

The Chain Reaction

Humanitarian Solutions Worldwide

Newsletter 16 • August 1, 2014



Letter from the President

Dear Colleagues,

The last three months have been very busy for us at Chemists Without Borders. We have brought new volunteers into our Human Resources Department to help evaluate, identify and match members' skills with roles that need to be filled. There has been fantastic progress in the Arsenic Education in Bangladesh Project, and we are looking to begin the first phase of the project with two high schools in Bangladesh in August. Professor Rusty Myers is beginning his sabbatical which will be partially devoted to reinvigorating the Lois K. Ongley Chemistry Kits for Sierra Leone Project that our late Secretary, Professor Lois Ongley, initiated in 2012 (see Lois K Ongley Chemistry Kits for Sierra Leone pg. 2). We now have Michael Schur, a young, tech-savvy volunteer who has agreed to assist in social media outreach and blogging. And we are consulting with Brakeley Briscoe, which is helping us to develop our fundraising efforts to support these and other future projects.

As of this July, I will have been working as President of Chemists Without Borders for almost one year. I am pleased with the progress we have made, especially in developing and improving membership outreach and providing opportunities for volunteers to put their chemistry expertise to use. I hope the next year will provide new and greater opportunities for us to provide solutions to humanitarian issues that chemists are in a unique position to solve.

All the best,
Steve Chambreau
President and Board Member

We want to thank our donors for their participation in our 2013 Arsenic Education fundraising event. Just so you know- in May 2014, Chemists Without Borders subsidized a portion of the travel expenses for our representative Professor Amber Wise (Chicago State University) to complete the second step of our initiative. Professor Wise enlisted several high schools, organizations and individuals to educate the public in understanding and solving the arsenic contamination problem in Bangladesh. Your continued support will help us succeed in the next phase of our Arsenic Education (see pg. 2), Lois K. Ongley Chemistry Kits for Sierra Leone (see pg. 2), and IdeaConnection (see pg. 3) clean water testing and treatment solution projects. Your donations matter.

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Our Mission

Chemists Without Borders solves humanitarian problems by mobilizing the resources and expertise of the global chemistry community and its networks.

Our Vision

A global support network of volunteers providing mentoring, information and advice to ensure every person, everywhere, has affordable, consistent and persistent access to:

- Essential medicines and vaccines
- Sufficient safe water
- A sustainable energy supply
- Education in green chemistry and business which people can apply in their daily lives and teach to others
- Safe processes in work environments where chemical hazards exist
- Emergency support, including essential supplies and technology

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Arsenic Project

In May, Chemists Without Borders representative Professor Amber Wise (Chicago State University) traveled to Bangladesh to attend the graduation of her former students whom she taught at the [Asian University for Women](#) in Chittagong. While she was in Bangladesh, she and her former student, Nishat Raihana, visited several high schools and other organizations and individuals interested in solving the arsenic contamination problem in Bangladesh. The high schools expressed interest and willingness to participate in the Chemists Without Borders Arsenic Education in Bangladesh Project, which is described in [Newsletter 15](#). Plans are being made to provide the high schools with a [Hach](#) arsenic test kit and a [SONO arsenic filter](#) along with training on how to use the kits and the filters properly.

Recently, five teams in the US have performed evaluations on the two Hach arsenic test kits donated by Hach for this



Students working with the Hach test kit.

project. The final report will be available on the [Chemists Without Borders](#) website by the end of June. Testing included the effects of pH and temperature, and were performed by both trained scientists and non-scientific high school and university students. These evaluations will identify the most appropriate Hach test kit for use by high school students in Bangladesh, and will identify potential problems that could arise from its use. [Professor Rusty Myers](#) and his team from Alaska Pacific University have put together a short, non-verbal video demonstrating use of the Hach arsenic test kit which can be viewed [here](#). The idea of a non-verbal video demonstration is to eliminate the need for translation into Bengali, or any other language for that matter.

We would like to thank Mr. Jamil Azher and Mr. Shohel Nipu from Bangladesh University in Dhaka for picking up and temporarily storing the EconoQuick Arsenic test kits donated to Chemists Without Borders by UNICEF last year. The EconoQuick arsenic test kits will be transferred to a representative at Asian University for Women in Chittagong for use in the second, scaled-up phase of this project.

We would also like to recognize the following participants for their excellent work in the Hach Arsenic test kit evaluation: Midland American Chemical Society team: Mike Paquette, Joan McMahon, John Blizzard; Rusty Myers (Alaska Pacific University); Ray Kronquist (Foothill College) and Victoria Hughes, Raihan Chowdhury, Daniel Vignon, Scott Hann; Nina Stein (University of Connecticut, Waterbury); Amber Wise (Chicago State University). We would also like to thank Nina Paquette for securing the Hach arsenic test kit donation, and Hach for donating the test kits for evaluation.

Lois K. Ongley - Sierra Leone Chemistry Kits Project

Several years ago Chemists Without Borders entered into an agreement on a chemical education project with the nonprofit organization Khardalis, based in Providence, Rhode Island. The project involves the development of a "chem lab in a baggie", named "Lois Labs", designed to use green chemistry lab activities that support the introductory sequence of senior level/first year college chemistry topics in Sierra Leone.

Sierra Leone suffered a tragic civil war starting in the 1990s, which ended in 2002. The civil war devastated much of the country's infrastructure and education system. Today Sierra Leone remains one of the world's poorest nations.

Lois Ongley led the Sierra Leone Project before she passed away in Fall of 2013. The project was renamed the Lois K. Ongley Chemistry Kits for Sierra Leone Project in honor of Lois' dedication and leadership to this and other Chemists Without Borders activities. The loss of Lois temporarily halted progress on the Sierra Leone project, but I have now assumed leadership of the project and feel we are ready to resume moving forward.

At this stage I have reestablished contact with Aisha Khadar from Khardalis and we are starting to plan a Fall trip to Sierra Leone. The purpose of the trip will be to build relations with Sierra Leone educators, determine specific needs of chemistry teachers, become familiar with available resources, and

generally gather information on the best way to move forward.

I envision there will be ample work for Chemists Without Borders volunteers once our trip is completed. I am now trying to reestablish a team to work on the Lois Ongley Sierra Leone Kit Project. If you feel you would like to take part in this project or just want to be kept informed of progress, please send me your name and an email contact and I'll let do my best to keep you updated.

Rusty Myers
Professor of Environmental Science
rmyers@alaskapacific.edu

Meet the Team - Gabriela Solano



Gabriela Solano is a Staffing Specialist at Manpower for Strategic Account Services. She worked at Medtronic as an International Business Administrator for the Latin-American and the Caribbean Market for almost four years. During this time she also worked as a Volunteer Food Bank Coordinator and Interpreter at Hopelink. Then she moved to Minor and James Medical as a Human Resources Coordinator. Gabriela graduated in Business and International Trade at Shoreline Community College. Gabriela moved from Seattle Washington to California in November 2013. She became a volunteer at Chemists Without Borders in March 2014. Gabriela is from Lima, Peru, and has been living in the United States since 2004.

To learn more about Gabriela visit her [Linkedin Profile](#).

Members Step Up

As we proceed through our membership, we are pleased to announce that the following people are actively helping Chemists Without Borders:

Member	Location	Assistance
Montse Perez	Germany	External Communications
Yasmin Chaudhry	USA Pacific	IdeaConnection (IC) Project Lead
Nicolas Schaeffer	France	Grant Writer, IC Project Team
Arnab Chakrabarty	USA Central	Lois K Ongley Test Kit Team
Jon Binder	USA CST	IdeaConnection Project Lead
Antonella Di Trapani	Brussels	IC Project Team
More coming...		

Our Human Resources (HR) team may have reached out to you already. We will be contacting you shortly. For those of you who want to help us, please contact our HR team of gabrielasolano@chemistswithoutborders.org or alvinmenezes@chemistswithoutborders.org.

IdeaConnection Solutions

In March, the efforts of the IdeaConnection solver teams came to fruition and [solutions](#) for five challenges were submitted to Chemists Without Borders for review. After a thorough review process of all of the solutions submitted by the IdeaConnection teams, solutions to the Arsenic Penny-Per-Test Challenge, the

Contaminated Water Treatment Tool Kit, and the Arsenic Remediation Cottage Industry Challenge were accepted for potential implementation by Chemists Without Borders.

Chemists Without Borders is looking to recruit volunteers with project management experience to assist in taking these solutions to the next step before implementation namely

feasibility and social impact studies. If you are interested in joining or managing a team to evaluate one of these solutions, please contact our HR Department gabrielasolano@chemistswithoutborders.org or alvinmenezes@chemistswithoutborders.org.

You are Cordially Invited to:

Chemists Without Borders at American Chemical Society National Meeting in San Francisco

Co-founder Dr. Bego Gerber has been invited to speak about Chemists Without Borders at the following Symposium:

Chemistry Plus Passions, Interests: Careers on The Road
Less Traveled (01:30 PM - 05:20 PM)
Sunday, August 10, 2014 - 03:50 PM
Location: Moscone Center, North Bldg., Room 132

His topic will be, "Chemists Without Borders: Solving humanitarian problems by mobilizing the resources and expertise of the global chemistry community and its networks."

Abstract: When I was young, I was told, "Get a good education, get a good job, and everything will be fine." They were right - and they were wrong: The times changed and so did the rules of business. The new Millennium arrived and with it the Internet and the Information Age. But life is less about changing circumstances than about how we respond to these changes. Things are rarely what they seem and much of life is about guesswork, randomness and attitude. We will discuss unexpected discoveries from both inside and outside chemistry that have made all the difference.

ACS Committee on International Activities Reception

Dr H N Cheng, the Chair of the ACS Committee on International Activities has generously invited all our Chemists Without Borders colleagues to attend the International Reception which takes place after the Sunday symposium. This is a great opportunity to socialize with one another in a relaxed atmosphere. Please join us: 5:30 pm - 7:30 pm, ACS Committee on International Activities Reception, Hilton San Francisco Union Square, Grand Ballroom A.

Dr Cheng has also organized a symposium on the Monday, August 11, called "Innovation from International Collaborations" which you are encouraged to attend. It will be held on Monday (all day) at Moscone Center, South Building, in Esplanade Ballroom 300. ([View a full schedule of OIA Signature events](#))

Chemists Without Borders at Co- mité d'Études des Relations Fran- co-Allemandes (Study Commit- tee for Franco-German Relations) Symposium in Munich

On the 12th of September 2014, in Munich (Germany), team member Ms. Pérez-Navarro, former Ph.D. candidate at the Max-Planck-Institute for Chemical Energy Conversion, will be discussing the mission of Chemists Without Borders at the "2nd CERFA* Symposium: Alternative Careers for Scientists".

Chemists Without Borders solves humanitarian problems by mobilizing the resources and expertise of the global chemistry community and its networks. The organization has over 650 members in 53 countries. Each volunteer can contribute according to his or her personal motivation, expertise or communication skills to ensure every person in this world has access to safe water, essential medicines and vaccines, sustainable energy supply, "green chemistry" and business education, safe working conditions, and emergency support.

Ms. Pérez-Navarro's talk at the Symposium aims to attract the attention of scientists and other experts, as well as recruit personnel, seeking alternative options in their careers that might find the solutions for which nowadays our world is asking.

Send us your photos

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