

STUDENT ACTIVITIES
Report to Members Council
From Meeting of January 28, 2022

Members Present

***in person**

*Jared Larson, Chair
*Mai Anh Dao, Vice-Chair
Chonghui Lui, Reg I
*Elizabeth Primeau, Reg II
*Sam Tascarella, Reg III
Adam Parker, Reg IV
*Bob Snow, Reg V
*Jane Opoien, Reg VI
*Nancy McBee, Reg VII
Pam Duffy, Reg VIII
*Shaun Nienhueser, Reg IX
*Kellie Huff, Reg X
*Tracey McKeon, Reg XI
Walter Lenzi, Reg XII
Fu-Jen Wang, Reg XIII
Ade Awujoola, RAL
Dennis O'Neal, ABET BoD
Mansour Zenouzi, ABET ETAC
*Robin Bryant, BoD Ex-O

Members Absent

Aleksandar Andjelkovic, Reg XIV
Robert Bittle, ABET EAC

Guests

Mick Schwedler
Ronald Gagnon
Chris Gray
Bryan Holcomb
Harrison Kesling
Devon Abellon
Austin Hochstetler

Staff

Katie Thomson
Joyce Abrams

Referred Motion

UK Midlands Chapter – Motion 23 (11/4/2021):

That the ASHRAE Student competition selection be a transparent process and feedback given to all the students.

Background: Recently there has been more participation in the student competition. The process should be transparent with feedback given to all participants. SAC must be transparent and share more information on the evaluation results. This may be the scoring matrix or/together with a short evaluation summary of main weaknesses or other suitable constructive criticism so that the participating teams may learn something.

Fiscal Impact: None as feedback will be digital.

The Student Activities Committee voted (14-0-0 CNV) in favor of adding the scoring criterion to the ASHRAE website for transparency as well as give students guidance on where they can best utilize their time. Due to volunteer time constraints, comments cannot be provided for every submission, but teams are encouraged to reach out to Chapter Chairs and RVCs for more clarity.

Information Items

1. Executive Committee
 - The Chair reviewed the status of this year's MBOs. See [Attachment A](#).
 - The Student Activities budget was reviewed and discussed. See [Attachment B](#).
 - PAOE for SY22-23 was reviewed and suggested changes are in [Attachment C](#).
 - The Virtual Career Fair (Feb 7-14) was discussed and the Committee was asked to promote the event to their network and students in their region.
2. Centralized Training
 - Planning a virtual event around the Annual Meeting
3. ABET Subcommittee
 - New Program Evaluator, Nick Roberts, was approved.
 - Conversations are ongoing to become a cooperating society with ASCE and ASME to allow our PEVs to go on more visits.
4. K-12/STEM Subcommittee
 - Children's book is available for purchase online and at the bookstore
 - Additional STEM kits are being developed.
5. Post High Subcommittee
 - Three nominations were reviewed for the SA Achievement Award and the subcommittee voted unanimously for a winner.
 - In-person Student Program on Saturday and Sunday of Winter Conference. See [Attachment D](#) for details.

- Student Membership
 - The total number of student members as of January 28, 2022 is 5,222 with 3,938 active and 1,284 in grace
 - Branches – Three pending branches bringing the 2021-22 total to eight new branches. We have around 400 active student branches with annual reports due May 31st.

Region	Student Branch	School	Chapter	Location
X	Golden Eagle Student Branch	California State University Los Angeles	Southern California	Los Angeles, CA
RAL	MKSSS's Cummins College of Engineering For Women Student Branch	MKSSS's Cummins College of Engineering For Women	Pune	Pune, India
RAL	University of Jordan Student Branch	University of Jordan	Jordan	Amman, Jordan

6. Grants Subcommittee

- 53 applications were reviewed and scored. 38 projects will be funded for SY22-23 for a total of \$161,456 and \$10k will be used to fund travel for the top two scoring teams to present at the 2023 Winter Conference in Atlanta.
- Plans to create new marketing material (videos and flyers) to promote the grants program to more schools
- Received an overwhelming response to first travel grants funded by Life Members Club. 66 applications were received and five \$1,000 grants were awarded.

7. Design Competition Subcommittee

- The 2023 Design Competition location and building type were finalized.
- The ISBD competition will be renamed for 2023 to Setty Family Foundation Net Zero Energy Design with additional funding for travel and prize.

Attachment A: Student Activities MBOs

Number		Who	Description
1	<i>General</i>		Hold paramount our relationships with chapter chairs, and then to each of our other committee members. Our task is to ensure they are equipped and have support.
	A		
	B	Each RVC	Have at least one - one on one call with each chapter chair by September 30, 2021
	C	Each RVC	Attend at least 90% of the subcommittee meetings
	D	Each RVC	100% attendance at winter and annual meeting.
	E	Each RVC	Have Fun!!
2	<i>Post high</i>		Provide equity within our programs to engage post high students in HVAC related careers - create awareness, provide opportunities, and receive feedback.
	A		Create / host 4 virtual congress sessions
	B		Plan a virtual Career fair (providing its approved)
	C		Review and revise the student program with a focus on networking skills, resume building tips.
	D		Develop tools for students searching and applying for jobs. Are students aware of what an HVAC career path looks like?
3	<i>K-12 STEM</i>		Provide a culture of equity for students to engage K-12 students toward Engineering, with a focus on HVAC related field.
	A		Promote the integration of the children's book. the subcommittee is to develop a few concepts of how this may be promoted, so that chapter members can understand the intent.
	B		complete the high school competition details
	C		Develop a toolkit to help promote HVAC careers to K-12. (is it a flyer, video, mentorship program...)
		Each RVC	Increase the STEM Leadership award to one per region.
			Develop an HVAC specific Stem kit
			Build a list of future stem kits (preferable HVAC or building science themed), and add to existing
4	<i>Grants</i>		To increase student's interest and awareness in HVAC, make connections with industry with the aim to attract students into HVAC.
	A		Update showcase flyers before september 1, and send one or two out every second week until deadline
	B		Reach out to 10 universities who currently are not ASHRAE members
	C	Each RVC	Promote the travel grant - get at least one applicant per region
	D		Send out a survey to all applicants, and potential applicants to determine if the program creates any disadvantages.
			should we rename this to Applications subcommittee, move BEQ and AEC into this subcommittee. Both have summer deadlines
5	<i>Design Competition</i>		Provide an environment of equity in the competition, and engage all members.
	A		review the complexity of the competition. will this improve DEI? will we lose participation?
	B		investigate whether BEQ competition be moved to grants? or left out of a subcommittee move it into the full committee.
	C		international competitions that also compete, should we amalgamate?

Attachment B: Student Activities Budget

Fiscal YTD Through Month of Dec				TWELVE MONTHS ENDING JUNE 30						
Actual	Budget	Actual	Budget	roll up	Actual	Actual	Budget	Actual	Forecast	Budget
FY 2021	FY 2021	FY 2022	FY 2022	acct / Description	FY 2019	FY 2020	FY 2021	FY 2021	FY 2022	FY 2022
\$5.0		\$29.0		REVENUES:						
0.1	1.0		1.1	41 Transfer From Foundation	\$14.5	\$10.0		\$5.0		
	1.4		1.5	46 Logo Income			2.1	0.1	2.2	2.2
				46 Miscellaneous Income			2.8		2.9	2.9
5.1	2.4	29.0	2.5	TOTAL REVENUES	14.5	10.0	4.8	5.1	5.1	5.1
				EXPENSES:						
45.2	52.9	49.7	49.3	51 Salaries	91.9	99.2	97.8	85.9	101.2	101.2
12.8	16.4	14.1	13.5	52 Payroll Taxes & Benefits	25.0	27.7	29.0	19.7	28.3	28.3
	7.1	1.8	6.9	61 Promotion	0.4	5.0	7.1		7.5	7.5
0.7	5.2	1.1	4.2	61 Shipping & Handling	3.3	2.9	7.8	1.5	8.0	8.0
				64 Meetings & Seminars	40.8	39.0	39.5	7.3	41.5	41.5
				64 Functions & Tours	6.3		16.6		17.4	17.4
		2.6	16.9	66 Travel Expenses (excl staff)	68.5	41.3	39.2		61.8	61.8
		0.8	3.6	66 Travel Staff	1.9	1.4	6.3		9.8	9.8
	10.0	7.7	4.0	68 Certificates/Awards/Logo	29.7	17.0	16.9	12.1	17.7	17.7
155.3	154.2	157.2	164.0	71 Grants Sr Student Proj	116.5	166.1	165.0	157.2	173.3	173.3
	0.6	0.3	13.4	82 Stationery/Broch/Forms/Other	6.3	0.5	12.8		13.4	13.4
		0.1		82 Postage	0.0	0.0				
0.1	0.5		0.6	82 Telephone & Communications	0.8	0.6	0.9	0.2	0.9	0.9
0.5	3.9	0.5	24.4	82 Dues & Subscriptions	42.3	18.7	22.1	0.5	24.4	24.4
0.4		9.5	0.4	84 Outside Services-Other Services	10.7	10.4		0.4	10.5	10.5
215.0	250.7	245.2	309.7	TOTAL EXPENSES BEFORE OH & BOD	444.5	429.9	460.8	284.6	515.6	515.6
(209.9)	(248.3)	(216.2)	(307.2)	SURPLUS (DEFICIT) before OH & BOD	(430.0)	(419.9)	(456.0)	(279.6)	(510.5)	(510.5)
52.0	67.2	63.1	86.2	91 Allocation of Overhead & BOD	130.2	132.3	141.8	97.1	153.1	153.1
266.9	317.9	308.2	395.9	TOTAL EXPENSES including OH & BOD	574.8	562.2	602.6	381.8	668.7	668.7
(261.9)	(315.5)	(279.2)	(393.4)	SURPLUS (DEFICIT) after OH & BOD	(560.3)	(552.2)	(597.8)	(376.7)	(663.6)	(663.6)

Most of SA’s budget, other than membership dues (\$25 for students, \$15 for DC), are expenses. We are not asking for additional funding beyond our normal amounts for next year but are recommending that Student Activities Centralized Training (\$12k budgeted for FY2022 under code 6433-2-207) continue to run virtually rather than in person at the Annual Meeting.

Some of the larger line items are outlined below:

- Promotion: ASHRAE logo items we provide to student members, branches, SBAs, and SA Chairs to promote student membership
- Meetings & Seminars: Student Program at Winter Conference and Centralized Training at Annual Meeting
- Functions & Tours: Student Program at Winter Conference
- Stationery/Broch/Forms/Other: ASHRAE flyers and brochures to promote student membership throughout the year and at the Student Program
- Dues & Subscriptions: ABET dues

Attachment C: PAOE Recommendations

- The committee will add points for using Student Activities STEM KIT materials for classrooms visits including the new children's book.
- The committee will move the DEI points to the Presidential initiative section.
- No other additions or deletions are recommended.

Attachment D: Student Program Brochure



What is the SmartStart Program?
Simply put, it's the best way for ASHRAE Student members to receive the many benefits of Associate grade membership after finishing college. SmartStart is a 3-year program that allows Student members to transfer to Associate grade membership at a rate that is recent-graduate friendly.

Pricing
First Year: \$25
Second Year: \$85
Third Year: \$115

Why Transfer to Associate membership?

- Take advantage of the networking and professional development opportunities offered through Young Engineers in ASHRAE (YEA)
- Tremendous networking opportunities at the Chapter, Regional, and Society level
- Choice of one of the following: Upcoming edition of the ASHRAE Handbook (PDF), One ASHRAE Standard (PDF), or One eLearning Course
- ASHRAE Journal — this monthly resource is the most trusted technical magazine in the HVAC&R community
- High Performing Buildings — the quarterly magazine for innovation in building technology design and operation
- HVAC Industry News — a weekly news resource keeping ASHRAE members abreast of the latest industry news
- Access to more than 300 of the industry's leading technical publications
- Access to online education, webcasts and professional development opportunities

Please note that the SmartStart program is only for current ASHRAE Student members who have been a Student member for at least one year.



The ASHRAE 365 App

- EVERYDAY** – Year-round updates on all things ASHRAE.
- FLEXIBLE** – Accessible across all of your devices from mobile to desktop.
- ENGAGING** – Provides information about events, standards and guidelines, continuing education, industry jobs, and much more.



Download
ASHRAE 365 now in the App Store or Google Play



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Share your ASHRAE life with **#myashrae**. Whether you're at the meeting, out with friends, or home on the couch...snap a pic and show us your **#myashrae**.

Questions?
Email students@ashrae.org or check facebook.com/ashraestudents



STUDENT PROGRAM



2022 LAS VEGAS
in-person + virtual


2022 WINTER CONFERENCE
Jan 29-Feb 2 | AHR EXPO Jan 31-Feb 2

ashrae.org/2022winter

Saturday, January 29

STUDENT WELCOME | 1:00 PM – 3:00 PM
Caesars Palace, Palace III (E)

Hear welcoming remarks from ASHRAE President Mick Schwedler followed by a keynote from Kenneth Lane, two grant presentations and an awards ceremony.



Kenneth Lane is Principal Consultant Systems Integration at NV5. NV5 is a leading provider of compliance, technology, and engineering consulting solutions for public and private sector clients supporting infrastructure, utility, and building assets and systems. Prior to working for NV5, Ken founded Trinity Advising Group, LLC. He has been responsible in assisting others in growing and maintaining an industry presence in Nevada, California and international locations.

Ken's broad knowledge of mechanical and control systems originated in the United States Navy on nuclear submarines. This knowledge and experience enable him to deliver superb controls system, construction specifications, sequence design, energy analysis and modeling, commissioning, measurement & verification, as well as construction management through owner's representative services.


Ken leverages his nearly 30 years of experience in the building automation, energy analytics & system integration services industry to maximize savings, engineering and operations for clients.

Grant Presentation 1: Development of a Residential-Scale Compressor Load Stand to Support Compressor Research, Oklahoma State University

Grant Presentation 2: Air Conditioner Cum Air Sterilizer for Combined Application of Air Heating and Cooling, Maharaja Agrasen Institute of Technology

PLENARY SESSION | 3:15 – 5:30 PM
Caesars Palace, Palace I/II (E)

The Plenary will feature a keynote from record-breaking polar explorer, Ann Daniels. The Plenary Session also features presentations from the Honors and Awards programs, including the First Place winners of the Student Design Competition.




YEA/TC MIXER | 5:00 – 6:30 PM
Caesars Palace, Palace III (E)

Learn more about ASHRAE Grassroots Committees and mix and mingle with Young Engineers in ASHRAE (YEA) members while competing in a poker run activity. Prizes will be available along with free food & drinks.

WELCOME PARTY | 6:30 – 8:30 PM
Caesars Palace Garden of the Gods Pool Oasis (\$70 ticket)

Students are encouraged to attend.



Sunday, January 30

STUDENT PROGRAM | 10:00AM - 2:00PM
Caesars Palace, Palace III (E)

10:00am – 12:00pm

12:00pm – 1:00pm

1:00pm – 2:00pm

Career Panel
Learn about what jobs may await with a career related to ASHRAE! This is an open forum for you to ask questions to professionals spanning multiple industry sectors.

Lunch & Roundtable Discussions

Group Activity

RECOMMENDED TECHNICAL SESSIONS

Sunday January 30

8:00 AM – 9:00 AM
Seminar 3: How to Talk to Your Clients and Friends about Climate Change, Climate Zones and Codes (Intermediate)

9:45 AM – 10:45 AM
Seminar 7: Introduction of Building Decarbonization (Basic) OR

Seminar 6: High Performance Design for Mega Airport Terminals (Intermediate)

11:00 AM – 12:30 PM
Seminar 10: Building-Integrated Indoor Air Quality Sensors (Intermediate)

1:30 PM – 3:30 PM
Seminar 14: Smart Thermostats, Energy Savings and Cooling Equipment Cycling (Basic)

Monday January 31

9:45 AM - 10:45 AM
Forum 2: Diversity, Equity, Inclusion and ASHRAE: Does It Really Matter?

9:45 AM - 10:45 AM
Seminar 19: ASHRAE Conference Crash Course

11:00 AM - 12:00 PM
Seminar 22: Infection Control in Commercial Spaces

Tuesday February 1

8:00 AM - 9:30 AM
Panel 1: In Real Time: Charting the Pathway for Existing Buildings to get to Carbon Neutrality

9:45 AM - 10:45 AM
Paper Session 16: How the Use of Smart "Self-Learning" Controls Can Enhance the Building Efficiency


9:45 AM - 10:45 AM
Paper Session 17: Water-Energy Nexus Both in Central and District Systems

Wednesday February 2

9:45 AM - 10:45 AM
Forum 4: The Future of Thermally Driven Heat Pumping and Cooling in the Age of Decarbonization

11:00 AM - 12:30 PM
Seminar 42: (Intermediate) Humidifiers for Health and Comfort: Installation and Use Considerations

11:00 AM - 12:30 PM
Seminar 44: (Intermediate) Upgrading Existing Building Control Systems for High Performance Operation



Scan the QR code to answer a short survey