

## Local Section Innovative Project Grant (IPG) Application Form

<b>Sponsoring Local Section:</b>	Chemical Society of Washington
<b>Submission Date:</b>	06/30/2017
<b>Title of Project:</b>	Kids and Chemistry Demonstration Day: Advancing Chemistry Appreciation using Chemical Demonstrations
<b>Brief Description:</b>	Implement an innovative outreach program for underrepresented elementary school students at the third grade level where they watch chemical demonstrations to foster STEM appreciation. Students will travel to the University of Maryland and engage in chemistry-themed activities and watch an engaging hour-long show where chemical demonstrations are performed.
<b>Name:</b>	Lenea H. Stocker
<b>Address:</b>	[REDACTED]
<b>Tel:</b>	[REDACTED]
<b>Email:</b>	[REDACTED]
<b>Does the Section currently have an active IPG funded by LSAC?</b>	No
<b>If yes, indicate submission date:</b>	
<b>Name of Current Section Chair:</b>	Jason Schaff
<b>Letter of Support from Local Section attached? (If the Section Chair is the Project Coordinator, a member of the Executive Committee must submit the support letter.)</b>	Yes
<b>Upload Local Section's letter of support here (acceptable formats: .pdf, .doc, .docx).</b>	<a href="#">CSW_2017_IPG_chair_letter_170618.pdf (462k)</a>
<b>Letter(s) of support from your co-sponsors attached?</b>	Yes
<b>Upload co-sponsor's letter(s) of support here (acceptable formats: .pdf, .doc, .docx).</b>	<a href="#">IPG_Support_Letter_RRobey1.pdf (276k)</a>
<b>Which groups are co-sponsors?</b>	External (non-ACS) Groups
<b>Specify partnership(s):</b>	Department of Chemistry and Biochemistry, University of Maryland
<b>What are the project's goals/objectives?</b>	<p>This project has two major goals.</p> <p>1) Develop an annual outreach event for underrepresented elementary schools to promote the appreciation of chemistry and STEM at the third grade level. By witnessing chemical demonstrations, children will see chemistry as fun and exciting and an approachable subject.</p> <p>2) Mentor undergraduate and graduate students, both those in the ACS Student Chapters and those who might be recruited into the Chapter. These students will participate and volunteer during the event, which will increase their involvement in chemistry outreach and will train them to become educators in the field.</p>

<p><b>How is this project consistent with your local section's strategic plan?</b></p>	<p>Both goals are directly related to the Chemical Society of Washington's (CSW) strategic plan, which is to empower members of the broader chemistry profession and promote interaction with the public in the greater Washington DC area.</p> <p>This project will increase the involvement and participation in chemistry of both members and nonmembers in the greater Washington DC area and will increase their professional skills in performing chemical demonstrations and chemical education. This project will undoubtedly promote interaction with the general public by Advancing Informal STEM Learning (AISL) by communicating and teaching chemistry through captivating visual demonstrations.</p>
<p><b>Justify how the project is innovative for your local section or a unique one-time opportunity.</b></p>	<p>This project is innovative for our local section because it targets a specific age group (third graders) who are specifically from underrepresented schools in Prince Georges' county. This event will be yearly and host up to 350 third grade children and up to 25 elementary school teachers. By hosting a yearly event, we will have the ability to share this event with an impressive number of children as they continue through elementary school. This project will impact students and teachers within the greater Washington DC area who lack opportunities to collaborate with higher education. "Demonstration Day" will allow us to share impressive chemical demonstrations with the general public that they would otherwise be unable to watch in person.</p>
<p><b>How will this project stimulate local section members to become and remain involved?</b></p>	<p>We hope that this event will increase student interest within chemistry and will show undergraduate and graduate students the resources that ACS and CSW can provide. Furthermore, this event will create an incentive for University of Maryland students to apply for Student Chapter Grants to help fund this event in the future. Therefore, this project allows for continual growth and can be sustained by undergraduate and graduate student involvement.</p>

<p><b>What is the project's plan of action? Please include probable date(s).</b></p>	<p>August 2017: Contact local elementary schools and invite them to the event hosted at the University of Maryland in May 2018.</p> <p>October 2017: Create a list of chemical demonstrations to be performed.</p> <p>December 2017: Purchase all chemicals and equipment for the demonstrations.</p> <p>January 2018: Recruit undergraduate and graduate students to participate and volunteer during the event.</p> <p>March – April 2018: Perform chemical demonstrations with undergraduate and graduate students as a rehearsal for the event.</p> <p>May 2018: Host the “Kids and Chemistry Demonstration Day” at the University of Maryland.</p> <p>June 2018: Hold an after action review with the undergraduate and graduate volunteers to discuss the pros and cons of the event.</p>
<p><b>Identify target audience(s) and estimate the number of people to be reached. Estimate the number of members involved in organizing the project.</b></p>	<p>1)Organizers of the event (~5 faculty and ~3 stockroom coordinators)</p> <p>2)Undergraduate and graduate students within the Local Chapter as well as nonmembers (~10 undergraduate and ~10 graduate students)</p> <p>3)Elementary school teachers and their third grade students (~8 teachers per school and ~100 students per school, ~350 total)</p>
<p><b>How will IPG funding seed continuing events following the completion of this project?</b></p>	<p>The goal is to make this chemical demonstration day an annual event. The first implementation of the event will be geared toward inviting three local elementary schools for one day of chemical demonstrations. The idea is to invite more schools, specifically underrepresented schools in Prince Georges’ County, with the potential to grow the event to several days where even more elementary schools can be reached. Furthermore, members of the ACS student chapter can apply for Student Chapter Grants to help fund the event in the future.</p>
<p><b>If the spaces below are insufficient, you may also upload an itemized budget spreadsheet with explanations (acceptable formats: .xls, .xlsx).</b></p>	
<p><b>Item:</b></p>	<p>Cupcakes decorated with elemental symbols</p>
<p><b>Expense:</b></p>	<p>525.00</p>
<p><b>Justification:</b></p>	<p>Snack for children, \$1.50/cupcake x 350 = \$525.00</p>
<p><b>Item:</b></p>	<p>Pens, pencils, and goody bag items</p>
<p><b>Expense:</b></p>	<p>875.00</p>
<p><b>Justification:</b></p>	<p>Goody bag items, \$2.50/goody bag x 350 = \$875.00</p>
<p><b>Item:</b></p>	<p>Chemicals and equipment</p>
<p><b>Expense:</b></p>	<p>500.00</p>

<b>Justification:</b>	Materials for chemical demonstrations.
<b>Item:</b>	Bus transportation
<b>Expense:</b>	1500.00
<b>Justification:</b>	Travel expenses increase attendance, $\$500/\text{school} \times 3 = \$1500$
<b>Item:</b>	Refreshments and snacks
<b>Expense:</b>	100.00
<b>Justification:</b>	Food after the chemical demonstration show.
<b>Item:</b>	
<b>Expense:</b>	0.00
<b>Justification:</b>	
<b>Additional funds requested from other sources:</b>	1000.00
<b>Justification:</b>	Additional funds for chemicals, equipment, goody bag items, and envelopes and postage for surveys and worksheets provided by the Department of Chemistry and Biochemistry at the University of Maryland.
<b>Project Total:</b>	4500.00
<b>Total Requested from LSAC:</b>	3500.00
<b>How do you plan to evaluate the success of your event?</b>	We will evaluate the success of the event with both quantitative and qualitative measures. The number of schools that attend the event are an important measure. The number of undergraduate and graduate students who volunteer and join CSW will be measured. Additionally we will present the teachers with an evaluative survey. We will also hold an after action review with the volunteers to discuss the pros and cons of the event.
<b>What tools will you use to measure success of event (i.e., surveys)?</b>	Surveys and evaluations will be handed out to the teachers. We will also provide the teachers with a worksheet to be handed out to the students when they return to their school. This worksheet will ask for students to draw a picture of their favorite experiment and explain why. We will also ask the students to name their least favorite demonstration and explain why. We will provide an envelope and postage for teachers to return the worksheets to us so that we can plan for the future.
<b>How will you use the data captured for future planning?</b>	We will use the worksheet and drawings of students' favorite experiments to gauge the interest and success of certain demonstrations. We will decide which chemical demonstrations to include in the future and also decide if any demonstrations were unsuccessful.

June 14, 2017

**Officers**

Jason E. Schaff, **President**  
Allison A. Aldridge, **President Elect**  
Jennifer Tanir, **Secretary**  
Wesley Farrell, **Treasurer**  
Dennis Chamot, **Past President**

Dear members of the LSAC IPG Committee:

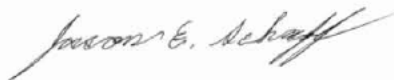
I am writing to express my enthusiastic support for CSW's IPG application to fund an outreach event for elementary school students in spring of 2018. I firmly believe that, as chemical professionals, we have an obligation to reach out to students of all ages and communicate the value, importance, and, quite frankly, fun of our work.

The project to be funded by this IPG grant would support this goal in three ways. First, and most obviously, putting on "cool" demonstrations based upon chemistry provides a hook that can be used to show the elementary school students that our science can be used to do neat things while still being approachable. Second, by recruiting and training graduate and undergraduate students to perform and explain these demos the program will help grow the pool of available amateur science educators in our region. Finally, it is our hope that cooperating with the University of Maryland in this project will build the foundations of a long-term relationship that can be leveraged in the future to support other educational outreach goals.

The most outstanding plan is, however, worth very little without the right people to execute it. I can say without fear of contradiction that Dr. Stocker is highly enthusiastic about this program and absolutely dedicated to its success. In addition, Dr. Stefanie Wittenberg, who served for many years as Treasurer of CSW and is currently a Councilor, will be on the project staff. Her extensive experience with CSW budgeting and finances, as well as her organizational skills will help bring the project to a successful conclusion.

If you have any questions, please contact either me or our office – [csw@acs.org](mailto:csw@acs.org) ; 202.659.2650.

Sincerely,



Jason E. Schaff, Ph.D.  
President, CSW  
ACS Local Section Chair

[Redacted]  
[Redacted]

Dear Tracey and Elaine,

June 27, 2017

I am excited to hear that you are planning to apply for this IPG and the project it would support. As advisor to the University of Portland Student ACS Chapter, I will promote this program and invite students to attend. We have a strong slate of officers for the coming academic year, and I know they will also be supportive.

I would be happy to be involved and contribute as you see fit, and I would suggest we ask U of P chemistry faculty colleagues Ronda Bard, Rachel Hutcheson and Valerie Walters. We also have several successful former students who could contribute to a panel or serve as mentors to current students.

Thank you for organizing this exciting program, and I am happy to help as needed.

Sincerely,

Angela Hoffman

Professor,

Department of Chemistry

University of Portland