

PHutures PhD Spotlight



- Professionalization as a member of the Kempa Group & a recent Sr. PHutures Fellow
- Building community as Co-Chair of the GRO
- Increasing the presence of Global Policy Training as the Science Diplomacy Chair of the JHSPG

Ona Ambrozaite
Ph.D. Candidate
Chemistry Department

May 2022 | Issue 09



JOHNS HOPKINS
UNIVERSITY

PHutures

FROM NATURE'S COLORS TO WATERCOLORS: GRADUATE SCHOOL AS A CREATIVE JOURNEY

Thanks for taking time to share with us, Ona. We'd love to learn more about you, including your background and upbringing.

I have nearly finished the second year of my Ph.D. in Chemistry, and now I am spending even more time exploring chemical vapor deposition (CVD) reactions and designer surfaces in the Kempa Lab! My roots are in the beautiful woodlands of Lithuania, where I spent my early years and absorbed so much culture that I now try to share with all of my friends, such as the exotic-looking neon pink beetroot soup. I still catch myself trying to translate certain Lithuanian sayings into English expressions, which always leads to lots of laughs and curious conversations.

Perhaps due to my attraction to nature and anything that's green, yellow, and red, I chose to go to the University of Vermont for my undergraduate studies in biochemistry. The Green Mountains around the campus made the entire journey a breeze, and there wasn't a single day when I felt too overwhelmed by anything.

I spent all of my undergraduate summers in different countries such as Japan and France, where I was able to chat with Nobel Laureates in Chemistry and found out that I truly enjoy physical materials chemistry, which is now the focus of my daily research.

The summer of 2019, I became determined to pursue a Ph.D. in Chemistry with the Kempa Group at JHU. And here I am now!

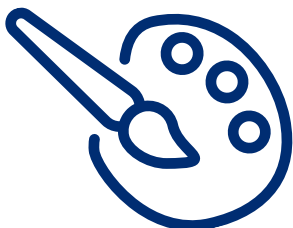
Your love of nature and the physical world sounds like a huge source of inspiration. Who or what else inspires you everyday?

Like many of us, my family is a major source of inspiration, positivity, and strength every single minute of the day. It's known to those I am close to that family time is "holy time," and anything I have ever accomplished is due to their endless support and encouragement.



It's known to those I am close to that family time is "holy time," and anything I have ever accomplished is due to [my family's] endless support and encouragement."

My grandmother, for example, is quite literally the powerhouse of our family – she walks 5-10 miles every day (which often makes me ashamed of my daily step count), became an artist when she was in her 60s, and she is an avid reader, all of which push me forward every day. Curiosity and positivity are two other values I've internalized since I was a child, and I truly enjoy conversing and connecting with people, even someone I meet while standing in a line for chai tea. This has led to wonderful friendships all over the world, and I am thankful for having close friends in different continents whom I can reach out to, send watercolor cards to, and enjoy life's moments with.



Happily waiting for a delicious piece of okonomiyaki, a savory Japanese pancake dish, in a market in Kyoto, Japan.

We can see just how important relationships are day-to-day.

What are some other sources of joy and fulfillment?

I am very curiosity-driven, and now as a chemistry Ph.D. candidate I read publications related to the field of low dimensional materials every day, which fascinate me with how innovative scientists can be. The world of condensed matter physics and the delicate interplay between the shape, size, and composition of materials with resulting properties fuel new ideas that I can later apply to my studies on designer surfaces for crystal growth in the Kempa Lab.

Watercolor is another major activity I do almost every day. I started when my grandmother enrolled in an art school and showed me ways to spread watercolors, sprinkle salt on the surface, and then let my imagination roam free. I've become so used to looking at random blobs of color and visualizing what they could turn into that now even the scanning electron microscope (SEM) images of synthesized materials become like SciArt canvases to me. One other activity I love is having discussions and tons of laughs with everyone in the Kempa Lab. It brings me as much joy as being in the family I grew up with and love dearly. It is an incredible collection of scientists who make both - science and life - as enjoyable as they can get. No wonder our lab's most recent Ph.D. graduates all pointed out that it is the best lab in the world to be part of!



A watercolor by Ona in 2019.

Watercolor is another major activity I do almost everyday. I started when my grandmother enrolled in an art school and showed me ways to spread watercolors, sprinkle salt on the surface, and then let my imagination roam free.

Aside from your coursework and your immersion in watercolor - an activity we're learning is not unlike your chemistry research! - what other extracurricular activities have you been involved in?

Last year, I became one of the two Co-Chairs of the Graduate Representative Organization (GRO) here at Hopkins, which I got involved with the same day I accepted the offer from JHU.

When the COVID-19 pandemic pushed learning online, I felt the need to connect with fellow Blue Jays despite all of us having to stay at home, which led to me interacting with GC Departmental Representatives and the GRO E-board to work hand-in-hand to make the GRO as inclusive, approachable, and diverse as possible.

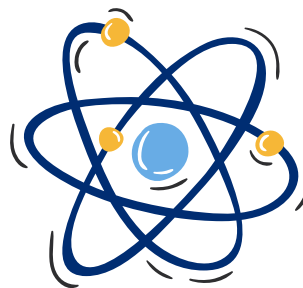
Another organization I have worked closely with is the PHutures office at the Homewood campus. I knew immediately it would be the ideal place to further my artistic side after seeing the way Dr. Roshni Rao's team, including staff and graduate students, were able to create a meaningful and impactful experience for hundreds of graduate students by organizing the Horizons by Hopkins conference last fall. Having recently served as a PHutures Senior Fellow, I worked hard to engage doctoral students and postdoctoral fellows in life design, experiential learning, professional development, and connections with alumni and employers.



A 2019 watercolor.

After attending PHutures events and connecting with hundreds of individuals at Hopkins and beyond, I quickly realized my passion for science policy. Being able to take the most crucial aspects of scientific evidence and apply this knowledge in a concise way in the policy field fascinates me. After getting elected as the Science Diplomacy Chair of the Johns Hopkins Science Policy Group (JHSPG), I have spearheaded collaborations with Embassies in Washington, D.C.

Our team has been able to start a very exciting collaboration with the Embassy of Belgium that focuses on transition to sustainable agriculture, which we're hoping to work on together with Ph.D. students from a Belgium university as well. One of my goals as the Science Diplomacy Chair is to increase the presence of global policy training and real-world experience in science diplomacy. The creation of impactful and long-term collaborations with Embassies in Washington, D.C., on the most important transatlantic issues of today is a great way to start!



Have you contemplated what you might like to do after you've finished your Ph.D.?

It is yet to be seen what I will pursue after obtaining my Ph.D., but being part of the PHutures office, the GRO, and the JHSPG has shown me that the field of science policy / diplomacy is the area where I would love to grow in the future. Attending hundreds of events that spotlight the diverse paths Ph.D.'s take after graduate school have brought my attention to a number of career paths I would like to explore. I am sure the materials chemistry knowledge and skills gained while being part of the Kempa Group will be extremely useful in the near future. To be continued! :)



Fun moments with Horizons by Hopkins co-organizer, Gian.

Can you comment on what resources Hopkins has provided to help enhance your career and professional development?

The PHutures office is the absolute number one resource that opened my eyes to what Ph.D.'s can do with their degrees. As a 2020 Horizons by Hopkins conference speaker showed, getting a Ph.D. in mechanical engineering does not prevent one from joining the team of Cirque du Soleil! PHutures has shown that there is an entire world of unexplored careers out there, which I do hope other Ph.D. students explore sooner than later. I also find it extremely useful that PHutures organizes events where students can interact with recruiters in real time, which can lead to future job offerings and useful connections.

“
As a 2020 Horizons by Hopkins conference speaker showed, getting a Ph.D. in mechanical engineering does not prevent one from joining the team of Cirque du Soleil!



Walking towards the Kyoto Imperial Palace to visit shrines and temples after New Year's Day with a friend from Kyoto.

If you have one piece of advice for your fellow graduate students who are navigating their Ph.D. program, what would it be and why?

I encourage everyone to take a look at a video [[linked here](#)] on the PHutures YouTube page, where I have outlined five important steps to take while thinking about careers in graduate school. One of the most important pieces of advice is to remember that no one knows everything, not even people who have established careers. They are all just figuring it out, step-by-step, and so will we.

I think it is extremely important to avoid getting into the habit of allowing imposter syndrome to take over our thought process. It is true that there are extremely intelligent people around us, but there is no need to be disappointed by comparing yourself to such a high standard right after entering graduate school. There is so much time and many opportunities to grow and have fun along the way!

What suggestions do you have for graduate students contemplating next steps in their career journeys?

I would suggest to not be afraid to reach out and ask for informational interviews with someone who works in the field one is interested in. This is an excellent way to gauge early on whether the specific path at hand will bring joy and fulfillment without having to work in the field for a long time to understand what it truly is about. The YouTube video referenced above is, once again, a good summary of quick tips of how to make the most out of graduate school and how to start thinking early about next steps. I want to emphasize the need to find interests outside of research since preparing for a world outside of graduate school will require skills in leadership, teamwork, communication, and people skills, which different extracurricular activities can provide.



Such an honor to chat with Nobel Laureates in Chemistry after a conference in Strasbourg, France! From Left: Professors Jean Pierre-Sauvage, Jean-Marie Lehn, and Ben Feringa.



"I think it is extremely important to avoid getting into the habit of allowing imposter syndrome to take over our thought process. It is true that there are extremely intelligent people around us, but there is no need to be disappointed by comparing yourself to such a high standard right after entering graduate school. There is so much time and many opportunities to grow and have fun along the way!"

ONA AMBROZAITE

