



virtuAIChE[®]

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FEBRUARY MEETING: AT LEAST 1,000X THINNER THAN A HUMAN HAIR

PROF. BRIAN KORGEL UNIVERSITY OF TEXAS AT AUSTIN

<http://fuze.me/27991902> (detailed directions on page 3)

THURSDAY, 26 FEBRUARY 2015

9:00 pm EST, 8:00 pm CST, 7:00 pm MST, 6:00 pm PST;

UTC/GMT 0200



Dr. Korgel will give us discuss nanomaterials, their unique combinations of properties, and their potential to revolutionize a broad spectrum of applications, from semiconductors wires, to functional textiles, to nanocrystals for solar cells and energy storage. This presentation will highlight nanomaterials has been studying for lithium ion battery and photovoltaics applications in particular and some of the challenges facing the commercial use of these materials.

Dr. Korgel specializes in nanomaterials chemistry and complex fluids. His research projects include academic work in Ireland, Spain, France, and China. He is the co-found of two companies and receiving numerous awards and honors. More details on Brian and the meeting are found on the [VLS Events Website](#).

VIRTUAL LOCAL SECTION: PATH FORWARD -- SUPPORTING CHEMICAL ENGINEERS EVERYWHERE



The VLS is different -- it is an Experiment in Progress. The virtual local section (VLS) was established in 2010 to support chemical

engineers everywhere. Less than a third of AIChE members are members of a local section. Many of these non-members don't have an active local section that is close enough to attend or the meetings are at times that just aren't convenient. So the VLS is trying to be there for you by offering meetings via cyberspace and also by allowing you on-demand access to the meetings recordings, if you can't attend the live broadcast.

When I shared my idea for the VLS with a few of my friends, some were excited and others thought it was a crazy idea. The chair of the local section committee thought it was an answered prayer. A small group who heard my presentation volunteered to join my team including Neil Yeoman our treasurer, David Eckhardt and Bill Doumas, our first directors and Amanda Robben, our first vice chair. So I had the support of a former AIChE president and

two former members of the Board of Directors on my team, plus support from both the local section committee and the Career and Education Operating Council. And we were given the go ahead to establish the VLS at the 2010 AIChE spring meeting.

We had our [first meeting](#) on January 27, 2011 with AIChE President Maria Burka as our keynote speaker. How many local sections have had an AIChE president speak at their first meeting? We've had a lot of meetings since then, just short of 50. We've had great speakers like distillation guru Henry Keister. We've learned that we are in the golden age of chemical engineering from Phil Westmoreland and that humor works from Andrew Tarvin. We've hosted a few AIChE presidential election debates and had a number of meetings to encourage young professionals and even had a speaker join us from England.

So it has been a good five years. We've made some mistakes, we've learned a lot, and we keep trying to make the VLS better. My hope for the VLS is that we continue providing great programming. I hope we find better ways to serve young professionals, grad students and international ChEs. But this will only happen if we get your great ideas. So please feel free to share your ideas for speakers, topics and ideas for serving our ChEs everywhere.

The VLS Mission is to "Serve Chemical Engineers Worldwide". Our Vision is that "No Chemical Engineer is Left Behind". Many ChEs are far from a local section. If

you are, we want to serve you and support you wherever you may be in your career, from students to retirees. And remember, you don't have to be a VLS member to attend our events. Our audience is ChEs without access to a local section, Process Engineers with limited company support, Young professionals looking for a place to belong and a place to serve, and Engineers working nontraditional schedules.

How can you help us? Please come to our meetings and invite your friends and colleagues. And if you like what you see, please [join the VLS](#), it is only \$10 a year. And please consider serving in the VLS. Like any local section, we need workers and leaders. One of the most important tasks we do is to provide archived videos of most of our meetings. So we need people to edit our videos so that others can watch them at their convenience. But there are a number of other small and large tasks and leadership tasks that we need help with. So contact us if you have ideas or want to help at virtualchair@aiche.org or virtualaiche@gmail.com. And find out about us through our newsletter (edited by Jennifer Brand), our [website](#), or our [LinkedIn group](#).

So thanks for being a part of the VLS. Thanks to so many who have provided leadership and served as speakers in the last five years. Thanks to our leaders, especially Chair Amanda Scalza, Vice Chair Daniel Sujo, Past Chair Noah Meeks, Treasurer Neil Yeoman, Secretary Laura Gimpelson, and newsletter editor Jennifer Brand. And thanks to AIChE for all the

encouragement and support they have given us. My hope is the VLS can continue to grow in serving you and chemical engineers everywhere in the years to come as we strive to be your professional home no matter what industry you work in or where you live in the world.

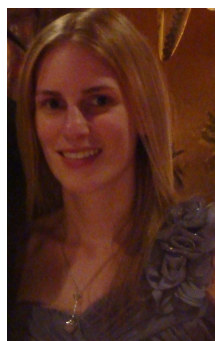
See you in Cyberspace.



Dan Lambert, VLS founding chair

FROM THE CHAIR: E-WEEK IS FOR CELEBRATION AND COMMUNICATION!

Amanda Scalza



Whatever the outcome of the groundhog and his shadow, those of us in the United States can all look forward a celebration a few weeks later: Engineers Week, also known as E-Week.

Engineers Week is typically celebrated around February 22, George Washington's birthday, commemorating our first president's surveying accomplishments. (The popular February date seems to have originated in the 1950s and has supplanted, in most regions, the older tradition of local engineering celebrations near March 17, the day of St. Patrick, traditional Patron Saint of Engineers.) Companies, professional organizations and nonprofits

all sponsor events and participate, as well as individual engineers. E-Week celebrations are spreading, too; many other countries now join in this great celebration. No matter the date or location, the purpose of E-Week is to celebrate the entire spectrum of the engineering profession, to recognize significant engineers and engineering achievements, and to promote technical studies for students.

During Engineers Week, outreach activities abound. Some outreach is aimed at making the public more familiar with what engineers really do, some tries to help the public become more comfortable with science, some has the goal of increasing students' interested in science, technology, engineering and math (STEM) education and professions. Since I am a first generation engineer, the outreach activities closest to my heart are those directed at both students and their parents.

For chemical engineers, particularly, outreach can be a challenge. We, as chemical engineers, know that chemistry, from nature and from industry, touches every part of our lives, from our safest and tastiest food, to medicine to improve the quality of life, to the brilliant colors we enjoy all around us. As Steve Brown, our speaker at our February, 2014, meeting discussed, the general public can be uncomfortable with "chemicals" and there are more and less effective ways to communicate our professional knowledge to them.

E-Week activities can give us fresh ideas for good communications with non-

engineers. For me, the simplest way to reach out to my neighbors is just through listening. Once we engage and listen to fears and complaints, it is easier to explain how chemistry is making life better overall, in spite of some of the scary news stories that float around.

Outreach and the education of the public are important to all of us. Without public support, permitting and operating plants is difficult, public research funding is unobtainable, and even finding markets for our products is challenging. So we should remember that, in the end, each of us is an ambassador for our industry, all year round not just during E-Week.

We should celebrate E-Week in February, renew our enthusiasm for communicating our profession to others, and practice outreach every day. Check out Engineers Week dates and activities near you!

FROM THE CHAIR - ELECT: THE VALUE OF VLS: MY STORY

Daniel Sujo



What is the value of VLS? If I invest my time in it, what returns do I get? I believe that each member has a personal answer for this, but I have

benefitted greatly from my AIChE involvement. I see the VLS as an exciting

Experiment in Progress, a way I can continue to receive value from the AIChE and to enhance the experience for other chemical engineers.

My AIChE story began in 2004, when I was studying chemical engineering in Mexico. As a member of the organizing board for 4th Conference of Chemical & Environmental Engineering: "Engineering a Better World" at ITESO (Instituto Tecnológico y de Estudios Superiores de Occidente), I invited the AIChE to support our efforts, which they agreed to do. This volunteer activity, including my AIChE experiences, opened doors for me, which led to opportunities to study and work in the United States. Of course, I have continued my valuable involvement with the AIChE, remaining active in the Delaware Valley Local Section as well as the VLS.

Since my time as a student in Guadalajara, there has been exponential growth in the Internet. In 2004, virtual collaboration was not as common, so collaboration was linked with transportation and traveling. International collaboration meant flying people in, which meant we devoted a lot of effort to securing company sponsorship.

Ten years after my conference organization days, virtual collaboration tools are much more advanced and available. Now that we have the tools, what can we do with them? There are undeniable intrinsic differences between the virtual and personal meetings. Even casual virtual interactions require lots of structure, scheduling, and planning. Right now,

spontaneous networking, brainstorming, and just hanging out are easier at in-person events. But virtual meetings offer great convenience, especially with archiving for asynchronous or repeat viewing.

How can we create a stronger virtual group, giving members more of the advantages of conventional local sections, as well as the advantages of the web? I believe the VLS can bring the best of both worlds to its members, but there are some challenges, not all of which are technological. We must serve our membership, which is larger and more diverse (technically and culturally) than most local sections; we need to operate in all the world's time zones; and, in spite of the scope, we have to meet the needs of members at various stages of their careers. Just a few active members in a couple of time zones cannot meet the needs of all our members, especially without two-way communications! The VLS must have the same commitment level of its members, just like a conventional organization.

Now you know my story and my vision for VLS progress. It is your turn, now. So what is the value of VLS to you? If you invest my time in it, what are the returns do you need? We need your answers to these questions so we can all work together diligently in order to achieve "No chemical engineer left behind". You may contact me at sujo.aiche@gmail.com.

MARK YOUR CALENDAR

VLS Meetings are the fourth Thursday of the month:

Thursday, March 26th

Thursday, April 23rd

Thursday, May 28th

2015 [European Industrial and Technical Heritage Year](#)

2015 [Spring Meeting and 11th Global Congress on Process Safety](#) April 26-30, 2015, Austin, TX

CONTRIBUTIONS TO THE VLS NEWSLETTER

Is your inner journalist yearning for a little exercise? Please feel free to contribute letters to the editor, short articles, announcements of general interest, news items, suggestions for VLS activities, and announcements such as member awards and promotions. On-call volunteers for editing, interviewing, and other newsletter activities are also welcomed. Contact the editor at jbrand@unl.edu using "VLS Newsletter" in the subject line

ATTENDING A VLS MEETING

Downloading Fuze (fuze.com) in advance of the meeting is recommended.

Go to <http://fuze.me/27991902> and follow directions. (The "name" requested will be the name displayed to other meeting participants.)

- For audio only: (If prompted, enter the meeting number: 24120303, then press #)
 - From a browser, select the internet audio option after joining.
 - From a phone:
 - US: +1 201 479 4595 or +1 855 346 3893
 - International access numbers <https://www.fuzebox.com/extras/symphony>
- Having problems? Follow the meeting link from our website virtual.aiche.org
- Need more help? You can connect to the Customer Support Team or access self-help tools at www.fuzebox.com/support.

Attendance at a Virtual Section Meeting is open to AIChE Virtual Local Section Members, AIChE members and other interested people.