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NO. 8



APRIL 2015

# Columbus Engineer

Official Publication of the Franklin County Chapter of the Ohio and National Societies of Professional Engineers

## PRESIDENT'S MESSAGE

By Steven F. Wilson, PE, FCC President



Voting is a privilege that should never be taken lightly, and this month, Franklin County Chapter members have the opportunity and responsibility to elect

Chapter officers for the next year. Please take the time to vote.

One of the great benefits of FCC/OSPE membership is the availability to obtain CPD hours at a reasonable cost. April should present another such opportunity. Look for the announcement of an April event at the

(Presidents message continued on Page 2.)

## OSPE-FCC April Luncheon Program

**Date:** Thursday, April 16, 2015

**Place:** La Scala Restaurant  
4199 W. Dublin Granville Rd., Dublin

**Registration:** 11:30 am

**Lunch:** 11:50 am Speaker: 12:00 pm  
Closing Remarks: 1:00 pm

**Cost:** Members: \$20.00 & Non-Members: \$30.00.

**Registration:** Visit [fccospe.com](http://fccospe.com). Pay at door or online at ([www.fccospe.org](http://www.fccospe.org)). No access to computer contact JimArnold, 614-299-2133, to help with registration.

### Program: Oil and Gas Pipeline Corrosion

The research at the Institute for Corrosion and Multiphase Technology (ICMT) at Ohio University concentrates on internal corrosion. Internal corrosion is today's major problem in the oil and gas wells and transportation lines, where much of the oil and gas emerge with water, sand, and other impurities. Those impurities include carbon dioxide, hydrogen sulfide, and organic acids, and these, when mixed with water,

can cause corrosion of the steel wall and catastrophic failure. For more than two decades, researchers and students have worked side by side, sponsored by a consortium of the world's leading oil and gas, engineering and chemical companies, to come up with new ways to deal with the internal corrosion of wells and lines that carry crude oil and gas to the refineries, often across hundreds of miles of land and ocean floor.

Ohio University boasts the largest research facility of its kind in the world, and its expertise is sought from all corners of the globe. What is unique about the facility is its size and the number of large scale multiphase flow loops for studying corrosion under realistic conditions.

The Institute has seven such large systems as well as some smaller flow loops and a host of high pressure/high temperature autoclaves, which are ideal for long-term projects. This variety of equipment and broad expertise enables ICMT researchers to do deal with a wide variety of research requests that come from all corners of the world. The research work done by Ohio University provides sponsoring companies with knowledge that can help them design, build and operate

(Luncheon Program continued on Page 2)

(President's Message continued from Page 1.)

La Scala Restaurant in this issue of the Columbus Engineer.

Another successful MATHCOUNTS state-level competition was held on March 14. Thanks to all who contributed to this worthwhile endeavor.

A successful District Science Day was held on March 21st at Columbus State Community College. FCC/OSPE members judged 32 entries and awarded prizes as follows:

- 1st Place & \$150 to Aishwarya Murali for The Effect of Roughness of PPE Addition of BMP-2 on MC3T3-E1 Preosteoblast Cells;
- 2nd Place & \$100 to George Li for Ultrasound Motion Guiding System for the Visually Impaired;
- 3rd Place & \$50 to Harrison Pasquinilli for Sensing the Environment Which Sensor Helps the Robot Navigate the Environment most Efficiently.

Congratulations, winners!

This issue includes the three winners names and their drawings of the FCC Imagineering Engineering coloring contest.

State Science Day is yet to come on May 16. Please remember that many hands make light work, and this is opportunity to volunteer to assist with the judging.

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(Luncheon Program continued from Page 1.)

oil and gas lines with more confidence, particularly when it comes to remote and previously inaccessible locations that constantly present new challenges.

### Presenter: Professor Srdjan Netic, is Director of the Institute for Corrosion and Multiphase

Professor Netic has 27 years of experience. His education is multi-national. He earned his B.Sc. from University of Belgrade, Yugoslavia, in the Department of Mechanical Engineering. He earned his M.Sc. at University of Belgrade, Yugoslavia, also in the Department of Mechanical Engineering. His Ph.D. was awarded by the University of Saskatchewan, Canada, in the Department of Chemical Engineering.

Professor Netic has taught at the University of Queensland, Brisbane, Australia in ME, and part time at the University of Oslo, in Norway. He has been at the Ohio University since 2002.

A certificate for 1 hour of Professional Development for attending the program will be presented at the luncheon.

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## **RESULTS - 2015 FRANKLIN COUNTY MATHCOUNTS REGIONAL COMPETITION**

The 2015 Franklin County MATHCOUNTS Regional Competition was held on the scheduled date of 2/21/15 with 40 of the 49 schools participating. Due to the weather, 9 schools did not attend, and based on the Level 1 Weather Advisory in Central Ohio, the national rules required that we provide a separate contest for them. Competition B was held at Columbus State on 2/28/15 in several rooms on the 4<sup>th</sup> floor of Davidson Hall.

Both events are treated as separate competitions which means that Competition A is sending 5 teams and 10 individuals (not on a winning team), and Competition B is sending 1 team and 2 individuals (not on a winning team). Although the weather caused some unusual problems this year, we had nearly 90 volunteers brave the weather and make it a successful event. Thanks to everyone who helped out and the attached are the results of the competitions:

### **2015 Franklin County Chapter Regional MATHCOUNTS Competition "A"**

#### **Top Scoring Teams**

- 1st - Dublin Karrer
- 2nd - John Sells
- 3rd - Olentangy Shanahan
- 4th - New Albany
- 5th - Olentangy Hyatts

#### **Top Scoring Individuals (not on a winning team)**

- 1. Ved Sampath - Homeschool
- 2. Gordon Liu - McCord
- 3. Sounak Dey - Phoenix
- 4. Llwyatt Hofer - Olentangy Hyatts
- 5. Soham Konar - Worthingway
- 6. Adam Sorrels - St. Joseph
- 7. Ben Jin - Karrer
- 8. Alex Mitchell - Hilliard Heritage
- 9. Nathan Johnson - Homeschool
- 10. Brian Pang - Olentangy Liberty

The teams and individuals in this list above advance to the State Competition on 3/14/15

#### **Top Scoring Individuals**

- Ved Sampath - Homeschool
- Alex Wang - Karrer
- Gordon Liu - McCord
- Sean Yu - Karrer

#### **Countdown Round Winners**

- 1st - Soham Konar - Worthingway
- 2nd - Ved Sampath - Homeschool
- 3rd - Luke Xie - Karrer
- 4th - Lucas Huang - Karrer

### **2015 Franklin County Chapter Regional MATHCOUNTS Competition "B"**

- Granville Middle School (Top team)
- Aaron Marshall (Jackson MS)
- Russell Zhu (Jackson MS)

## Ohio Engineers Legislative Day

Ohio Engineers Legislative Day will take place on Wednesday, May 6th at the Capital Club/ DoubleTree Suites in downtown Columbus. Five hours of Continuing Professional Development will be available. Join your peers and visit your legislators following the program.

Find details and registration information on [www.ohioengineer.com](http://www.ohioengineer.com). Or call 614-223-1144 (1-800-654-9481 out of Columbus area) with your interest.




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## **Musings on FE**

by Paul F. Junk, PE, PS

Anybody who has traveled the road to a professional license has taken the national fundamentals of engineering exam. I would highly recommend the article in the March issue of PE our NSPE publication. The article describes how the exam has changed since it was started in 1965.

There are some of us who remember carrying in a large suit case full of text books and a slide rule to a large room filled with hundreds of fellow kindred spirits seeking the right to call ourselves professional engineers. The exam covered everything you were supposed to learn in school. All engineering disciplines took the same test. It was a fun way to kill eight hours and wait 8 weeks to see if you have to take it again in 6 months.

The new computer exam has changed the way the test is taken and used. The text books are found online. The examinee can sit down at the testing terminal and take the test almost anytime he wants and the test takes less time with fewer problems. The testing stations have video monitors to make them more secure. The testing is more specific to the type of engineering discipline. The results take only a week or two. This modernization does come at a price. The cost of the test is higher.

With all these changes, the percentages passing the exam are very close to number passing before the computerization. The exam does more than just determine if a person is qualified to be a professional engineer. It is used by educators to plan courses for the engineering students. The test has always been adjusted to get the best results. Please look for this article and many other articles that come in the PE magazine.

## **OSPE Spring CPD Conference and Annual Member Meeting!**

The OSPE Spring CPD Conference & Annual Member Meeting will take place on June 11-13, at the Holiday Inn Hotel & Suites Cincinnati-Eastgate. Southwest Ohio Chapter will be hosting this year's event. The theme for the conference is "Engineering Now: An Eye on the Professional."

There are many outstanding sessions for the engineers. There are a number of programs that will be available for the engineers' guests.

Make your plans to attend the conference. Any questions Call 614-223-1144 or 1-800-654-9481 (outside Columbus area).

### **FCC Auxiliary April Meeting**

The Auxiliary to the Franklin Co. Chapter of OSPE will meet at La Scala Restaurant, 1190 W. Dublin-Granville Rd., Dublin, on Tuesday, April 21, beginning with a noon luncheon of delicious Italian food served family style.

Karen Martens of The Wild Ones, a group that promotes the use of native plants, will give a slide presentation.

Jane Smith will give the invocation and lead the pledge of allegiance. Betty Cuniberti is to be hostess.

Guests and any interested prospective members are always welcome. To make a reservation, please call Jean Mitchell at 262-7071.

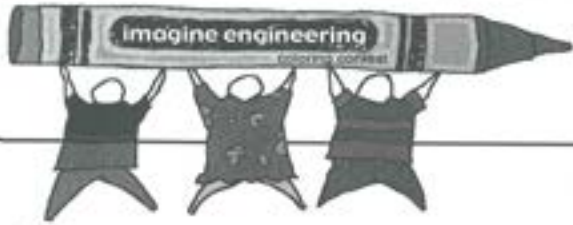
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## **Imagine Engineering Contest Winners**

Congratulations to our Imagine Engineering Contest winners, Addy Tracy from Carlisle Delaware in First Place, Kael Howard from Delaware Christian in Second Place, and Josh Gooden from Bishop Fenwick in Third Place for their excellent drawings of engineers at work. This year's contest was a huge success; we visited

almost 800 students at 15 schools across the Franklin County Chapter. See the winners drawings in this issue.

Thank you to all of the Imagine Engineering volunteers that visited the schools, without your energy and enthusiasm this program would not be possible.



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Directions:

- 1) Print your name, your school's name, and your teacher's name here
- 2) Think about what engineers do in your hometown.
- 3) Draw and color an original picture of engineers working.
- 4) Turn in your art to your teacher by the deadline announced in class.  
*Your teacher will need to return artwork to your Ohio Society of Professional Engineers' volunteer by his or her deadline.*
- 5) We will notify the state's top three winners.

Thanks for participating, and **HAVE FUN!**

Prizes:

The 1st, 2nd and 3rd place statewide winners will win:

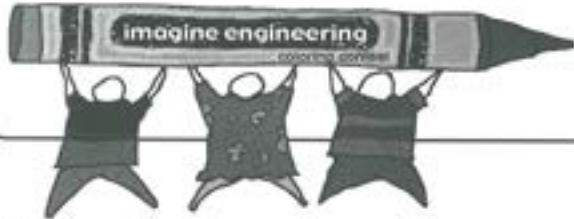
- 1st -- Telescope (\$200 value)
- 2nd -- Big Screen Microscope (\$60 value)
- 3rd -- MathShark Skill Game (\$40 value)

In addition, the 1st place winner will have his/her art and school photo published in *OhioENGINEER* magazine!

Name: addy ray  
School and City: Carlisle, Delaware  
Your Teacher's Name: Mrs. Ray

Top of Coloring





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Name: Kael Howard  
School and City: DELAWARE CHRISTIAN SCHOOL  
Your Teacher's Name: MRS. HEATHER BURGAN

Top of Coloring





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Name: Josh Goeden  
School and City: Bishop Fenwick  
Your Teacher's Name: M. Wolfel

Top of Coloring





**FRANKLIN COUNTY CHAPTER  
OHIO SOCIETY OF PROFESSIONAL ENGINEERS  
BALLOT FOR ELECTION OF OFFICERS  
2015 – 2016**

**2014-2015 Previously Elected Positions**

**President** – Paul Junk, PE, PS  
*Retired*

**Treasurer** – Steve Day, PE  
*Day Engineering, LLC*

The following Trustees are in the second year of a two-year term:

**PEC Trustee** – Bruce Larcomb, PE, PS  
*Fire & Building Consultant*

**Young Engineers Trustee** – Ryan Dolan, EI  
*American Electric Power*

**PEI Trustee** – Tina Sutermeister, PE  
*Alcatel - Lucent*

**Retired Engineers Trustee** – Ron Eifert, PE  
*Retired*

**PEG Trustee** – C.R. Weaver, PE  
*City of Columbus*

**BALLOT**

(Please Check or Write-In Selection)

**Vice-President/President-Elect (vote for 1)**

Kevin Ernst, PE  
*Terracon Consultants, Inc.*

**Vice-President (vote for up to 3)**

C.R. Weaver, PE  
*City of Columbus*

Tina Sutermeister, PE  
*Alcatel - Lucent*

Ben Brown, PE  
*Crawford Murphy & Tilly, Inc.*

**Chapter Secretary (vote for 1)**

Steve Wilson, PE  
*American Electric Power*

**Chapter Treasurer-elect (vote for 1)**

Steve Day, PE  
*Day Engineering, LLC*

**Trustees**

**(Vote for only those Practice Divisions that you belong – the term is two years unless otherwise noted)**

**PEPP Trustee**

\_\_\_\_\_  
Write-in candidate

**PEHE Trustee**

\_\_\_\_\_  
Write-in candidate

\_\_\_\_\_  
Write-in candidate

\_\_\_\_\_  
Position

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Attention: Joe Sullivan

Or Fax to: Joe Sullivan at 614-486-4387

Ballots must be postmarked by May 7, 2015



FIRST CLASS

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Franklin County Chapter  
P.O. Box 69  
Reynoldsburg, Ohio 43068

## 2015 CALENDAR

Apr. 14	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
Apr. 15	5:00 p.m.	Deadline for May Columbus Engineer
Apr. 16	Noon	Luncheon - <b>Oil and Gas Pipeline Corrosion</b> by <b>Srdjan Nestic,</b> <b>Chemical Engineer, OU</b>
May 12	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
May 16	5:00 p.m.	Deadline for June Columbus Engineer
May 21	12:00 p.m.	Officer Installation at La Scala
June 11-13		Annual Spring Leadership Conference
July (TBA)		FCC Budget Meeting Location to be announced

Korda Nemeth Address: 1650 Watermark Dr Ste 200, Columbus, OH 43215