

Franklin County Chapter

A chapter chartered by the Ohio Society of Professional Engineers.

P.O. Box 69 Reynoldsburg, OH 43068-0069 Vol. 80 No. 1



President's Message Baba Yahaya, P.E. – FCC President

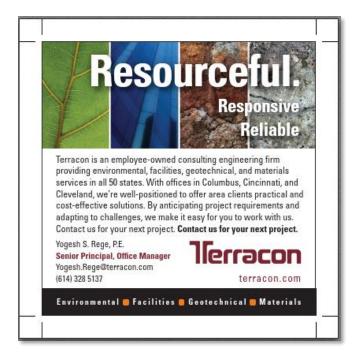
FCC-OSPE 2021-2022 fiscal year began July 1, 2021. Due to the challenges of our time, the newly

elected chapter officers and trustees were formally installed at the virtual Officer Installation and Awards ceremony held via Zoom on July 14, 2021. I am honored to serve as President of the Chapter for this fiscal year, along with a team of selfless Board Members who have been dedicating their time to the organization for several years and continue to do so. Chapter Award recipients for Outstanding Engineering Student (Trevor Gerstner, EI), Outstanding Engineering Educator (Dr.Jieun Hur, PhD), Meritorious Service (Ben Brown, PE), and Professional Engineering Management (Yogesh Rege, PE) were presented their awards at the ceremony. I was delighted at the fact that our Chapter award recipients this year also won the State level awards by OSPE.

In August the Board passed the budget for 2021-2022 fiscal year. We continue to plan for activities including engagement with the OSU Student Chapter, continuing professional development (CPD) hour programs, MATHCOUNTS, Imagine Engineering, Science Day, and Engineers Week among others. We are seeking speakers to present at our CPD programs. I would like to request our Engineering Professionals to consider volunteering for these programs.

Our FCC Corporate Sponsorship Program remains valuable and we continue to solicit corporate sponsors to help defray the cost associated with many of our activities. Sincere thanks to our corporate sponsors for your continued support of our Chapter from year to year. Once again, please consider a level of sponsorship to help us achieve another successful year.

I look forward to having another successful year with you and FCC-OSPE.



OSPE-FCC September Virtual Program

Date: Thursday, September 16, 2021 **Location:** Zoom Meeting, 12:00pm -1:00pm **Registration** – Registration closes at 5:00 pm, September 14, 2021

Visit <u>www.fccospe.org</u> to register on online. Be sure to include your membership number.

Continued Page 2

Program – continued

After registration is closed and prior to the presentation a **Zoom** link will be sent to the registrants.

Cost: Cost \$10.00, Members of NSPE and members OSPE/FCC are free.

Title: "<u>Strategies for Learning through the</u> <u>Deployment of New Grid Technologies"</u>

Abstract: Over the last several years, AEP has been able to implement multiple processes and procedures for vetting new technology for deployment on our transmission and distribution grids. These processes have led to structured implementation, established methods of collecting lessons learned, and translating value from cross-functional engineering teams. This presentation will cover an overview of these methods as well as several key technologies that have been implemented to bring value and/or added reliability to our customers.



Biography: James Wolf is the Advanced Technology Planning & Analysis (ATPA) Team Manager in the Grid Solutions department at American Electric Power (AEP). The role of James and ATPA within AEP Grid Solutions and Energy Delivery is to provide a strategic, transparent, and

unified direction for the pursuit of new technology and research while focusing on efficient and accountable implementation. James' team is currently executing AEP Project Cortex, an effort to shape the Digital Substation of the Future with breakthrough technology that focuses on maximizing the value of sampled real-time data captured and processed at a substation.

James has over a decade of engineering experiences including substation design, commercial consulting for building design and construction, and product manufacturing. Prior to joining the ATPA team, James has been a member of AEP Transmission Protection and Controls team in both design and leadership roles. James has a BS in Electrical and Computer Engineering from The Ohio State University and an MBA from Ohio Dominican University. James is also a registered professional engineer (PE) in the State of Ohio.



Biography: Morgan Love is an Engineer on the Advanced Technology Planning & Analysis (ATPA) Team in the Grid Solutions department at American Electric Power (AEP). The ATPA team provides a strategic, transparent, and

unified direction for the pursuit of new technology and research while focusing on efficient and accountable implementation. Morgan's role on the ATPA team is to coordinate and facilitate the completion and documentation of technology pilots.

Morgan has over five years of engineering experience working as both a supervisor and systems engineer in the food manufacturing industry for General Mills and, prior to her current role, a continuous improvement project manager at AEP.

Morgan has a BS in Industrial and Systems Engineering from The Russ College of Engineering at The Ohio University. Morgan is a Lean Six Sigma Green Belt and an experienced process improvement practitioner with a passion for continuous improvement.

A certificate for 1 hour of Professional Development for attending the program will be emailed to you.



B B Co tel

IBI GROUP 8101 North High Street Columbus OH 43235 tel 614 818 4900 fax 614 818 4901 ibigroup.com

Daniel J. Lauletta CFP, LUTCF, CLU, ChFC, AEP Financial Planner | Legacy Planning Team office 440.857.3042 cell 440.319.0739 dlauletta@financialguide.com 2012 W. 25th Street, Suite 900

Cleveland OH | 44113

Revised Engineers' Creed -Approved

At the July 11, 2021 NSPE Board Meeting the Board approved the Engineers' Creed. Shown below is the revised Creed.

Engineers' Creed (2021)

As a Professional Engineer, I dedicate my professional knowledge to the advancement and betterment of public health, safety, and welfare.

I pledge:

To give the utmost of performance;

To participate in none but honest enterprise;

To live and work according to the highest standards of professional conduct;

To place service before profit, the honor and standing of my profession before personal advantage, and the public welfare above all other considerations.

In humility, I make this pledge.



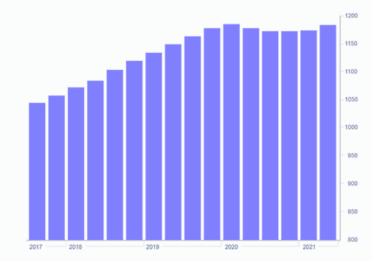


August 2021 FCC OSPE Construction Report

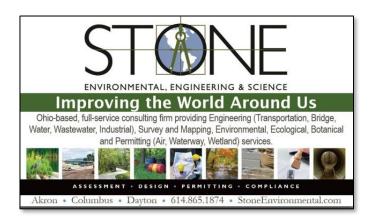
Since the pandemic hit, it has felt like one thing after another has affected the Construction industry. When the COVID-19 pandemic hit the U.S., the engineering and construction industry lost \$60.9 billion in GDP, and total jobs decreased to roughly 6.5 million, effectively wiping out two years of GDP gains and four years of job gains in months

Since then, construction spending has been gradually recovering. While spending and projects have both been increasing, Turner Construction recently noted that costs have been increasing as well. TurnerConstruction.com indicates that "Second Quarter 2021 Turner Building Cost Index—which measures costs in the non-residential building construction market in the United States—had increased to the value of 1187. This represents a 1.28% quarterly increase from the First Quarter 2021 and a 0.85% yearly increase from the Second Quarter 2020."

Their graph, below, tells the story:



Continued Page 4



Construction Report - continued

They further note "An increase in demand for construction services combined with pandemic related supply chain disruptions led to a spike in construction costs for material including lumber, steel, copper, aluminum, PVC, and gypsum." This was exacerbated by shortages in labors, causing contractors and subcontractors to struggle with production and schedules.

In-spite-of this, the U.S. construction industry is projected to grow 15.6% in 2021, according the National Mortgage Professional. In fact, the Franklin County market shows a number of new projects. Columbus Business First's Crane Watch shows new industrial space coming to new Albany, Homeport, Thrive Co, at Crandview Crossing, and VanTrust moving forward with projects, Groveport beginning a \$7.6 million mixed-use project, Edwards planning a 15 story downtown tower with a rooftop pool and bar, Nationwide Children's planning a Surgery center addition, and OhioHealth adding an outpatient campus near New Albany.



We are engineers. We are scientists. We are designers. S&ME has the versatility you need and the experience that matters.

Transportation // Energy // Water // Planning + Design Geotechnical // Environmental // Construction Services

> 6190 Enterprise Court, Dublin, OH 43019 Columbus | Cincinnati | Cleveland www.smeinc.com

Celebrating Women Empowerment in Engineering Technologies



For two years, Lauryn A. Stauffer has seen only male faces in her electronics classes at Pennsylvania College of Technology. This fall, she'll at least see multiple women

leaders within the School of Engineering Technologies, who boasts three female assistant deans.

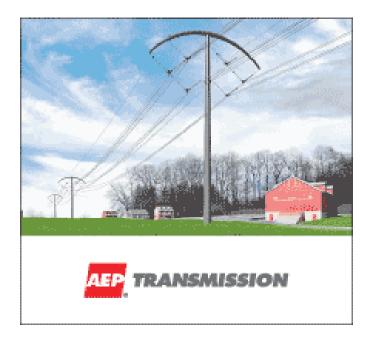
Kathleen D. Chesmel and Ellyn A. Lester were hired in late spring to head the Materials Science and Engineering Technologies Division and the Construction and Architectural Technologies Division, respectively.

They join longtime college employee Stacey C. Hampton, who is assistant dean of industrial and computer technologies.

"It's hard transitioning into male-dominated fields," she said. "My first year, I felt lost because basically all the guys in class didn't want anything to do with me. Mr. (Ken J.) Kinley and Mr. (Randall L.) Moser (assistant professors of electronics and computer engineering technologies) were great, but it wasn't until this past year when the guys started to realize I don't bite.

"I didn't have any female mentors, and they (the assistant deans) will be a great resource. I can go to them for advice or just to talk. Honestly, it means a lot."

Continued Page 5



Women Empowerment – continued

"STEM careers provide an incredible opportunity to be at the forefront of changes in technology, changes in advancements and changes in ways to improve our lives... These careers have layers of opportunities," explained Davie Jane Gilmour, Penn College president.

"Having three women in leadership roles for engineering technologies speaks well for Penn College because they bring diverse backgrounds and interesting perspectives for prospective and existing students," she added.

"When I started, I knew engineering in my head but didn't know all the intricacies behind it and the creative career possibilities. I wish I knew that when I was a young student because I might have gone into plastics or some other technical field," she said.

"When you can bring people together with various expertise and perspectives and work together for the common good, it's amazing," Lester said.

During the 2020-21 academic year, the student population in the divisions represented by the three assistant deans was about 91% male. "Traditionally, STEM fields have not had a lot of women role models. Now we have three female assistant deans in engineering who can show young women coming into our programs that STEM is a possibility for them. It's like,

'She did it; so can I,' "said Bradley M. Webb, dean of engineering technologies

"For sure, I'm going to tell them (students) that we have three assistant deans for engineering who are female," Stauffer said. "I'm very Penn College proud about that!" (Excerpted from NSPE DAILY DESIGNS, August 27, 2021)



FAA Investigates Safety Culture at Boeing After Complaints From Engineers Raise

A small group of Boeing engineers who perform key safety tasks are raising concerns about their ability to work free of pressure from supervisors, and their comments are prompting federal regulators to take a broader look into the company's safety culture.

The employees are deputized to approve safety assessments and handle other jobs for the Federal Aviation Administration, making their independence from company pressure critical.

According to an FAA letter, one of the employees said, "I had to have a sit down with a manager and explain why I can't approve something." The worker indicated that the company shopped around for another employee in the engineering unit.

Continued Page 6

5

FAA – continued

Another employee reported consternation by managers when engineers find fault in designs of components because that can cause delays in delivering airplanes.

The FAA's initial investigation ran from May until July. An FAA official described it in an August 19 letter to Boeing's leader of safety and aircraft certification. The Associated Press obtained a copy of the letter, which was first reported by The Wall Street Journal on Tuesday.

"We take these matters with the utmost seriousness, and are continuously working to improve the processes we have in place to ensure the independence" of employees who work on behalf of the FAA, said Boeing spokeswoman Jessica Kowal. She said those employees "must be accorded the same respect and deference that is shown" to FAA personnel.

"Environment does not support independence"

The FAA surveyed 32 of the roughly 1,400 Boeing employees who are deputized to work on the FAA's behalf. Of those surveyed, one-third raised concerns. The FAA said in the letter to Chicago-based Boeing that it will follow up by surveying all employees in the unit.

The FAA examination raises further questions about a longstanding practice of relying on employees of aircraft manufacturers to perform safety-related work, including analysis of critical aircraft systems. The policy is supposed to take advantage of the employees' specialized knowledge, and the companies are supposed to give those workers authority to perform the safety-related functions without interference.

However, findings from Boeing "indicate the environment does not support independence" of the employees, Ian Won, an FAA official who helps oversee Boeing, wrote in the letter to the company. The FAA's policy of relying on safety assessments by industry employees, called organization designation authorization, came under intense scrutiny after two deadly crashes involving the Boeing 737 Max. Investigations determined that key people at the FAA were largely unaware of an automated flight-control system that played a role in the crashes.

(Excerpted from NSPE DAILY DESIGNS, August 25, 2021)

PROUDLY DISPLAY YOU ARE A PROFESSIONAL ENGINEER

Frame your license plate with a black frame and raised white letters. The frames are ideal gift for newly licensed Professional Engineers, or for a spouse, an associate, friend, son or daughter who is a Professional



Engineer. This is also a great way to recognize the new Professional Engineer in your organization by presenting them with a Professional Engineer License Plate Frame.

These frames are available through the Franklin County Chapter of the Ohio Society of Professional Engineers, web site: <u>www.fccospe.org/store/</u>, Each frame requires a 55.00 donation plus Shipping and Handling.

Have A Very Safe and Happy Labor Day!



Ohio Society of Professional Engineers FRANKLIN COUNTY CHAPTER presents

GOLUMB



Huntington Park 330 Huntington Park Lane, Columbus, OH 43215

No ticket fee required. The Franklin County Chapter will cover the fee for the ticket. RSVP is requested (ddoherty@cecinc.com).

7





FRANKLIN COUNTY CHAPTER OHIO SOCIETY OF

PROFESSIONAL ENGINEERS

2021-2022 CALENDAR

DATE	TIME	DESCRIPTION			
Aug. 31	10:00 a.m.	Deadline for September Columbus Engineer			
Sept. 14	12:00 p.m.	FCC Board Meeting @ CEC, Inc. and Virtual			
Sept. 16	12:00 p.m.	Program: Strategies for Learning Through the Deployment of New Grid			
		Technologies, Presenters: James Wolf, Morgan Love (Virtual)			
Oct. 8	5:00 p.m.	Deadline for October Columbus Engineer			
Oct. 12	12:00 p.m.	FCC Board Meeting @ CEC, Inc. and Virtual			
Oct. 21	12:00 p.m.	Program: TBD (Virtual)			
Nov. 4-5		EFO Fall CPD Conference			
Nov. 8	5:00 p.m.	Deadline for November Columbus Engineer			
Nov. 9	12:00 p.m.	FCC Board Meeting @ CEC, Inc. and Virtual			
Nov. 18	12:00 p.m.	Program: TBD (Virtual)			
Dec. 6	5:00 p.m.	Deadline for December Columbus Engineer			
Dec. 14	12:00 p.m.	FCC Board Meeting @ CEC, Inc. and Virtual			
Dec. 16	12:00 p.m.	Program: TBD (Virtual)			
Jan. 10	5:00 p.m.	Deadline for January Columbus Engineer			
Jan. 11	12:00 p.m.	FCC Board Meeting @ CEC, Inc. and Virtual			
Jan. 20	12:00 p.m.	Program: TBD (Virtual)			
Feb. TBD	8:00 a.m.	Regional MathCounts Competition @ CSCC			
Feb. 14	5:00 p.m.	Deadline for February Columbus Engineer			
Feb. 15	12:00 p.m.	FCC Board Meeting @ CEC, Inc. and Virtual			
Feb. 24	11:30 a.m.	Program: E-Week Luncheon			
Feb. 23	8:00 a.m. – 3:00 p.m.	Engineer for a Day Program			
Mar. 2	5:00 p.m.	Deadline for March Columbus Engineer			
Mar. TBD	8:15 a.m. – 4:00 p.m.	Ohio MathCounts Competition (OSPE, see www.ohioengineer.com)			
Mar. 8	12:00 p.m.	FCC Board Meeting @ CEC, Inc. and Virtual			
Mar. 17	12:00 p.m.	Program: TBD (Virtual)			
Mar. TBD		District Science Day @ CSCC			
Apr. 7	5:00 p.m.	Deadline for April Columbus Engineer			
Apr. 11	12:00 p.m.	FCC Board Meeting @ CEC, Inc. and Virtual			
Apr. 21	12:00 p.m.	Program: TBD (Possible Virtual)			
May 5	12:00 p.m.	Deadline for May Columbus Engineer			
May 10	12:00 p.m.	FCC Board Meeting @ CEC, Inc. and Virtual			
May 19	6:30 p.m.	Chapter Officer Installation & Awards Dinner			
May 30	12:00 p.m.	Deadline for June Columbus Engineer			
June 14	12:00 p.m.	FCC Board Meeting @ CEC, Inc. and Virtual			
June 16	12:00 p.m.	Program: TBD (Possible Virtual)			
July TBD	(TBA)	FCC Budget Meeting - Location to be announced			

Civil & Environmental Consultants, Inc. Address: 250 Old Wilson Bridge Road, Suite 250, Worthington, Ohio 43085

WHERE DO I GET MORE INFORMATION?

FCC-OSPE President E-mail & Phone: FCC-OSPE WEBSITE OSPE WEBSITE: NSPE WEBSITE:	baba.yahaya2@terracon.com www.fccospe.org www.ohioengineer.com www.nspe.org	(614) 328-5209
To volunteer to help with MATHCOUNTS:	benjamin_brown68@yahoo.com	(614) 519-8978
To volunteer to help with Science Day:	yogesh.rege@terracon.com	(614) 863-3113
To volunteer to help with OSU Student Chapter:	mccarthy.226@osu.edu	(614) 247-1561
To volunteer to help with Imagine Engineering:	devonseal1@gmail.com	(614) 208-6986
FCC Luncheons / Programs:	ddoherty@cecinc.com	(614) 359-6321
New Members / Membership Application	www.nspe.org or www.ohioengineer.com	(614) 223-1144



NSPE-OH

2021-2022 OFFICERS, **TRUSTEES & COMMITTEE CHAIRS**

	Name	Phone # (w) or (h)	Cell Phone #	E-mail Address
President	Baba Yahaya, PE	614-328-5209 (w)	614-517-7864 (cell)	Baba.Yahaya2@terracon.com
lice President	Mehrdad Rowhani, PE	614-328-1197 (w)	773-517-1036 (cell)	Mehrdad.Rowhani@terracon.com
hapter Secretary	Nathan Abele, PE	614-793-2226 (w)	614-746-7243 (cell)	Nabele@smeinc.com
reasurer	Steve Day, PE	614-876-7525 (w)	614-531-2858 (cell)	Iday1@columbus.rr.com
ast President	Dustin Doherty, PE, CPESC	614-310-2075 (w)	614-359-9321 (cell)	ddoherty@cecinc.com
dminstrative Assistant	Dawn Morrison	614-328-5148 (w)	614-313-3814 (cell)	dawn.morrison@terracon.com
NE	V FCC-OSPE Website			www.fccospe.org
SPE Executive Director	Tim Schaffer	614-223-1144 (w)		exec@ohioengineer.com
DSPE/EFO Staff	Pam McClure (ret., part-time)	614-223-1144 (w-OSPE)		admin@ohioengineer.com
	Holly Ross	614-223-1177 (w-EFO)		pr@ohioengineer.com
	TRUSTEE/COMMITTEE	CULAIDDEDSON		Г МАЦ
VICE-PRESIDENT	TRUSTEE/COMMITTEE	CHAIRPERSON Mehrdad Rowhani, PE	TELEPHONE 614-328-1197 (w)	E-MAIL Mehrdad.Rowhani@terracon.com
			773-517-1036 (cell)	Merindad. Kownani@terracon.com
	Programs/CPD/Activity	Dustin Doherty, PE,	614-310-2075 (w)	ddoherty@cecinc.com
		CPESC	614-359-6321 (cell)	
	Membership	Dustin Doherty, PE,	614-310-2075 (w)	ddoherty@cecinc.com
		CPESC	614-359-6321 (cell)	
	Young Engineer Trustee	Colleen Konsavage, PE	614-758-3048 (cell)	Ckonsav1@gmail.com
	Retired Engineers Trustee	Steve Smith, PE	614-328-1192 (w)	Steve.Smith2@terracon.com
			740-683-2180	
	PEHE Trustee	Tim McCarthy, PE		mccarthy.226@osu.edu
			614-670-1175 (cell)	1100011117.220 @ 030.600
	OSU - Student Chapter Liason	Tim McCarthy, PE		mccarthy.226@osu.edu
	CCC Cludent Chapter Elason		614-670-1175 (cell)	
ogesh Rege, PE	Vice-President	Yogesh Rege, PE	614-328-5137 (w)	yogesh.rege@terracon.com
ogesiintege, i L			304-951-7874 (cell)	yogeshilege@terracon.com
	Science Day (District)	Yogesh Rege, PE	614-328-5137 (w)	yogesh.rege@terracon.com
			304-951-7874 (cell)	yogeshirege eterracon.com
	Scholarship	Joe Sullivan, PE	614-486-4383 (w)	joe.sullivan@stantec.com
			614-561-5447 (cell)	Joe. Sunvarie Stantee. com
	Columbus Engineer - Editor	Howard Jones, PE		hrjones63@yahoo.com
			614-209-3289 (cell)	
	Engineers Week	CR Weaver, PE	614-645-7100 (w)	CRWeaver@columbus.gov
			014-040-7 100 (W)	<u>Citweaver@coldinbd3.gov</u>
	Engineer For A Day	Charles Ohrstedt, PE	614-937-1512 (cell)	mohrstedt@sbcglobal.net
				monisted & socyobal.net
	PEG Trustee	CR Weaver, PE	614-645-7100 (w)	CRWeaver@columbus.gov
			014 040 7 100 (W)	
. Rao Chitikela, PE	Vice-President	S. Rao Chitikela, PE		srao.chitikela@amail.com
		0. Rao Onitikela, 1 E	412-310-9452 (cell)	Srad.crittikela es giriali.com
	MATHCOUNTS Chair	Ben Brown. PE	614-818-4900 (w)	ben.brown@ibigroup.com
			614-519-8978 (cell)	
	Awards/Citations	Tina Sutermeister, PE		tlsuterm@embargmail.com
			614-537-7660 (cell)	
	Legislative	Steve Day, PE	614-876-7525 (w)	Iday1@columbus.rr.com
			614-531-2858 (cell)	
	PEI Trustee	Richard Smelker, PE	614-933-2236 (w)	rdsmelker@aep.com
	EFO Liaison	Steve Day, PE	614-876-7525 (w)	Iday1@columbus.rr.com
			614-531-2858 (cell)	
	Chapter Directory	Baba Yahaya, PE	614-328-5209 (w)	Baba.Yahaya2@terracon.com
			614-517-7864 (cell)	
olleen Konsavage, PE	Vice-President	Colleen Konsavage, PE	614-758-3048 (cell)	Ckonsav1@gmail.com
ee.in Konourugo, r E				
	Imagine Engineering Contest	Devon Seal, PE		devonseal1@gmail.com
			614-208-6986 (cell)	
	Auxiliary Trustee	Barbara Fuller	614-880-9221 (h)	bfuller@columbus.rr.com
	OSPE Director	Tina Sutermeister, PE	740-964-0828 (h)	tlsuterm@embargmail.com
			614-537-7660 (cell)	
	Constitution & By-Laws	Devon Seal, PE		devonseal1@gmail.com
			614-208-6986 (cell)	
	PEPP Trustee	Greg Nortz, PE		gregnortz@otiscoengineering.com
			614-790-0029 (cell)	grognonz e onscoengineering.com
	PEPP Trustee	Nathan Abele, PE	614-793-2226 (w)	Nabele@smeinc.com
			614-746-7243 (cell)	
		Kon Coodeen DE		
	PEC Trustee	Ken Goodson, PE	614-443-1178 (w)	kengoodson@hotmail.com



OHIO SOCIETY OF Pranklin County Chapter P.O. Box 69 Reynoldsburg, Ohio 43068

EIBST CLASS

