

Professional Science Master's Scholar

Marc Francis Hidalgo

Ateneo de Manila University



PSM Degree

*Master of Science and Professional Science
Master's in Materials Science and Engineering
State University of New York - Binghamton
May 2017
3.77*

US University

Date of Completion

GPA

Professional Science Master's in Materials Science and Engineering

Materials Science and Engineering (MSE) is a discipline with a focus on materials that comprise our world. As the name implies, it has both science and engineering aspects. That is, we elucidate the inner workings of the materials through both atomistic and physical point of views, essentially the science of the materials, and manipulate these properties in order to engineer these materials into desirable forms. The final goal of any materials scientist or engineer is to better understand how and why a material works and these can be manipulated for a specific use.

As a PSM student, what was the highlight of your study?

The best thing about the PSM program was that it forced you to look away from the science and see the non-engineering aspects of your field. As a PSM student, I met and worked with many graduate students who were not scientists. This is what helped differentiate my PSM degree from a regular MS. Among the different PSM experiences I had, the one which highlights this most is my group in my organizational behavior course. The course allowed me to see the importance of non-science-related fields to science as a whole, which is one of the key aspects which defines a good PSM program.

In what way has the USAID scholarship changed you?

Prior to coming to the US, I had a science-centered mindset. That is, to me, if the science is good, the product will be good. However, this is not the case in practice. People, emotions, organizations, and ideas cannot be quantified. It is important that we, as the future scientists and leaders of the world, must have a more holistic understanding of our fields. Being a USAID-STRIDE scholar has opened my eyes to this reality.

How would you use your degree to contribute or influence economic growth in the country?

With my degree, I'll be able to positively influence the economic growth of the Philippines by contributing to both research and industrial applications in energy storage, primarily in Li-ion technologies. My final goal has two facets: to be in any industry handling Li-ion, hopefully doing research or working in manufacturing, and to collaborate with academic institutions who do fundamental research on energy storage.

As a young scientist, what do you envision for the Philippine science, technology and innovation ecosystem in the next 10 years?

Although science is central to any rising economy, I believe that the Philippines will move forward with a more technology-centric focus. Science will still play a key role in this movement. But its contribution will less be about science for science's sake and more about how science is applied in order to meet specific needs. The ecosystem will evolve in order to nurture this type of mindset. My vision of the Philippines in the next 10 years is that this mindset will continue to flourish, and there will be more incentives for these application-centered science projects to continue.

Marc is currently pursuing a PhD degree in Materials Science and Engineering at the State University of New York – Binghamton. He is also working on his research focusing on energy storage, specifically Li-ion materials, with the Whittingham group, one of the key figures in Li-ion battery research.

E-mail: mhidalgl@binghamton.edu