“Macro” Rheology: New World Experiences

The 86th Annual Meeting of the Society of Rheology
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By definition, rheology is the study of the deformation and flow of matter. For most of their studies, rheologists work on micro-to nano- scales. The title of this article reflects that I experienced different kinds of external stresses and other environmental factors on a macro scale before, during and after the 86th Annual Meeting of the Society of Rheology (SOR). The meeting had a great impact on my career plans and taught me how to handle these stresses and factors.

I always have loved traveling. I consider it as a means of understanding other people with their different cultures and beliefs. It’s my way of de-stressing and enjoying life. When my colleagues heard that I was traveling alone from the Philippines to Philadelphia to attend the meeting, they were very afraid and concerned for my safety, but I felt the other way around. I was very excited to be going to a new world, away from my comfort zone. I was excited to meet new people, especially those who are excelling in this field of research.

As an undergraduate applied physics student from University of San Carlos, Cebu, Philippines, I never imagined that my dream of attending an international conference and presenting my research there would come true, especially because it entails a large amount of money. But I guess nothing is impossible as long as you keep dreaming, work hard for it, and believe you can get there. I am very happy that I was able to join the Society of Rheology (SOR) meeting in Philadelphia, because it is related to my current research. It was an opportunity to listen to advices from the experts, learn from them and improve my research. I am also thankful because gave me insight into what to do after I graduate, either pursue graduate studies or to work in industry.

When the meeting started, I did not have difficulty making new friends. Since most of the students presenting at the meeting are already in graduate programs, I feel proud that I was able to attend as an undergraduate. I heard about their current research and I am amazed that women can make such a difference in the field of science. My new friends advised me to choose the topic I’m most comfortable in researching for my graduate studies early. They told me that being a graduate student is not that easy too but as long as you are focused enough, then you can make it.

On the first day a forum, “Rheology in the Real World,” featured a panel of scientists representing industry and US national labs who shared
their experiences and discussed the role of rheology in their company’s products and processes. I got acquainted with one of the speakers who is a post-doc in Australia. He is doing food rheology and was very friendly.

After the forum, a reception followed where I was able to meet more rheologists and professors from different universities around the world and ask them about graduate studies. I was amazed to see a great number of attendees and everyone was very welcoming. It was also amazing to know that there are members of the Society of Rheology who did their undergraduate studies in the Philippines or who have visited the Philippines.

The meeting featured four plenary lectures. I found the talk on microfluidics the most interesting because I am doing microfluidics on human red blood cells now. I had the chance to interview the speaker, Dr. S.J. Muller, after her talk. She considered my research interesting and advised me to use a laminator in making my microfluidic chambers as that is what they are doing in her laboratory and it is hassle-free. She gave me her e-mail address so that I can contact her for more information. I felt happy and fulfilled by that experience.

I attended talks on biomaterials and biological systems and a few on confined and coupled systems. I was able to understand the role of rheology and how it can be applied in treating diseases, e.g. cancer. I heard about studies on microfluidic simulations, the behavior of cells, gels and biopolymers, microrheology, etc. It really inspired me a lot. I would find it interesting to do research in these fields too and contribute something to the society soon.

During the poster session, I presented two posters, “Random walk simulation and one-particle tracking of Fibroblast Cells”, and “Visual scripting interface for human Red Blood Cells’ osmotic characteristics”. Before the session I was scared and my mind was full of what ifs. But as more visitors came to see my posters and asked me questions, I felt more comfortable. My explanations were concise and I had great time talking with people. I also had the chance to visit other posters and made new friends.

Another activity that was fun was the Rocky Rheology Run. We did it early one morning before the start of the plenary talks. Only a few of us came, mostly men. When I could no longer kept up with the other runners I decided to walk towards the last stop and took pictures of the beautiful city along the way.

All photos courtesy of Clare Maristela V. Galon.