

Brookline STEM Students and Younger Chemists Benefiting from NESACS Connections to A123 Systems

By Leland L. Johnson, Conditas Group, NESACS 2016 Program Chair

For the second year in a row, A123 Systems in Waltham has hosted 6th grade students from the Michael Driscoll Elementary School in Brookline, Massachusetts for “Science Solstice.” On December 11, 2015, twenty students and three chaperones and teachers accompanied the group of students to learn about the research, development, and commercial interests of A123 at their laboratories in Waltham, Massachusetts.

Driscoll students learned a bit about the component parts of batteries, about the way that A123 competes for the placement of innovative, safe batteries in high performance (racing) vehicles and other vehicles (buses).

For the annual “Science Solstice,” there are numerous visits to laboratories throughout the Boston area, and many parents volunteer to host students on tours of these pharmaceutical, industrial and academic labs in the Northeastern Section of the ACS. Early STEM educators seek to expand the relationships between primary schools and all types of labs, expanding the options and inspiration opportunities for scores of students every year. How can we expand community and chemical society involvement with local industry? Just ask the administrators of your local schools.

How did the relationship with A123 Systems evolve through the past few years?

Neighborly networking!

As a resident of the Boston area for the past 12 years, I have become a Connector of sorts (à la Malcolm Gladwell’s Tipping Point). As a member of NESACS, I have found many ways to connect scientists in industry to younger chemists in the area. One day about three years ago, I was talking to a former neighbor, Donald Pinnell about biotechnology consulting in Boston and beyond.

Don asked me “how work was going”. I explained that I was engaged in connecting clients in biotechnology and hightech companies with service providers in business and science, as well as helping lean startups achieve scientific, business, and intellectual property milestones and other successes. Don understood right away, and he suggested that I get in touch with his daughter, Leslie Pinnell, who “works for A123 Systems,” up in Waltham. I left a card, and sought out Leslie on LinkedIn.

In the intervening months of 2013, I worked with Leslie and her colleague, Chris Campion (NESACS member) on arranging a tour of A123 Systems for our 2013 German Exchange participants who would travel to NERM mid-week in New Haven, CT. Leslie and Chris each became internal champions for the visit, and the tour was well-received by our friends from Germany.

Then the internal champions answered the calls again. And again. In the fall of 2014, Chris Campion and Leslie Pinnell were the speakers at the November meeting of NESACS, which was co-hosted by the YCC. Later in 2014, Chris, Leslie, and a team of scientists and others at A123 hosted the first group of sixth graders traveling from Driscoll Elementary School for “Science Solstice”.

This year marks the second year that A123 has graciously hosted a new group of sixth graders, eager to peer into the labs to witness the manufacture of batteries, watch demos of high-performance vehicles powered solely by battery power, and learn more about ways that battery technology can be utilized in hybrid vehicles.

The group at A123 has provided inspiring and exciting tours for the next generation of scientists, and on behalf of NESACS and Driscoll School, I would like to say “thank you” to our friends for their continuing support of the future of chemistry in the Boston area!



Rocco Iocco explains battery components and performs a live demonstration of electroplating pre-1982 pennies, creating shiny, brass keepsake pennies.



Driscoll sixth graders, Driscoll chaperones, and hosts from A123 Systems still smiling after their half day of demonstrations, tours, and lunch on-site in Waltham, MA.



Several student-friendly activities for the Driscoll sixth graders, including A123 batteries, battery cells, magnetic demos and other items.



SWAG for the Driscoll students, including invisible ink, lab coat, safety goggles, a brass penny, a copper-plated quarter, and more.