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Contact Information

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Message from the Chair

January has come and gone and it's February already. Our January presentation on compressed air systems, including compressors and air-dryers presented by Taylor Quackenbush, Regional Director for Kaeser Compressors, was fantastic and informative. We also had two guests from the local Kaeser representative Len Horne and Jason Acker, of Elevated Industrial, who also contributed to the discussion. I'd like to thank all 3 for their contribution to a successful meeting. Our dinner from the Lazy Chicken was very good and a nice change of pace. Thanks to Devon Clymer for taking care of that for us.

One of the truly cool things about chemical engineering is it more broadly applicable than the other engineering disciplines. Being built on chemistry, physics, and math give it an unusual flexibility. In fact, when I graduated, several of my peers went on to medical schools who preferred the broad applied thinking that the chemical engineering curriculum provided. As the years have gone by, I've come to appreciate the incredible chemical plant that is the human body. We are full of semi-permeable membranes, we use trace amounts of materials as catalysts, we maintain a critical electrolyte balances, generate our own hormones, reproduce ourselves, and on and on. We do all this without having to think about it. Working in the life sciences arena has given me a much greater appreciation of what chemical engineering can contribute to maintaining healthy functioning human bodies. If you've watched any TV, you have doubtlessly seen the new sensor for diabetic patients who can continuously monitor their glucose through their cell phone. That remarkable technology wouldn't exist without chemical engineering skills.

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Our speaker, Dr. Adam Melvin of Clemson University works in the frontier of this type of technology. The focus of his research group is developing new bioanalytical techniques, including microfluidic devices, to study drug resistance in multiple myeloma and creating better preclinical models to study metastasis in breast cancer. It's always easier to defeat an enemy such as cancer if you can understand the fundamentals of how it works to find its vulnerability to attack. I look forward to hearing his talk. We will be meeting at Earle Hall on the campus of Clemson University with the student section for this meeting. I know it's further than normal, but if you can make the extra effort to come in person, we'd be delighted to see you. Come meet Dr. Melvin in person along with Dr. Norfolk who has helped us a great deal over the last few years and take the time to meet the students and encourage them in their professional pursuits.

Bill Thompson, Chair, WSC AIChE

NEXT MEETING - February 13, 2024

Engineering Preclinical Tumor Models to Study Cancer Drug Resistance and Metastatic Spread

The scope of the talk is a summary of the ongoing research in Dr. Melvin's lab to develop new, enabling technologies to study the complexities associated with cancer, the tumor microenvironment, and metastasis. A focal point of the technology is the use of microfluidic devices, a microscale approach operating in the laminar flow regime that allows the user precise spatial and temporal control of the cellular environment.

Meeting Information

TITLE:	Engineering Preclinical Tumor Models to Study Cancer Drug Resistance and Metastatic Spread By Dr. Adam Melvin
DATE:	Tuesday, February 13th, 2024
Event timing:	6:30 PM Dinner 7:00 PM Presentation
LOCATION (in-person event):	Earle Hall S Palmetto Blvd, Clemson SC, 29631
LOCATION (virtual event):	Zoom Connect via link on the WSC AIChE Website
COST	No Charge for Dinner
RSVP by 2/11/24	RSVP HERE if you plan to join us for Dinner

RSVP [\[HERE\]](#) - by February 13th if you plan to join us for dinner.

2024 WSC AIChE Clemson Scholarship Application

We received a number of applications for this year's WSC AIChE Clemson Scholarship award.

The two winners will be announced at February's meeting at Earle Hall in Clemson. Come out and celebrate these spectacular students and the future of Chemical Engineering!

Opportunities to Assist

We welcome your participation on any level in this organization. Please reach out to Devon Clymer, sec@wscaiche.org, if you have any feedback on any of the following:

- You or someone you know would like to give a technical presentation at an upcoming meeting.
 - Provide meeting topic or location recommendations to the leadership team.
 - Provide recommendation or access for a plant tour (usually in the spring).
 - You have interest in joining our Officers or Executive Committee.
 - Any general question or comments on meeting times, locations, and topics
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2023-2024 Officers and Executive Committee

POSITION	NAME	COMPANY	E-MAIL
Chair	Bill Thompson	Ortec	bthompson@ortecinc.com chair@wscaiche.org
Vice-Chair	James Young	Fluor	James.H.Young@fluor.com vchair@wscaiche.org
Secretary	Devon Clymer	Jacobs	Devon.clymer@jacobs.com sec@wscaiche.org
Treasurer	Kevin Pait		kipait100@gmail.com treasurer@wscaiche.org
Former Chair	Conny Walker	Independent	connyw@earthlink.net
Newsletter	(open)		
Webmaster	(open)		
Historian	(open)		
	Karl McCaleb		kmccaleb2@bellsouth.net

POSITION	NAME	COMPANY	E-MAIL
Executive Committee	Donald P Gurney, Jr., ScD, P.E.	Consultant	degurney@charter.net
	Anil Wagle	Retired	Anilwagle123@gmail.com
	Anastase (Tasso) Ghionis	Omega Chemicals	

2023-2024 Calendar of Events

DATE	LOCATION	TOPIC
October 11, 2023	Clemson	Tolling Manufacturing
November 2023	Spartanburg Community College	Complexes with M-M bonds. Joint meeting with ACS
December 13 th 2023	Think Tank Brew Lab	WSCAICHe Holiday Social
January 7, 2024	Jacobs Office	Compressed Air Systems
February 13, 2024	Clemson	Engineering Preclinical Tumor Models to Study Cancer Drug Resistance and Metastatic Spread Clemson professor
March 12, 2024	Jacobs office	TBD
April 2024	TBD	Plant Tour
May 2024	TBD	WSCAICHe May Social
