ADVERTISEMENT

EMPLOYMENT

Hiring managers share tips for landing your first chemical industry job

Strengthen your 'soft' skills, project positive energy, and more advice to help you get your foot in the door

by Linda Wang

MAY 26, 2019 | APPEARED IN **VOLUME 97, ISSUE 21**

Credit: Will Ludwig/C&EN/Shutterstock

s graduation approaches—whether you're earning a bachelor's, master's, or doctoral degree—you feel the pressures of the past several years start to lift. But as soon as your muscles relax, a new panic sets in: you need to find a job.

If you've decided on a career in industry, you might be wondering what it takes to get your foot in the door. C&EN interviewed hiring managers from a variety of sectors across the chemical industry to find out what they look for in potential hires and what advice they have for industry job seekers.

Here are their top takeaways.

COVER STORY

Hiring managers share tips for landing your first chemical industry job

Waiting (and waiting) for rejection

Recent hires reflect on the industry experience

GO BEYOND YOUR TECHNICAL KNOWLEDGE

Although you might be tempted to focus your résumé on your technical skills, hiring managers say they also want to see that you are well rounded and have a breadth of knowledge.

ADVERTISEMENT

"What's beyond that technical depth? What else have you done?" asks Michael Romanelli, an R&D leader of emerging technologies at DowDuPont Specialty Products Division (DuPont). "You can distinguish yourself in a résumé by showing that you've done a lot of collaborative work and that you've taken some of your work to an application level, which is important for industry."

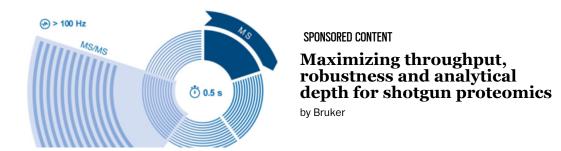
He encourages students to strengthen their so-called soft, or interpersonal, skills in areas such as writing and public speaking. "It's one thing to put a lot of data on a PowerPoint, but when you come into an R&D organization where you have to communicate progress and your very technical data to different levels within the organization, people who come in with strong communications skills are going to be able to set themselves apart."

Related: Why can't the drug industry solve its gender diversity problem?

Romanelli adds that, for him, candidates with a strong knowledge of statistical data analysis will also stand out. "Confidence in our data, especially in what we do in industrial research, is so important as we transition an idea from R&D all the way through to commercialization," he says. Candidates can gain such knowledge through process-improvement courses, like Six Sigma training, or courses in statistical data analysis.

Familiarity with a foreign language or a foreign culture can also be an asset when searching for an industry job, says Christopher Pondy, technical manager of Nissan and commercial vehicles at PPG Industries. "For us, being in the automotive industry, somebody that can speak Japanese, knows the Japanese culture and our customer base, that's a huge advantage above others," he says.

It's also important to learn industry terms, especially those related to problem solving. For example, Pondy says, candidates for certain positions at PPG should understand the principles of lean manufacturing and lean processing and how they work. Or, if they're applying for a job in automotive coatings, they should be familiar with the Toyota production model.



BUILD AND USE YOUR NETWORK

Getting a job in industry may be as much about who you know as it is about what you know, so it's important to develop your networking skills.

Related: Career Ladder: Hannah Follis

Alex Patist, vice president of process development and manufacturing at biomaterials start-up Bolt Threads, says that when he's looking at résumés, he typically scans only the first half of each application. But if someone's résumé comes to him through a referral, he will review the entire résumé and spend more time considering it. "Now I feel responsible for going back to my colleague or the one that referred him or her and say why or why not," he says.

MOST POPULAR IN CAREE

For grad students and postdocs, men health begins with faculty

Francis Collins says it's time to end a male panels. These prominent chemi responded

How to combat impostor syndrome

Hiring managers share tips for landir your first chemical industry job

The struggle to keep women in academia

Some companies hire predominantly through referrals. Rebecca Ruck, executive director of small-molecule process R&D enabling technologies at Merck & Co., says that when she coordinated recruiting for process chemistry from 2014 to 2018, of the roughly 40 people the company hired at one point, only 1 or 2 came through the online application system. "The odds aren't good," she says. "Part of that is because the system is just flooded with applicants for a position."

Merck invests in building relationships with schools from which they recruit. "When we're seeking out candidates, the faculty know the level of talent that we're looking for, and through the relationships, we're able to get honest and transparent feedback on the candidates before we even bring them in for an interview." She says Merck has ambassadors at roughly 40 schools, and those ambassadors help the company identify talent.

Ruck says that if you are at a school without Merck ambassadors, you can connect with Merck employees by attending scientific conferences. "We make sure we're well represented at Gordon Research Conferences, for example, and at ACS meetings," Ruck says, adding that Merck scientists also give talks at universities around the country, and the firm has a growing presence on social media, where it engages with the external community. Students who take the initiative to connect with Merck chemists, either in person or through social media, can benefit from those interactions when it comes time to apply for positions.

When networking, maximize your chances of success by knowing what you want, says Sarah Hymowitz, vice president and principal scientist in protein sciences at Genentech. "Be specific about what details you are seeking to learn about a given role or function, do your research about who the best person might be to contact for additional information, and close the loop in a positive way after each interaction," she says.

Charlotte Allerton, head of medicine design at Pfizer, recommends that students take advantage of the various professional development resources available through organizations like the American Chemical Society. She notes that at ACS national meetings, for example, students looking for industry positions can wear a Catalyzing Career Networking (C2N) ribbon to make industry representatives aware of their intent. Also, the Division of Organic Chemistry's Summer Undergraduate Research Fellowships, which are sponsored by industry, give students an opportunity to visit an industrial campus and present their research.

Another effective way to grow your network and gain insights into industry is to do an internship, co-op, or industrial postdoc, Allerton says. "All those opportunities give a background for students to begin to understand what industry is looking for," she says. "And it doesn't need to be within our company. They could do an internship at a different company, and it's another source of experience."

PREPARE FOR THE INTERVIEW

While networking can help you get your foot in the door, a strong interview can seal the deal. "We look for concise answers that paint a clear picture of the person's accomplishments, the impact of those accomplishments, and how he or she thinks about tackling a challenging project or hypothesis," Hymowitz says. "We also find it compelling when someone is able to articulate what he or she learned from a given experience and how she might approach it differently in the future."

BE PREPARED

Here are some questions hiring managers love.

"What scientific questions excite you?"

Demonstrating an ability to communicate is key. "We are looking for somebody that can cater to their specific audience, be able to have in-depth technical discussions with their peers, but also be able to simplify and hone in on the key message to a nontechnical audience," says Silke Courtenay, R&D manager for ink and dispersion development at HP. "We are also looking for people that are really strong team players. We are a global company, so we interact with other teams in many technology and geographic areas."

Candidates should also demonstrate that they are able to understand customers' needs. "There are certainly opportunities to talk to customers and to understand what some of their current pain points are," Courtenay says. "The chemist can then go back and innovate for new products that solve some of the issues that customers may have."

Ruck says that candidates seeking a position in process R&D at Merck start the daylong interview by giving a seminar. "We want to hear a story. We know that everything doesn't work in science, so we'd rather you not bombard us with substrate tables and instead tell us, What was hard, what were the challenges you faced in the course of your research, and how did you go about solving them? How did you demonstrate creativity and innovation?"

-Sarah Hymowitz, vice president and principal scientist in protein sciences, Genentech

"How do you manage multiple projects and keep multiple things moving?"

-Christopher Pondy, technical manager of Nissan and commercial vehicles, PPG Industries

"What have you learned from failure?"

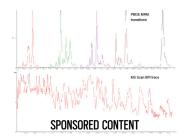
-Charlotte Allerton, head of medicine design, Pfizer

"Give me an example of a problem you couldn't solve, and how did you work through it?"

-Michael Romanelli, R&D leader of emerging technologies, DowDuPont Specialty Products (DuPont) Division

She points out that every interaction during an interview is an opportunity for interviewers to assess the candidate, even during the meals. "As much as it's intended to be laid back and not make you more nervous, it is still part of the interview. Just because it's dinner and the people around the table are closer to being your peers doesn't mean you can let your guard down."

Body language is very important, HP's Courtenay says. "If you see the person being open and interested in the questions that you're asking and being willing to learn, those are all cues that can provide a positive impression on the interviewer," she says.



Ensure the safety and quality of consumer products

by Waters

Bolt's Patist says that when interviewing candidates, he looks for people who have the growth mind-set needed to excel at a start-up company. "How adaptable are they to change in a fast-moving environment that is constantly evolving and constantly innovating?" he asks. "If we hire you for job A, it's very likely you will be doing job B in several months. You have to be flexible and agile."

Patist recommends that job candidates create a document of specific examples they might want to share during the interview. "I've made myself a three-pager that says, 'What are my leadership skills? What

are my strengths (i.e., what gives me energy)? What are my weaknesses (i.e., what drains my energy)? An example of a success. An example of a screwup. I have that all listed, and I update it as I make more screwups or have good examples," he says. "It's really good to have a living document for yourself so when people ask these questions, you have a good example."

Finally, the interview is a two-way conversation, and the candidate should be prepared with questions for the hiring manager. "It's important that a candidate comes to an interview with thoughtful questions that demonstrate a curiosity about our culture and mission, an ability to work well with other people, and most importantly, a passion for science and patients," Hymowitz says.

PROJECT POSITIVE ENERGY

When hiring managers are faced with two equally qualified candidates, many say that one factor can help a candidate seal the deal. "It comes down to energy for me, hands down," says DuPont's Romanelli. He clarifies that by energy, he doesn't mean high energy. "There's a calm energy also. It's about having the right energy and showing and exuding confidence and passion in what you're doing."

PPG's Pondy agrees. "If they come in and don't provide a positive image or energy, it can really kill it. The other thing is arrogance. A lack of humility is really a killer," he says. "Some people are just more reserved and quiet, so it's hard to get a read on them. And then some people are just naturally excited. But typically what I go off of is their knowledge and background of PPG, the questions that they ask, and the feeling of genuineness that you get during the interview."

Related: The struggle to keep women in academia

"It's key that we have people who are passionate about the products they will be developing and the company," HP's Courtenay says. "They should absolutely understand the background of the company. They should have done their research. They should be able to verbalize why they're excited about working at HP."

Patist encourages candidates to make a personal connection with the interviewers. A recent candidate made a particularly strong impression on him during the seminar part of the interview. "She spent 6 months in Italy building and starting up a facility. That's great experience, but she had one slide that talked about the Italian culture and how it's different from American culture. She went to one of the famous restaurants in Milan and showed a picture of the dessert, and she spent maybe 20 seconds explaining the dessert. And you know what? That did it. That was it. She made it personal and made everyone connect." Most importantly, she got the job.

Chemical & Engineering News ISSN 0009-2347 Copyright © 2019 American Chemical Society

YOU MIGHT ALSO LIKE...







How to get a head start on the job market



Interviewing Insights



Managing your lab's data
by Waters

Sign up for C&EN's must-read weekly newsletter

Email Address

Subscribe »

Contact us to opt out anytime

LEAVE A COMMENT

Name

Email*

Comments by first-time contributors will be reviewed prior to appearing on the site. This review is done by humans and not always immediately. You may be laudatory or critical, but please stay on topic and be respectful of the author and your fellow readers. We reserve the right to remove any comments that are profane, obscene, abusive, or otherwise inappropriate. Email addresses are required so that we can verify you are not a robot overlord and in case we need to contact you about your comment privately. They will not appear on the site.

Submit

*Required to comment