

Executive Summary – Minority Affairs Com. Report

Executive Meeting Summary – July 9, 2021 - *Charlene Crawley*

Minority Affairs Mission Statement: The mission of the Minority Affairs Committee of the ACS-VA section is to serve, increase the representation of, communicate interests of, and establish programming for persons under-represented in the chemical and engineering sciences. This mission is advanced through sponsoring of the following initiatives:

1. Attract minority students (K-12 and College) to the chemistry related professions.
2. Create programs that provide mentoring to minority students via liaisons with VA universities and industries.
3. Compile best practices for recruitment, retention, career development, resumes writing, and evaluate programs for the advancement of minority programs.
4. Establish links with other STEM minority serving groups, such as the National Organization for the Professional advancement of Black Chemists and Chemical Engineers (NOBCChe)
5. Identify minority friendly educational institutions and business.
6. Create programming and initiatives to increase the participation and membership of minority STEM students and professionals within the ACS VA Section.

ANNOUNCEMENTS:

2021 Initiatives and Accomplishments: (Budget Request- \$1000)

1. **Increase outreach, awareness, and involvement of Minority membership** in VA section and surrounding sections with a '*share your story*' feature in future bulletins with 'interview-type' responses to questions like: (1) *Why did you choose chemistry/engineering/STEM as a career*, (2) *Discussion of 'defining' moments in career/discipline selection, such as early heroes/mentors*, (3) *steps and struggles overcome in attaining degree/position*, (4) *what excites you about discipline area*, (5) *describe everyday experiences/research on job*, (6) *what would you do/change to increase pipeline or make ACS or work environment more attractive/conducive to under-represented populations?* (7) *How have you navigated the COVID-19 and social justice pandemics and what advice can you offer to others.*

Requested \$500 to pay a VCU journalism/other student to interview and prepare write-up feature articles for up to 10 members to be featured in the bulletin and as a feature on our website. (*Was able to raise \$800 in matching funds to accomplish similar initiative.*)

Measure of success – increase in membership, participation, or attendance at VA section meetings.

Accomplishments to date: This initiative was accomplished via a different route with the same level of funding by holding a '*Diversity in Chemistry – Thru the Lens of Chemistry*' summit at VCU on April 29, 2021 that was used to accomplish the same goals. [See attached STEM FINAL REPORT on this initiative.](#)



2. **Supporting SOL Performance and awareness of STEM careers in Community Schools**– Collaboration between VCU, VUU, VSU faculty and alumni, ACS members and students, NOBCChE members and in collaboration with Dr. Mychal Smith (VCU Chemistry) to provide assistance to students with their SOLs using interest and performance enhancing experiments, using Zoom to have live scientists, including the minority scientists featured in Item (1) above to visit K-12 classrooms to discuss scientific methods and careers before student body.

Plan to adopt a new Richmond city middle-school (Boushall Middle School) with a high minority population. Have made a connection with a Boushall faculty member (Mr. Renee Pierce and Principal). Idea is to work with middle-school faculty to select 2-3-scientists discuss careers that relate to teaching key SOL topics per semester.

Require students to select one of speakers and write a report on the scientist, the science, and develop or contribute to quiz questions that would appear on a test (related to SOL content). Turn this into a competition, where students present a 10–15-minute presentation and teach the class on the featured content. Top eight students will win a certificate + \$50 cash award.

Requested \$500 – (\$1000) to fund the student cash awards (\$400) + residuals.

Measure of success – Increase student class participation in STEM class and/or class averages on class SOL scores. Could also arrange for a section meeting where best 1-2 presentations are presented by student at an ACS meeting.

Accomplishments to date: A meeting was held on June 10, 2021 with Principal Latonya Waller (*TC Boushall Middle School, 3400 Hopkins Rd, Richmond, VA 23234*) with the Boushall Math Team headed by Dr. Angela M. Allen, PhD – Math Prof. Learning Coach, Mr. Renee Pierce (Lead Teacher on ACS/VCU initiative) and three other math teachers. Based on these discussions, the Boushall Math Team developed the following ideas and initiatives for this collaboration:

MATH DEPARTMENT IDEAS FOR POTENTIAL VCU CHEMISTRY DEPARTMENT MENTORING PARTNERSHIP w/ DR. CRAWLEY

- Bring projects to the classroom where students can engage in hands-on activities (e.g. a circuitry kit). Could be as thorough as the SOL application to as minimal as here is the plan and the link to the resource that would need funds.
- Scientific notation, units, and statistics could be the focus. Project to demonstrate real world application. Multiple representations that would include concrete - abstract representations. Possibly cross-curricular.
- Importance of participating college students being invested.
- Virtual field trips with students (local and abroad).
- Project Based Learning
 - Have students work with the VCU students on selected projects
- Tutoring/mentoring relationships (including **AVID** (*Advancement Via Individual Determination*))

- Proposal for **ZSpace** – creation of ‘augmented reality laboratories’ at Boushall with assistance from VCU/ACS members for in-person/virtual assistance. ([See Waller Letter](#)) **a) I met with members of Boushall’s science teachers and a representative from Amtek on Nov 2020 to view demonstration of technology and brainstorm ways in which our VCU/ACS chem and/or STEM students could help Boushall’s students learn and implement this technology in the classroom. b) I submitted this request in an NSF IUUSE (Dec 2020) proposal to seek funding for purchase of these devices (Ken Chapman); (not funded); to be resubmitted this summer to new NSF-Racial Equity in STEM Ed Announcement.**

Note: **ZSpace** is a technology firm based in San Jose, California that combine elements of virtual and augmented reality in a computer. zSpace allows people to interact with simulated objects in virtual environments as if they are real. zSpace is known for its progressive developments in human-computer interaction. *Wikipedia*



Quotation

Quote Number: **A210748-B**
Date: **12-Nov-20**

1244 Ritchie Hwy, Suite 10, Arnold MD 21012
Phone: (800) 926-8359 Fax: (410) 315-9249

Please email purchase orders to services@amtekcompany.com

Customer:	Terms:	Validity:	45 Days
Boushall Middle School 3400 Hopkins Road		Delivery:	45 - 60 Days ARO
Richmond, VA 23234		Pay't Terms:	Net 30 Days
Attn: LaTonya Waller	804-780-5016	FOB Point:	Delivered
		Consultant:	Rich Sykes
		Reference:	Verbal Request

zSpace Lab Package - Fairfax County Contract 4400008589

Model No	Description	Quantity	Unit Price	Ext. Price
zSpace Delivery Systems				
AIO PRO-PKG	zSpace AIO PRO Includes: • zSpace AIO PRO • Perpetual license: Studio, Leopold • 2 Year License zSpace Learning Applications With: Newton's Park, Franklin's Lab, Curie's Elements, Euclid's Shapes and zSpace Experiences • 2 Year License VIVED Science (AIO) • zView Camera Kit • zView Application License Perpetual • All Apps Pre-Installed • Shipping	2	\$8,172.00	\$16,344.00
ZSPACE LT 16-512 W/ BAT	zSpace Laptop (16GB/512GB) with External Battery Includes: • zSpace Laptop • Perpetual license: Studio, Leopold • 2 Year License zSpace Learning Applications With: Newton's Park, Franklin's Lab, Curie's Elements, Euclid's Shapes and zSpace Experiences • 2 year License VIVED Science (LT) • All Apps Pre-Installed • Shipping	9	\$3,886.00	\$34,974.00
zSpace System Recommended Accessories				
HW-ACC-00-01	zSpace AIO Supplemental Accessories Kit Kit of 6 tracked eyewear, 20 follower eyewear, 1 stylus, 2 clip-on for zSpace AIO	1	\$648.00	\$648.00
HW-ACC-00-02	zSpace Laptop Supplemental Accessories Kit Laptop Accessories Kit of 6 tracked eyewear, 24 follower eyewear, 2 stylus	2	\$607.00	\$1,214.00

Model No	Description	Quantity	Unit Price	Ext. Price
zSpace On-Boarding & Training				
EDU-SVC-ONB-00-02	Onboarding & Technical Training zSpace hosts and facilitates a remote Onboarding Call, Review & Sign Off of technical requirements, completes a remote network check, and facilitates a remote Technical Training. Includes enhanced technical support for 30 days after hardware delivery.	1	\$829.00	\$829.00
EDU-SVC-RPD-00-01	Remote Professional Development Remote Professional Development for zSpace designed to train end users on the technology, hardware, software, and instructional application of zSpace. Includes 5 hours of PD; Average session is between 45 and 60 minutes. Recommended for small groups (~3 - 6 participants).	1	\$1,106.00	\$1,106.00
	EDU/Contract Discount	1	(\$750.00)	(\$750.00)
Grand Total				\$54,365.00