

Joyeeta Bhattacharya

Application Scientist at Picarro Inc.



What is your current occupation?

I am an Application Scientist with Picarro Inc., based in Santa Clara, CA. As an Application Scientist, my role is to interact with customers who buy Picarro gas and isotope analyzers for various research and industrial purposes. I work to understand individual customer needs based on their research/work description, followed by supporting the installation of Picarro analyzers in their labs, training them along with other lab members (e.g., graduate students and postdocs) on how to use the instrument and analyze data. I am also available to consult as a post-sales scientific support in Picarro. While in lab, I need to work with various analyzers, for different experiments, calibration, sample analysis and tests, working on data reports, updating datasheets and analyzer manuals etc.

What is your educational background?

I did my BS and MS in Geology in India and moved to the US for my PhD. I completed my PhD in Paleoclimatology and Geochemistry from Rice University, Houston TX, in May 2021. I was working as a Postdoctoral Researcher at OU, Norman before finally transitioning to Picarro in December 2021.

A key message for students is that the geoscience workforce is dynamic, and boundaries between sectors and occupations are fluid. How has this been true in your career?

Many earth science graduate programs train PhD students in a way that they seem to realize, research is the only way after a PhD. As an international graduate student, I struggled to find

career pathways other than academic research. Four years into my PhD, I was enjoying research quite a lot, and wanted to keep both academic and industry career options open. Every time there was a job posting that drew my attention, I just applied. It was the same with Picarro, and here I am! My suggestion would be to cast a wider net, if you are not too sure of exactly where you want to be. Subscribe to email lists and conferences, and just keep your eyes open for any interesting opportunity that may come your way. Even if you think you are not a 100% fit for a particular interesting role, do not hesitate to just apply.

Where do you see your sector moving in future years? How would you advise students to prepare to be competitive job applicants and successful employees?

I work in an industry sector which provides solutions for various climate- and environmental issues. I can see remarkable growth of this industrial sector in the near and far future. This is quite fulfilling to me as a scientist, who worked on past climate reconstructions and understands the severity of the current climate crisis. Working in this industry makes me realize that I am being a part of the solution!

One big advice I want to give to current students is while you are in school, try to pick up data science and coding skills (I wish I did!). Those will help you diversify if you need to in future. Also, ability to adapt and change will be critically important in sustaining in career path you choose.

What is the role of networking in your sector? Do you have advice for a student who is just beginning to build their network? What is the best way for students to get their foot in the door?

During my time in academia, I found networking to be incredibly crucial to succeed. Having a supportive PI, attending conferences like AGU and GSA, presenting (and publishing) your research regularly will be important to help you in networking. In my personal experience, being associated with International Ocean Discovery Program (IODP) was pivotal in opening various networking opportunities!

What does a “typical” day of work look like for you?

Answering a lot of technical questions for our clients, helping customers with Picarro-related research, working in laboratory on analyzers and test sample analyses, attending team meetings, sitting on client calls to answer science questions. My work in a nutshell is relaying scientific information from one point to another.

What is the best part of your job?

When I visit customer labs, and train graduate students/postdocs and they discuss their research with me, and I can give critical scientific input into their work- it is absolutely fulfilling to see that my knowledge and skills can be instantly useful for our scientific community!

Do you have any other comments or advice for students looking to enter your sector of the geoscience workforce?

Try to have a supportive PI and cohort network if you choose to do a PhD, that may go a long way!

Connect:

<https://www.linkedin.com/in/joyeetabhattacharya/>

https://twitter.com/joy_geology

Learn More:

Picarro: https://www.picarro.com/dr_joyeeta_bhattacharya

Paleoceanography podcast: <https://podcasts.apple.com/us/podcast/paleoceanography-understanding-past-oceans-to-forecast/id1434886389?i=1000540327596>

Researchgate: <https://www.researchgate.net/profile/Joyeeta-Bhattacharya-3>

Google scholar: <https://scholar.google.com/citations?user=GGVhFy8AAAAJ&hl=en>

IODP blog: <https://joidesresolution.org/women-in-science-the-women-who-rock-on-the-jr/>