance the club mission. Members should be encouraged to play an active role in the club through committee assignments and other volunteer opportunities.

The Executive Committee should prepare an annual report providing an overall summary of the past year including:

- Club activities and progress
- Officer details
- Membership statistics
- List and description of all events and programs
- Outreach activities
- Community service
- Full accounting information based on the school's requirements for clubs.

The annual report should be prepared and shared with the network by June 1st of every year. A report template is provided in Appendix B.

Executive Meetings

The Executive Committee discusses chapter plans and reviews status of ongoing projects and activities. Representatives of working committees may report progress and general club members may also attend to observe or participate as appropriate, depending on the meeting agenda. If unable to attend in person, the faculty advisor should be kept informed on a regular basis by the president.

The following descriptions are examples of responsibilities of the primary officers of the Executive Committee. These functions may vary based on the interests and personalities of the officers. In some cases, the Executive Committee may choose a divide-and-conquer approach and divide up the responsibilities while in others, the hierarchy of a President, Vice President, etc., may be more effective. Each club is encouraged to find the approach most effective to benefit members and to balance the officers' competing commitments including course work. It is good to have more than one person able to do every task (with appropriate authority to make changes to the website, for example) so there is back up for times when an individual may have a series of exams, papers due, or other deadlines to ensure club items stay on track.

President

The President is responsible for leading the club and ensuring it functions well. Prior to taking office, it is good practice for the President to review the constitution and meet with outgoing Executive Committee to ensure understanding of the governing documents and vision for the Club. Past annual reports can also be reviewed for insight into the current status of the club.

Over the summer, the President should, in consultation with the Advisor and other officers, develop a plan and a basic calendar for the upcoming year. This plan may be modified based on the interests of the members, but will serve as a foundation to get the club off to a good start.

Although the President is ultimately responsible for the operation of the NextTech Chapter, it is important to delegate responsibility to avoid getting overwhelmed with details and help other members develop leadership skills. A number of the President's duties may be accomplished in communication with the executive committee. The President should try to identify skills and interests in officers and other members, and harness them in club activities and projects. As NextTech is intended to be a broad and interdisciplinary group, the President should monitor membership growth and development to seek to maintain a balance among academic majors and year, gender, ethnicity, and background through recruiting efforts and design of programs.

Typical responsibilities of the President include:

- **Setting yearly goals for the club**
- **Presiding over Executive and Member meetings**
- **Conducting effective meetings by preparing a detailed agenda including time for reports from officers and/or committees and encouraging member involvement**
- **Seeking research, internship, and other opportunities to share with members**
- **Representing the club at university and school club leadership activities**
- **Communicating and collaborating effectively with Advisor, and other NextTech Chapters.**
- **Promoting the club and recruiting members**
- **Delegating duties to appropriate Officers or Committees and monitoring progress**
- **Ensuring core programs and activities are successfully promoted and executed**
- **Assuming all other general executive duties not otherwise delegated**

Vice President

The Vice President works closely with the President and the other members of the Executive Committee to plan and implement the activities and programs of the NextTech Chapter. The core activities and programs are too much for a single person to lead and it is critical for the Vice President to work hard to help and support the President.

Typical responsibilities of the Vice-President include:

- **Advising the President**
- **Presiding over the meetings of Club in the absence of the President**
- **Assuming all duties of the President if the office of the President becomes vacant**
- **Represent the Club at university functions if the President is unavailable**
- **Lead specific programmatic functions, as appropriate (such as the seminar series)**

Secretary

The Secretary keeps all of the official records for the Club, works with the President to prepare reports, and takes notes and prepares meeting summaries. Committee chairs are responsible for reporting committee meeting details and outcomes to the Secretary for the chapter record, either through verbal report at regular meeting or direct communication.

Typical responsibilities of the Secretary include:

- **Maintaining all club records including membership details, committee assignments, attendance, event and program details, outreach contacts, meeting summaries, etc.**
- **Maintaining statistics on members and attendees at every event regarding major, year, gender, and ethnicity. (see federal guidelines of underrepresented groups)**
- **Working with President to prepare all reports**
- **Taking notes and preparing summary of all meetings**
- **Keeping Chapter contact and other information current with NextTech**
- **Serving as ex officio member of Web/Social Media Committee or other related committees to ensure information is current**

Meeting Summary

The secretary should keep a clear concise written summary of all meetings. If the Secretary is unable to attend a meeting, he or she is responsible for finding a designee (preferably a member of the Executive Committee) to keep the official record. The meeting summary should not detail every word or provide attribution, but instead should be a concise synopsis of what occurred and, importantly, the resulting action items with identification of member responsible. The Secretary should also work with the Publicity Committee to prepare summaries of successful projects, events, or newsworthy activities.

The meeting summary should include:

- **Type of meeting (executive, member, committee, etc)**
- **Date, time, place**
- **Attendees**
- **Additions or corrections to previous meeting summary**
- **Summary of each item on agenda**
- **Resulting action items, responsible party, and deadline**

It is important to get the meeting summaries out to members as quickly as possible so they can remain engaged in the club even if they are unable to make the meetings.

Treasurer

The Treasurer works closely with the President and the Secretary to maintain an accurate and complete financial record.

Typical responsibilities of the Treasurer include:

- **Collecting the Membership dues (if required by the club)**
- **Paying all debts of the Club as authorized by the President**
- **Keeping an exact account of all receipts and expenditures**
- **Providing a monthly update of income, expenditures, and account balances**
- **Identifying necessary expenditures on action items**
- **Preparing and submitting financial proposals for funding, if applicable, to school funds**
- **Submitting a complete annual financial report at the last regular meeting of the year and no later than April 15th to the Secretary and the President**
- **Serving as ex officio member of Fundraising Committee**

Budget & Financial Report

The Treasurer should work with the President and Executive Committee to develop the chapter budget. Committee chairs should also be consulted to provide input regarding anticipated expenses for projects planned for the year. The Treasurer also serves on the Fundraising Committee and communicates the financial needs to fund planned activities, events, and programs. It is important for the outgoing and incoming Treasurers to meet to review the accounts, transfer authority, and manage all details related to the position.

Consult your university's requirements, but a typical annual financial report is part of the chapter's permanent record and should include:

- **Original balance**
- **Income with source and date**
- **Expenditures detailing vendor (recipient) , purpose, and date**
- **Final balance**

Committees

It may be useful to establish committees to assist with the operation of the Club and enable members to become more engaged and have leadership opportunities. The President may appoint chairs to groups that may become standing committees, such as web/social media, program planning, publicity, fundraising, alumni relations, business relations, and outreach. Other committees may be formed based on the interest of the current members.

Committees should meet regularly, depending on the status of activities and programs underway. The meetings should be short and focused out of respect for members' time. All committee activities and expenses are subject to approval by the Executive Committee. The responsibilities of the committee chairs include:

- **Assigning committee members tasks and monitor progress**
- **Establishing a schedule for committee meetings**
- **Preparing agendas for committee meetings**
- **Engaging members and soliciting input**
- **Providing a concise update at member meetings**
- **Keeping the Executive Committee well informed of activities and progress.**

Depending on your club's size and needs, committees may vary in structure and formality. For smaller clubs, the duties described below may be discussed like a forum before the entire club (in this case, actions of the "committee" are brought up and resolved as parts of the group's agenda) or even determined by a small group of a few members (who volunteered to take on a certain responsibility). The following categories—apart from the

Executive Committee—may serve as sets of responsibilities that may be taken on by committees, delegated to specific club members, or revisited in regular meetings, as necessary.

Executive Committee

Governing

e.g. Managing, Recording, Leading

The Executive Committee, made up of the President, Vice President, Secretary and Treasurer, is responsible for the operation of the NextTech Chapter. Typical responsibilities of each officer are detailed above.

Web/Social Media Committee

Chapter Website Upkeep

e.g. Advertising, Recording, Updating

It is extremely important for the chapter website to remain current. Even if it is not the primary mechanism for communicating with members, the website will be viewed by potential members, potential sponsors, and others involved with NextTech. The following information should be easily accessible: vision and purpose of the club, contact information, officers, schedule of regular meetings and events, how to join or get involved, past events, opportunities for research positions or internships, and links to NextTech. It is also important to include a calendar so upcoming events can be clearly identified and viewers of the website can participate if interested. Clubs are encouraged to employ other forms of communication and social media such as Facebook, Instagram, etc., based on the best way to reach current students.

- **The foremost target audience is for members – current and perspective. The website should not only serve as a source of information, but should be attractive, exciting, and act as an active recruiting tool.**
- **Potential Sponsors will want to know the major activities their funds may support and the member base served.**
- **Speakers and other professional participants in NextTech events will use the site to evaluate the group and determine if they want to accept an invitation to be involved.**
- **Alumni may use the website as a tool to stay informed and connected to the group.**

Program Planning

Event Scheduling and Planning

e.g. Tours, Seminars

The core of a Club is the programming it offers its members. Designated individuals or a program committee can be used to plan and organize the regular and special events of the chapter. The program committee is responsible for developing ideas as well as acting upon those of other members, officers, or committees. Upon approval by the Executive Committee, the program committee (or designated individuals) leads all aspects of event planning and logistics, including finding and securing the proper venue, extending invitations as appropriate, developing a detailed budget to share with Treasurer, purchasing food or other necessary supplies, organizing volunteers to run the event, working with the publicity committee to advertise broadly, assigning tasks for the execution of the event, taking pictures and capturing details for the permanent record, cleaning up after the event, sending thank you notes as appropriate, and providing a summary to the Secretary. Suggestions for planning events such as speaker events and tours are detailed in the Operations section below.

Publicity

Advertising the Club and its Events

e.g. Flyers, Emails, Newsletters

Publicity is a critical function to ensure successful and a broad reach for events. For example, you should try to fill the room for your invited speakers. Publicity includes all aspects of advertising. Many different advertising methods may be used, depending on the audience sought and the culture of the school. Methods for publicizing events may include posting flyers, sending emails, announcing events or activities in appropriate large classes (introductory chemistry, physics and engineering courses), asking key professors and RAs to announce to their students, and chalking announcements on sidewalks. It is important to publicize outcomes and accomplishments in addition to upcoming events. News stories and articles can be shared with the school newspaper, online, in newsletters, and with the broader NextTech Network.

Fundraising

Raising Money

e.g. Sales, University Volunteer Work

Fundraising is a critical component of the club to enable a wide array of events and activities with minimal impact of dues on the members. Fundraising should be done with the approval of the Executive Committee and in accordance to university or school policies. These activities may involve working or cleaning up after university games or major events, selling merchandise, or soliciting sponsorships in collaboration with those addressing business relations.

Business Relations

Networking

e.g. Communication with Local Businesses

Interaction with industry is important to the mission of NextTech. Building good relationships with local businesses will help support several core activities including providing potential speakers, sites for internships, facility tours, and potential employment for members. Businesses may also support the club financially through gifts and sponsorships. Due to the importance of these relationships, which go beyond one year or set of officers, great care should be taken in communicating with business points of contact. Templates should be developed to ensure a proper and consistent message emanates from the club. All correspondence should be reviewed and edited by at least two people, preferably a member of the Executive Committee and the faculty advisor. This may seem unnecessary- but remember you are not only representing your current club, but also reputation of the legacy of the club and the broader organization of NextTech. Furthermore, this is common practice in executive correspondence at the highest levels. With the templates well established and connections underway, there may be some relaxation of this requirement, but take care not to fall into informalities with key points of contact as you become comfortable with your acquaintances.

Outreach

Outreach to Peers and Youth

e.g. Presentations, Contests

Outreach is very important to the core mission of NextTech, reaching out to promote awareness of emerging technologies and inspiring younger students to engage in science, technology,

engineering, and mathematics (STEM). The club should look for opportunities to engage local schools and conduct outreach to students, teachers, and the general public. Activities may include tours of university facilities, demonstrations in area classrooms, participation in local or national engineering or science festivals, contests, weekly article review, or other activities that promote science and engineering. Please note: the university and/or high school teacher/advisor/counselor should be copied on any communication between chapter members and local school students, especially when dealing with minors.

Alumni Relations

Former members are a valuable pool of potential speakers, employers, internship advisors for current members, and sponsors. It is important to reach out to keep alumni informed and engaged. Methods of doing so include newsletters with Club highlights and accomplishments, email updates, and use of social media. Consider planning special events, panels, dinners, etc. focused on alumni that are coordinated with Homecoming or other university events aimed at alumni.

Operations of the Club

The activities and events should be guided by the vision of the club. Considerable effort should be placed on recruiting new members and keeping current members excited and engaged. This can be accomplished by designing events that appeal to the students, promoting career development opportunities such as internships and research experience, and facilitating access to examples of emerging technologies.

Getting Started Each Year

After elections in the spring, the incoming and outgoing officers should meet to transfer responsibilities and share detailed information about the club. It is critical that any financial accounts are updated with the new treasurer's information and the financial details are explained and documented well. Be sure to update the point of contact for the club everywhere it is listed with the university, the school, student council, etc as well as the NextTech students.

Over the summer, the executive committee should meet (via web or phone if necessary) to make basic plans for the upcoming year and to develop a tentative calendar. The academic calendar should be used to constrain the events to be planned with exams, reading days, vacations, and finals clearly identified. An outline of the core activities should be mapped to the calendar including a monthly seminar, tours, outreach events, etc. A sample calendar is provided in Appendix E. The program committee should be engaged to make suggestions, provide input, and develop a working relationship. Plans should be made to secure the first month's speaker for the seminar series and for involvement in any back-to-school events to be sure the club starts the fall semester strong.

When the fall semester begins, activities and events should be held to engage returning members and to recruit new students. For example, many schools have an annual 'Activities Fair' where clubs can reserve a table to showcase their group. It is critical to have many members available to participate in these types of events to be available to greet students, share information about the group, and answer questions. Collect names and contact information from interested students. It is a great benefit to have concrete plans to share with visitors to the booth which is why it is so important to develop plans during the summer. At the very least, the first speaker for the seminar series should be identified and the details for the interest meeting should be available to share with potential members.

Activities Fair

A great way to recruit members is to have a booth at your school's activities fair at the start of the Fall semester. Share the purpose of the club and upcoming events. Collect contact information and follow up with students that visit the booth.

Flyers

Interest Meeting

Hold an interest meeting as soon as possible in the fall semester and advertise broadly using:

- **The list of people that attended the activities fair**
- **The members list from the previous year**
- **Academic department distribution lists**
- **Announcements posted in the dorms**
- **Announcements written on boards or announced in large classrooms of Chemistry, Physics, Materials Science, and other related majors**
- **Chalking, library notices**
- **Any other means to reach potential members!**

The interest meeting should share highlights of the group with a presentation that includes the basic facts about the club, typical meeting times, planned activities, committees, contact information, and the NextTech mission. The chapter should have a template presentation that can be used and updated each year. Exciting examples of emerging technologies should be included throughout (one of the key items to update each year). Potential sources for stories include the front page of Nano.gov, Nanowerk, and Technology Review at MIT. Solicit feedback from attendees regarding topics of interest, places to visit, etc. The calendar with as much detail as possible should be shared to allow members to block dates for your events.

Suggestions for effective meetings

Meetings should be fun and productive. You may want to build in time for brainstorming, networking, or just friendly socializing, but get through your agenda first and be respectful of members' time and other commitments.

- **Provide an agenda prior to the meeting so members know what to expect. See sample agenda in Appendix D**
  - **Send a video or article to members for background knowledge of the topic being covered in the upcoming meeting**
- **Start the meeting promptly.**
- **Begin with introductions and welcome new members.**
- **Circulate an attendance sheet.**
- **Follow agenda and keep updates from committee chairs and others focused and succinct. If tangents arise, the president should suggest the conversation be taken up offline to keep to schedule.**
- **Track action items, assign responsible member and deadline for each.**
- **Leave time for members to ask questions, make announcements, etc.**
- **At close of the meeting, recap all action items, announce next event/meeting and adjourn.**

Monthly Seminar Series

NExT Club at the University of Virginia hosts experts to present their work or research. Speakers include faculty members and industry representatives based on the interest of NExT members. The photos depict two different seminars, a speaker from SpaceX and a philosopher on artificial intelligence while featuring a screening of the movie, *Ex Machina.*

Speaker Events

The monthly seminar series is one of the core activities of NextTech chapters. Bringing in experts to discuss exciting cutting edge research and commercial applications is one of the primary ways to expose members to emerging technologies. Invite faculty or industry representatives to share their experience with the students in a forum that allows for a nice presentation and an opportunity for networking. It is important to interact professionally and plan carefully to ensure the event is positive and there is a good audience for the invited guest. *Industry speakers are typically a great draw for students, they can give practical examples and may also provide opportunities for internships or future employment.* Try to schedule far in advance to allow for all the planning that must occur to execute a successful event. Steps include:

- **Finding a speaker: select a speaker based on members' interests using the networks of all connected to the club- reach out to faculty, nearby labs/businesses, officials' contacts, members' parents, etc.,**
- **Extending an invitation explaining the mission of the club- see sample email is in Appendix F and secure a commitment, request title, abstract, and brief biographical sketch to include in advertising and the**
- **introduction,**
- **Reserving a venue,**
- **Advertise broadly using email, flyers, announcements in classrooms, chalking, etc., and**
- **Planning for and getting refreshments and a thank you gift for the speaker.**
    - **Consider a token gift customized to your club with a logo (of your club or university). Examples include: mug/cups, hats, gift basket.**

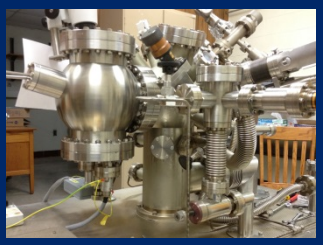
Hosting a Speaker

The actual speaking event may be run by the president, vice president, or program committee chair, but should follow these steps.

- **Arrive at the venue early to help set up the audio visual equipment as necessary.**
- **Set up refreshments**
- **Greet the speaker**
- **Call the meeting to order on time and pass around an attendance sheet.**
- **Introduce the speaker and share their background from the biographical sketch provided by the speaker**
- **At the close of the presentation, thank the speaker with applause and moderate questions.**
- **Finally, thank speaker and present a token thank you gift**
- **Note: be respectful of time- of the speaker and the audience and close meeting after allotted time. Extended questions can be tabled for after the session.**
  follow up the event with a thank you email.

Planning Trips

Plan tours of industry facilities, national laboratories, academic labs, and other locations of interest to members. Look for points of contact at the desired facility through member and faculty connections. Does a member have a parent that works for a facility that would be interesting to tour? If no connection is found, don't hesitate to reach out or 'cold call' as most facilities welcome visitors, especially of motivated technical students that may be future employees. Some universities may have a vehicles pool, review university resources to sign out or rent vehicles. As it is with speakers, it is important to treat guides like honored guests by being respectful visitors while attending, greeting, and thanking the person giving the tour.



Laboratory Tours

Collegiate Nanotechnology Society (CNS) at Virginia Tech

To connect students with professors and current research in the field of nanotechnology, the CNS frequently seeks opportunities for laboratory tours on campus. The image depicts a Scanning Tunneling Microscope—seen by the chapter during a tour of Dr. Chenggang Tao's lab at Virginia Tech.

Facility Tours

The Nano and Emerging Technologies Club (NExT) at University of Virginia

NExT organizes tours of industry facilities and federal laboratories to expose members to current practices and future opportunities. The image depicts a few NExT students prior to a tour of Micron Technology, a global leader focused on advanced memory and semiconductor technologies.

Conducting Outreach

Clubs are encouraged to actively look for opportunities to conduct science outreach and mentor younger students. Examples include demonstrations, laboratory tours, engineering and science fairs, open houses, and classroom visits. For example, NanoDays organized by the Nanoscale Informal Science Education Network (NISENet) funded for ten years by the National Science Foundation, developed demonstration kits which were used across the county at museums, science festivals, and in classrooms. There are also opportunities to volunteer at a booth, such as the one hosted by the National

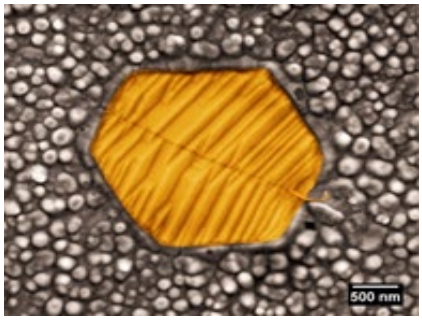
Nanotechnology Initiative at National Science and Engineering Festival in Washington, DC. Look for volunteer opportunities that make sense for your members.

One of the goals of a NextTech chapter is to spread awareness of nano and emerging technologies to students of all ages. Activities may vary but may include hosting students on lab tours, mentoring science fair projects, technical article review discussions, hosting competitions, delivering presentations, or other activities to promote science, technology, and innovation.

NanoDays
The Biggest Event for the Smallest Science!

NanoDays is a nationwide festival of educational programs about nanoscale science and engineering. The events are organized by participants in the Nanoscale Informal Science Education Network and take place at over 250 science museums, research centers, and universities across the US. The events engage people of all ages in learning about the emerging field of science.

EnvisioNano



Among the outreach activities possible for NextTech chapters is EnvisioNano, a microscopy image contest held on Nano.gov. Participation in regional events to display group activities makes for great outreach that builds a group's reputation and support.

The winner of the national contest in June 2016, from the University of Missouri, is pictured to the right and is called "Graphene Shows Its Stripes."

Projects and Research

Working on projects or research as a club may increase involvement and interest from members of the club, while improving the club's reputation at the school and beyond. Although this is not a necessary club operation, it may improve interest in addition to furthering the stated vision of the NextTech network. Activities can vary in formality and purpose. Some students may be focused on research over several years, while others may focus on an individual contest or a project to build something, like a vortex cannon or a model buckey ball six feet in diameter. For example, in 2016, the SUNY Poly UAV group made drones that were launched into space, while several students from the Society for Emerging and NanoTechnologies (SENT) at the University of Central Florida conducted research in university laboratories. If access to laboratory space is particularly difficult at your institution, online research and presentations to members or as outreach to area schools might be of interest to your club.

Promoting research opportunities for undergraduate students is part of the core mission of NextTech. The opportunities for research will vary greatly from school to school, but here are some suggestions to explore.

One approach to promoting research opportunities at your institution is to hold a 'Faculty-Student Research Mixer' where students who have done research present posters and faculty with openings in their laboratories give a quick pitch describing the available opportunity. Be sure to schedule lots of time for networking!

Individual Research

Many faculty members welcome undergraduate students into their laboratories to participate in their research programs. It is important to discuss expectations with respect to the time commitment and level of responsibility. In some cases, undergraduates may play a key role in the research and may have the chance to present their contributions with a poster or be an author on research papers. In other cases, undergraduates may play a supporting role to the more senior members of the research staff, such as graduate students or post-doctoral researchers. Any laboratory experience can be helpful, but it is good to communicate well to make sure expectations of both the student and the faculty member are managed. Often, a student may start in a supporting role and with experience, grow into a more significant role with more responsibility. A few words of caution: be careful not to overcommit; balance your class load and other commitments with the opportunity in the laboratory; and remember the research may be a significant aspect of the faculty members' career advancement, so be aware the work you do may have an impact beyond improving your resume.

Depending on the culture and resources at your institution, there may be a central office that coordinates undergraduate research opportunities (look, for example, in offices of the Vice President for Research, Deans, Career Services, or Student Affairs), or it may be a bit more ad hoc. Either way, NextTech chapters should consider organizing a Faculty-Student Research Mixer to help match students with research openings. Students should be encouraged to reach out to individual faculty members and seek opportunities even if there is not an opening posted.

There are several national programs that focus on research opportunities for undergraduate students, especially in the summer, more information can be found on the education pages of Nano.gov. For example:

- **Research Experience for Undergraduates (REU)** (**www.nsf.gov/crssprgm/reu**) — NSF funds a large number of research opportunities for undergraduate students through its REU Sites program. Each student is associated with a specific research project, where he/she works closely with the faculty and other researchers. Undergraduate students supported with NSF funds must be citizens or permanent residents of the United States or its possessions.
- **NIST Summer Undergraduate Research Fellowship (SURF) program** (**www.nist.gov/surf/surf-gaithersburg/overview**) — All six of the NIST laboratories in Gaithersburg, MD, participate in

SURF programs. NIST also offers SURF research opportunities in Boulder, CO. (**www.nist.gov/surfboulder/research.cfm**)

- **Science, Mathematics, & Research for Transformation (SMART) Scholarship for Service Program** (**www.smartscholarship.org/smart**)— The SMART Scholarship for Service Program has been established by the DOD to support undergraduate and graduate students pursuing degrees in science, technology, engineering, and mathematics (STEM) disciplines. The program is an opportunity for students to receive a full scholarship and be gainfully employed upon degree completion. The program aims to increase the number of civilian scientists and engineers working at DOD laboratories.

Tips for approaching faculty

Don't hesitate to reach out to a professor to ask about potential opportunities to do research, but be prepared.

- **Update your resume and have someone proofread it.**
- **Do your homework. Look into the type of research being done at your school and read articles in the areas that interest you.**
- **Consider experience you have that may be useful in a lab, especially if this is your first job. Do you like to work on cars? Have you done work around the house or helped a parent or friend with a project where you learned to use tools? Be prepared to talk about strengths that may not appear on your resume.**
- **Unless you know exactly what research you want to do, keep an open mind but think about your boundaries. How much time can you commit? Are you looking for a couple hours a week or a more significant commitment?**
- **Identify a professor to approach, could be based on their research area or someone you have had a class with and you have gotten to know.**
- **Schedule a meeting, by email, phone, before/after class or drop in to their office. If you don't hear back, try again. Sometimes you need to be persistent, but try not to be annoying and also consider future interactions- will this person be accessible as a potential mentor?**
- **Be on time to the meeting and be respectful of time. Ideally you will have a conversation to explore your strengths and interests as well as the potential opportunities in their lab as well as their colleagues. You may be pointed to another faculty member based on the conversation, which is also a good outcome that you should pursue.**
- **Explore opportunities to shadow graduate students, work for an hourly wage, volunteer, or get class credit for an independent study, based on your interests and institution policies.**

Group Research

It may not be possible at all schools, but some of the NextTech clubs have developed and executed concepts for group research. Students can develop ideas for group projects or research based on reading technical papers and write up a short proposal describing what they hope to accomplish and identifying what in particular they need to address the project. Identify faculty members that have related research programs and schedule time to discuss the concept with them. Be sure to go into the meeting as prepared as possible and be clear about what you need- are you looking for a lab bench to do the work or will you need access to special equipment or microscopes for characterization? Review safety considerations- do you need access to a hood? Will you need personal protection equipment such as lab coat, gloves, and googles? You should also have a sense of what you hope to achieve and a list of required supplies with an approximate budget. Consider sharing the idea (proposal) with the director of a research center at your school or with other faculty members who have related research programs. You should look for existing funding opportunities offered through your school, government programs, or foundations, etc., but don't be afraid to develop a good case and pitch to administrators at your school.

Community Service

It is important to look for opportunities to give back to the community. Chapters should aim to conduct at least one service project every year, such as a food drive that benefits the local community. Participation in school wide community service events, such as creating a team for "The Big Event" (a one-day community service event hosted by many universities), also helps raise awareness of the club. Look for opportunities where you can have a significant impact and where there is natural synergy with the interests of your members.

Every school has opportunities for community service—and they are rarely hard to find. The Big Event is a local, community outreach event hosted annually by many universities. This is particularly suitable as a club function because volunteers may sign up in groups. Participation also serves to raise awareness of your club awareness.

Registering and Renewing

An important responsibility of the club at the end of each school year, or semester (as required by your university), is to renew or re-register your club for the following semester. Most schools have a formal process (usually online) for registering and renewing registration which included updating officers and their contact information. This is an important task to remember and should be included in the executive committee calendar and planning documents so the group doesn't miss notices of important deadlines or events, such as the back to school activities fair.

Starting a New Chapter

The policies and procedures for starting a new club vary greatly from school to school, but this section provides some suggestions that may be helpful to you. This handbook outlines suggestions for structure and operation of a club. NextTech brings these clubs together in a network to learn from each other and share best practices. Each chapter may retain its individuality in name and purpose (i.e if your club specializes in specific types of emerging technology or serves as more of a social network/study group) and still benefit from communication and interactions with the other groups.

Most schools require information about the purpose of the club, vision, expected membership, governing documents such as a constitution, and officers. A sample constitution is included in Appendix A and page one of this handbook provides a concise overview of what a NextTech Chapter is all about, feel free to use this as you begin to build interest in your club.

Many of the tips above for getting started every year are also relevant to starting a new club. After you have identified a handful of friends or classmates that might be interested, consider holding an interest meeting and getting ideas from other students. Pitch the idea before or after large introductory classes and ask professors to help you spread the word and use email list serves or social media as appropriate at your institution.

It may be helpful to emphasize the connections and opportunities that are made available to members at your individual institution and more broadly through the network. Make it clear that members really drive the activities and that speakers, tours, and other events can be focused on their particular areas of interest, especially if they get involved.

How to pitch the club?

When pitching to a room of students introduce yourself (name, few credentials, year, position in club), present an overview of the club's activities, and then focus on two or three accomplishments from the previous year/semester (tours, events, projects, etc.). Close with a statement describing the benefits of membership, encourage students on the fence to show up to at least one meeting, and collect emails of interested students.

Contact Email

For more information on the student network

nanoed@nnco.nano.gov

Connect

Below are the links to join and learn more about the network:

nexttechnetwork.org

Nano.gov: US Nano & Emerging Technologies Student Network:

www.nano.gov/studentnetwork

Linkedin

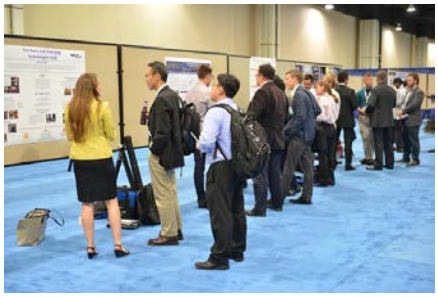
www.linkedin.com/groups/8362753/

TechConnect site for Student Leaders Conference

www.techconnectworld.com/World2019/SGLC/StudentGroupLeadership.html

Annual Meeting of all NextTech Chapters

In addition to video calls and interactions through social media, representatives from all the NextTech Chapters come together for an annual meeting. The meeting is held as an event in the annual TechConnect World Innovation Conference and Expo, co-located with the National Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Conference, and the National Innovation Summit and Showcase.



This event brings together small and large companies, academics, government representatives, and investors for a very diverse and unique conference. The student programing is heavily influenced by the students in the network. The Student Leaders Conference in 2016 consisted of a poster session for all the schools to present their clubs and/or research and network with each other, a session consisting of a panel of experts that shared their perspectives on careers and answered questions from the students. The panel included

- Brent Segal, Director of Advanced Research Programs at Lockheed Martin (also entrepreneur- founder of Nantero),

• Lori Henderson, Program Director for Clinical Trials Branch/Cancer Imaging Program at the National Institutes of Health,

• Victoria Scarborough, Program Director for the Global External Innovation Team at Sherwin-Williams,

• Wendel Wohlleben, Senior Scientist, Characterization of Nanomaterials, BASF, and

• Gene Lucadamo, Liaison to Industry and Government, Lehigh University (and a practicing engineer at Air Products for more than 30 years).

The panel created a forum for a fantastic discussion and several students followed up with individual panelists after the panel and even after the conference. The panel aspect will likely be a part of future NextTech Annual meetings.

Suggestions for future activities at this annual event include professional development sessions, entrepreneurship and/or research poster contests, mock pitches, and student-to-student practice research presentations. Of course, the students also benefit greatly from attending other sessions and events that are part of the broader conference programing.

www.techconnectworld.com/World2019/SGLC/StudentGroupLeadership.html

Appendices

Appendix A Sample Constitution

Chapter Constitution and Bylaws for the Nanotechnology Club
University of Pittsburgh Chapter

Revised August 5, 2016

Article I: Limits of Registration
The Nanotechnology Club and its membership accept and will fully comply with the requirements and limitations of registration.

Article II: Annual Re--Registration
The Nanotechnology Club will submit its annual re--registration application during the re--registration period following the election of new officers.

Article III: Statement of Purpose

Section 1: Purpose
The Nanotechnology Club supports the development of nano and emerging technologies by: raising awareness of research; educating students about important nanotechnology related topics such as safety and lab equipment; connecting an interdisciplinary community of students; facilitating interactions with faculty and industry; and promoting innovation.

Section 2: Activities
The Nanotechnology Club participates in the following:

- Bi--weekly Officer Meetings
- Monthly General Body Meetings
- Collaborative efforts with other student organizations
- Social activities to promote relations among the general body
- Community outreach
- Professional events such as industry visits and laboratory tours
- Scholastic activities such as tutoring and student panels
- Fundraising events to benefit the club and charitable organizations
- Relevant national and regional conferences, e.g., TechConnect and NeXTech
- Short courses on a specific topic: AFM, STM, other instruments in NFCF
- How--To seminars where older students to teach younger students important college and study skills
- Student--industry matchmaking.

Article IV: Membership

1. Membership is open to currently enrolled Pitt students as defined herein.

2. All members must accept and comply with all of the requirements and limitations of registration as a condition of membership.

3. Membership in the Nanotechnology Club is voluntary and all risk of personal injury, property damage or other losses that occur incidental to membership or participation in activities are assumed solely by the student organization and/or individual member(s) or non--member participant(s). Accordingly, the University of Pittsburgh, its officers and agents shall not be responsible nor liable for any claims or causes of action for damage or loss of property or personal injury of any kind or nature which may arise out of or are incidental to the conduct of any organization's activities or that of any individual's participation in any group--related activity. it is further understood and agreed that it is the responsibility of the officers of the organization to assure that all of the organization's members and non--member participants in all activities sponsored by the Nanotechnology Club are fully informed and advised of this ASSUMPTION OF RISK, and in the event any individual member or participant should express or indicate non--acceptance, the organization's officers shall forbid participation and/or membership of such individual. In regard to the organization member or non--member participant Assumption of Risk, the Nanotechnology Club acknowledges that the University recommends that the organization members and non--member participants make every effort to arrange for the acquisition of liability insurance sufficient to protect all participants against those risks being assumed. For sport--related organizations, the University recommends that each individual have insurance sufficient to allow for any risks by participation, accident or by deficiencies in physical health.

4. No hazing or illegal discriminatory criteria for membership, including those listed in the University of Pittsburgh's non--discrimination policy, will be used as a condition for membership in the organization.

   Section 1: Statement of Nondiscrimination
   The University of Pittsburgh student chapter of the Nanotechnology Club does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, medical condition, ancestry, marital status, citizenship, or sexual orientation.

5. To be eligible for membership in the Nanotechnology Club at the University of Pittsburgh, a person must be a currently registered undergraduate student of the University of Pittsburgh (main campus). All eligible members are also eligible to vote.

6. The Nanotechnology Club does not require any financial obligations for membership.

Article V: Officers

The Nanotechnology Club shall have the following officers whose duties are outlined below:

- President
- Vice President
- CFO (Business Manager)

Section 1: Executive Board
The Executive Board of the Nanotechnology Club shall be comprised of both elected and appointed positions. Elected positions shall be chosen by a majority (>50%) vote of voting members, while appointed positions shall be chosen by majority (>50%) vote of the current executive board. Election results shall only be validated through a fifty percent (50%) quorum of the general body members and one hundred percent (100%) quorum of current officials. Appointed positions will be created as necessary by the approval of the executive board.

Complaints and disputes about executive board members or appointed position members shall be dealt with first within the executive board. If a resolution can not be reached, the executive board shall take the issue to the general members of the club for dispute resolution. Impeachment of executive board members shall be taken only under extreme situations where wrongdoing has taken place and vote of both executive board and

general members is required. A fifty percent (50%) quorum of general members and 100% quorum of the executive board is necessary for impeachment voting. An 80% vote is required for impeachment to be successful. This same process shall take place for both elected and appointed members.

The Executive Board shall oversee chapter operation and work with the Petersen Institute for NanoScience and Engineering (PINSE), industry contacts, the community, and other students to promote and enhance the Nanotechnology Club student chapter. The Executive Board positions and their duties are outlined in Article V: Duties of Officers. The procedure for choosing the Executive Board is outlined in Article VII: Chapter Operation.

Section 2: President
The President of Nanotechnology Club must have at least one semester of Nanotechnology Club board experience and is responsible for:

1. Presiding over meetings.

2. Setting and evaluating chapter goals at the beginning and end of every semester.

3. Ensuring that officer transitioning goes smoothly every semester.

4. Acting as the initial point of contact between Nanotechnology Club and all other organizations (other student chapters, national NextTech, PINSE faculty and staff, industry representatives, etc.).

5. Organizing an agenda for both officer and general body meetings and emailing out agenda before every executive board meeting.

6. Ensuring that all officers are performing their duties.

7. Ensuring that Nanotechnology Club is still recognized as an official organization by the University of Pittsburgh.

8. Maintaining the Nanotechnology club Bylaws.

9. Completing the yearly summary.

10. Maintaining or delegating the task to maintain the SORC website for the student chapter.

11. Acting as primary contact and coordinator for NextTech conferences:
    - Planning and organizing the student chapter's participation in both Regional and National Student NextTech Conferences.
    - Organizing and writing debrief reports for every conference.
    - Planning how to fund our chapter's participation in each conference.
    - Encouraging student participation in every conference (e.g.: participation in poster sessions).
    - Maintaining a safe and professional environment at all conferences to promote the University of Pittsburgh.

Section 3: Vice--President
The Vice--President of Nanotechnology Club is responsible for:

1. Social activities.

2. Record attendance and status of each member.
3. In charge of maintaining the Nanotechnology Club email list.
4. Responsible for recording minutes for every meeting.
5. Advising the President.
6. Presiding over the chapter's meetings in the absence of the President.
7. Assuming all duties of the President if the office of the President becomes vacant.

Section 4: CFO (Business Manager)
The CFO of Nanotechnology Club is responsible for:

1. Maintaining the chapter's bank account and going to the bank to transfer the account to the new treasurer at the end of the school year.
2. Authorizing all financial transactions within the chapter.
3. Distributing funds when needed.
4. Providing reimbursement forms and distributing reimbursements.
5. Putting together budgets to give to SGA.
6. Depositing all raised funds into the bank account.
7. Ensuring all transactions are completed in a timely fashion.
8. Purchasing or ordering food for all general body meetings.

Article VI: Duties of Committees
The chair of each committee is held by the officer holding the position most relevant to each committee. An addition or termination of a committee can be petitioned to the executive board at any time.

Article VII: Chapter Operation

Section 1: Chapter Meeting Order
All Executive Board meetings will be run by the following rules and procedure:

1. The meeting will be called to order and presided over by the President. The President shall ensure that the officer meetings are kept on topic.
2. Each officer will have a chance to share information relevant to their position (i.e. event planning, proposals, reviews of past events, and other important information) through chair reports. Chair reports shall proceed in the following order:
    a. President
    b. Vice President
    c. CFO (Business Manager)

3. Each officer will share relevant updates in an open discussion format with constructive comments and brainstorming from the rest of the board.

4. Each meeting shall close with announcements about upcoming events, opportunities, etc.

5. If an officer is absent from an Executive Board meeting, then another officer may share relevant information on their behalf.

6. If the Vice President is absent from an Executive Board meeting, then another officer shall take meeting minutes and post them on Google Docs.

7. Professors, chapter advisors, and general body members can attend Executive Board meetings, though they may not participate in voting.

Section 2: Voting and Officer Elections
Voting privileges are limited to currently enrolled Pitt student members in good standing with the organization.

- Members may nominate themselves for a position by submitting a professional photo of themselves and no more than 300 characters on why they deserve to run for this position.

- Individuals running for office must be members of the Nanotechnology Club.

- Votes will be taken through a Google survey that will determine the winners, the sitting president will send an email announcing new positions for the following year to both the new officers and members.

- Majority of votes cast determine the winner.

- An officer may not hold more than one position.

- Absentee or proxy ballots may not be cast.

- Contests of election are determined by the standing executive board and advisor.

- Officers may vote, and in the event of a tie, the president and advisor determine a method to break said tie.

Section 3: Terms of Office
Officer elections will be held yearly at the end of the spring semester, unless otherwise needed. Appointed members can be added as needed at any time by a vote of the executive board.

Due to this being the initial year of the Nanotechnology Club, officer elections will be held during the second general body meeting during the fall semester 2016.

Section 4: Removal of Officers

- All officers must attend 75% of executive board meetings

- Officers who do not meet this requirement will be suspended from running for office in the following semester

- If an officer misses 2 meetings in a row, they will receive a punitive warning and must submit a formal excuse in the form of a large pizza to the executive board
- If an officer is going to be absent from any meeting, they must send an email to at least one person on the executive board before the meeting to let them know.
- All officers must attend at least one social event, fundraiser event, and one service event.
- If an officer has not performed their duties as stated in Article VI, they will be initially warned by any other executive board member at an executive board meeting
- If there is no improvement, they will be nominated to be removed from office.

Article VIII: Finances
Budget will be kept by the CFO and overseen by the president. Funds may be spent in any means necessary approved by the president and reimbursements may be provided to any executive board member who has spent their own money to finance an event or meeting. The Nanotechnology Club shall fully comply with the University fundraising policies and procedures for registered student organizations. The organization will not maintain an outside bank account.

Article X: Publications Code
In compliance with the publications code for student organizations, all publications of the organization will comply with current copyright laws, be distributed according to policies and procedures, refrain from expressions that are considered obscene or libelous according to current statute, advocate or insight the material interference or physical disruption of the educational process of the peace, order the decorum of the campus, or that advocate or incite imminent, lawless action or the violent overflow of the government and identify the organization as publisher and specify that the group is a registered organization at the University of Pittsburgh.

Article XI: Advisor
The advisor for the Nanotechnology Club must be affiliated with the external sponsor (see Article XII). The advisor will be selected or removed as needed through recommendation of the external sponsor. The advisor will assist in club relations and general organization when necessary. The advisor may occasionally meet with the club executive board for an update and may attend any club meetings or events.

Article XII: External Sponsor
The Peterson Institute of NanoScience and Engineering (PINSE) will serve as external sponsor for the Nanotechnology Club. Both PINSE and the Nanotechnology Club will adhere to University guidelines for administration of the student organization.

Article XIII: Amendments
Amendments to this constitution may be petitioned at any time by the executive board or advisor. The person who suggests the amendment must submit in writing to the president and advisor their amendment and reasons for said amendment. A majority vote by the board must be obtained to make any amendments. All constitutional additions, revisions and deletions must be reported to the SORC.

Appendix B Annual Report Template

Summary- (~page) Provide overview of chapter activities and plans. Include brief discussion of what went well and areas to improve in coming years.

1. **Leadership-**
   1.1 Officer details: position, name, major, year, email address.
   1.2 List of active committees, chairs, description of role or responsibilities, etc**.**

2. **Membership**- Provide details including: number of members, major, year, gender, other relevant statistics.
   (use table here- provide template? This may be important for future proposals)

3. **Events and Programs**
   3.1 Monthly Seminar Series
      1.1 Date, title, speaker, location
      2.1 Description, attendance details
   3.2 Facility Tours
      3.1 Date, Location
      4.1 Description
   3.3 Undergraduate Research Student/Faculty Mixer
      5.1 Date, Location
      6.1 Description
   3.4 Graduate Student Dinner

4. **Outreach Activities**
   Date, Affiliation (i.e. NanoDays, Destination Imagination), Location
   Description

5. **Community Service Activities**
   Date, Description

6. **Fundraising and Financing**
   Basic accounting information. Source of funds, expenditures, etc.
   Categories? Need help here.
   Income:
      Fundraising (hat sales $x)
      Corporate contribution (BAE)
      NanoSTAR Contributions
      Expenditures:
      Refreshments for events
      Travel expenses for trips
      Speaker gifts
      Publishing
      Goods to sell (hats?)

7. Other things necessary?

Appendix C Sample Agenda

Club Logo Meeting Name (Executive committee/general member) Date

Meeting Agenda

I. Call to Order and Attendance

II. Review of (date of previous meeting) meeting summary and status of action items

III. Update on next seminar
   a. a. Room reserved
   b. Talk title, bio, photo for advertising
   c. Advertising
      i. Design of flyers
      ii. Other advertising plans and assignments

IV. Project updates
   a. Project status
   b. Any project needs

V. Committee updates and reports

VI. NextTech update

VII. Announcements
   a. Volunteer opportunities
   b. Upcoming events

VIII. Open discussion/new business

IX. Identification of action items/ responsible party/ due date

X. Adjourn

Appendix D Sample Calendar

2012-2013 Calendar

Nano and Emerging Technologies Club ***https://sites.google.com/a/virginia.edu/next/home***
NextTech- University of Virginia Chapter

Vision:

NExT is devoted to raising awareness of current research and potential applications of nano and emerging technologies, building an interdisciplinary community of students interested in technologies of the future, facilitating interaction with faculty and industry, and promoting science and engineering innovation.

August	Activities Fair (recruitment) Planning Meeting- Executive Committee Meeting
September	Fall Reception-Welcome back/new member info session (social) NExT Seminar Business Meeting – Executive Committee and Working Groups- weekly
October	NExT Seminar Business Meeting – Executive Committee and Working Groups- weekly
November	NExT Seminar Innovation Competition announcement? Facility tour? Food Drive (public service) Business Meeting – Executive Committee and Working Groups- weekly
December	NExT Seminar Business Meeting – Executive Committee and Working Groups- weekly
January	Spring Reception (social) Business Meeting – Executive Committee and Working Groups- weekly
February	NExT Seminar Business Meeting – Executive Committee and Working Groups- weekly Engineering Family Day Washington, DC (Outreach)
March	NExT Seminar Student/ Faculty Research Mixer with NanoSTAR NanoDays (Outreach) Competition? Business Meeting – Executive Committee and Working Groups- weekly
April	NExT Seminar Statewide Student Poster Session Science and Engineering Festival Washington, DC (Outreach) Business Meeting – Executive Committee and Working Groups- weekly Member Dinner and Elections
May	Planning Meeting/ Reporting- Old/New Executive Committee Meeting

Appendix E Sample Invitation Email

Framework for invitation email

Subject: Invitation to present to NextTech, University, Month year

Dr. Smith,

The NextTech chapter at State University respectfully invites you to present during our fall seminar series. Are you available to give a presentation about your work in (specific topic area or about specific company) the first week of September 2016? (or the specific date of your event, if it is fixed.)

NextTech is an undergraduate student-run club devoted to raising awareness of nano and emerging technologies. (or use your vision statement) The audience for the seminar series is typically undergraduates studying engineering, sciences, and business. Graduate students, post docs, and faculty may also attend, but the majority of the audience will be undergraduates. Our members are particularly interested in xxxx.

We very much hope you are able to provide a seminar during our fall program. To ensure time to properly prepare for the event, please let us know by responding to name (email) by (date). If you are unable to participate, we welcome suggestions for an alternate (at xx company, or within your research group).

Please let me know if you have any questions. I look forward to hearing from you.

Best regards,

Full name

Role in club (Vice President, chair of program committee, etc.)

Contact info (email at least, phone optional)

Tips for an effective invitation

- Make the subject line clear
- Be respectful, avoid casual language
- Put 'the ask' up front, busy people may only read the first few sentences. And explicitly ask a question- people are more compelled to answer a specific question than respond to a statement.
- Will you present? vs We invite you to present.)
- If you have a common connection, you may want to open with "Dr. Joyce Jones suggested I reach out to you…"
- Briefly explain your club and the audience.
- Provide specifics or boundaries (do you have a specific date of an event, or can you be flexible, for example some time during the fall semester?)
- Give a deadline
- Provide contact information
- If you don't hear back, follow up, but avoid being annoying.