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Section Elections

2027 Section Officers & Approval of Updated By-Laws Voting Instructions

This year the membership will be voting not only for section officers, but also for approval of updated section by-laws. The section's by-laws are reviewed every five years and changes made as required. The amended bylaws for the Richland Section include:

- Updates for consistency with the latest Governing Documents as administered by the ACS Committee on Constitution & Bylaws, such as terminology, membership categories, and Section Committee names.
- Making the Immediate Past-Chair an Officer (and voting member of the Executive Committee). This change is to provide contact information in the online directory to assist with continuity and make the duties of the Immediate Past-Chair very clear.
- Staggering the election cycles of the Secretary and Treasurer to assist with stability of the Executive Committee. The terms of both positions will be increased from one year to two years.

Anyone wishing to view the entire updated by-laws can find them at: <https://acsrichland.org/proposed-bylaws-for-2026>

Because under the new (proposed) by-laws the secretary and the treasurer will be elected in alternate years, this year's election for officers will just be for treasurer and chair-elect.

Voting will be conducted electronically. The ballot will be sent to the email address you provided to ACS in your "Yellow Book" member registration. You will receive an email with a link to a survey. Simply follow the link to see the ballot where you can vote for each position.

The voting process is very straightforward and will take about one minute. Note that the ballot has the option for write-in candidates, per our by-laws. **Voting will open on November 1, 2026 and close on November 15, 2026.** Any member who wishes to vote with a paper ballot may request one by contacting Steve Krogsrud at steve_krogs@hotmail.com



**BALLOTS DUE
NOVEMBER 15**

PLEASE VOTE

YOUR PARTICIPATION IS APPRECIATED!

ANNUAL MEMBER RECOGNITION SOCIAL

SAVE THE DATE! NOVEMBER 6, 6-8:30PM

RIVERVIEW ROOM / RICHLAND COMMUNITY CENTER 500 Amon Park Drive

Please join us for our Annual Member Recognition Social hosted by the ACS Richland Section on November 6th, 6 - 8:30 pm, at the Richland Community Center (500 Amon Park Drive) in the Riverview Room South. This is a casual event that will include a buffet dinner, wine and nonalcoholic beverages, posters from local Section students, and recognition of our 50-, 60-, and 70-year members. We will also have science trivia hosted by Geeks Who Drink, so bring your competitive spirit! We kindly ask our members to bring wine to share, as our Section is not permitted to purchase alcohol.

Please RSVP at the link below so we know about how many people to expect. We hope to see you on November 6!

https://docs.google.com/forms/d/e/1FAIpQLSegNw7PLbZGP2dmgDoXfpel81IskJs2n_zQZBN1v5EtfYGx5A/viewform?usp=publish-editor

PRESENTING THE 2027 SLATE OF CANDIDATES

CHAIR-ELECT *Jason Rakos*



Jason Rakos is a Post-Doc at Pacific Northwest National Laboratory (PNNL), where his research focuses on developing analytical techniques for real-time and in-line monitoring of complex chemical processes. Jason earned his bachelor's in chemistry from the University of Nevada, Las Vegas where his research focused on electrochemistry and electrode development and testing for high-temperature molten-salt systems.

Jason began his Ph.D. Studies in Radiochemistry before transferring institutions with his advisor

and ultimately earning his Ph.D. from Miami University. His doctoral research covered a broad range of topics radiochemical and electrochemical topics including direct technetium detection to technetium sorption into biochar, and the electrochemical evaluation of U redox couples in molten salt systems.

During his Ph.D., Jason joined PNNL as a Ph.D. Intern, spending two years with the Process Sensing and Separations team. Following completion of his Ph.D., he transitioned into his current role as a postdoctoral researcher at PNNL.

TREASURER *Elizabeth Garcia*



Elizabeth Garcia is a postdoctoral researcher at PNNL working on chemical separations of critical materials. She received her B.S. in Chemistry from the University of Nevada Las Vegas and her PhD in Analytical Chemistry from Miami University in 2025. In the lab, Elizabeth loves problem solving, troubleshooting, and learning as much

as possible. When not in the lab, Elizabeth enjoys traveling, hiking, crocheting, puzzling, and spending time with friends and family.

 **BALLOTS DUE
NOVEMBER 15**

Where Chemistry Meets Winemaking Wordsearch

W	C	I	R	A	T	R	A	T	M	N	Z	K	A	B
F	J	C	F	M	K	L	C	L	O	E	E	C	N	O
Z	D	Z	A	G	O	X	I	G	O	D	B	X	T	J
S	G	L	Q	N	U	V	D	X	A	I	G	Q	H	D
V	I	N	A	K	N	G	I	U	K	X	W	H	O	K
C	B	H	Q	N	D	M	T	S	C	O	P	X	C	S
D	T	O	P	G	C	O	Y	J	B	I	A	L	Y	K
E	H	G	P	Q	L	C	D	V	B	D	R	A	A	Q
S	L	Y	I	Y	A	D	N	X	N	N	R	T	N	V
J	M	M	S	P	E	N	E	P	R	O	J	B	I	J
N	O	I	T	A	D	I	X	O	L	B	P	X	N	C
L	S	Q	Z	R	G	Q	M	E	E	R	X	H	S	I
F	M	Z	F	E	R	M	E	N	T	A	T	I	O	N
B	C	P	H	T	X	M	M	F	B	C	I	B	R	P
D	S	A	P	J	U	S	S	S	D	A	E	L	V	R

acidity
anthocyanins
autolysis
carbon dioxide
citric
ethanol
fermentation
malic
oxidation

Batteries are used for so many applications. The technology has improved immensely but we can do better and many people are working on it. A landmark experiment performed by Alessandro Volta in 1800 achieved the very first battery. This is a fun experiment to reproduce a battery with everyday materials but you will need a multimeter to see the voltage that is achieved.

MATERIALS

- 3 nickels and an equal amount of pennies
- Paper towel
- Aluminum foil
- Multimeter
- Vinegar
- Salt
- Cup

EXPERIMENT

You need clean coins to start, so mix $\frac{1}{4}$ cup or so of vinegar with roughly 1 tablespoon of salt in a cup and then add the coins. Stir these around for about a minute. Remove the coins followed by a rinse in tap water and then set them off to the side to dry. Tear off a piece of aluminum foil about two inches wide and fold it in half lengthwise and then in half widthwise and then in half widthwise again so that it is roughly 3 inches long and 1 inch wide. Put a penny on the edge of the foil. Tear off a small piece of paper towel about the size of a quarter and fold it several times so that it will fit on the penny but not go over the side. Add a few drops of the vinegar solution to the towel. Place a nickel on the wet towel. This makes a single voltaic cell.

Using the multimeter, turn it to DC voltage (2 V or 200 mV). Place one of the probes on the foil and the other probe on the nickel. If you get a negative voltage, switch the probes. Apply different pressures with the probe to see what happens to the numbers on the meter. A fairly hard press should give a fairly stable reading. If the reading jumps a lot or gives a 0.0 reading, it may be that you have too much solution on the towel and it is dripping and short-circuiting the cell, or the towel is overlapping onto the surface below.

Repeat the process making another cell by sandwiching another penny, wet towel, and nickel. Set this on the aluminum foil and determine it's voltage.



Stack one cell on the other by placing the penny of one cell on the nickel of the other cell (no towel between them). Test the voltage of the two combined cells. Did the two voltages add together to give a combined voltage? Keep repeating until you run out of coins – but always end with a nickel on top.

WHAT'S HAPPENING?

The battery operates by electrons moving and the multimeter detects this as a voltage. A typical AAA, AA, C, or D cell battery is a 1.5 V battery. It would take a lot of pennies and nickels to get that many volts! Because a nickel is actually made from nickel and copper and the penny has an outside coating of copper, electrons move from the nickel (negative anode) to the penny (positive cathode) giving a voltage. By combining multiple cells as in this experiment, you are creating a series of cells which adds the voltages.

EXTENSION

Do pre-1982 pennies give different voltages than newer pennies due to their copper content? What happens if you use other coinage (dimes and quarters)? Can you get greater voltages using copper and zinc washers? Can you get an LED light bulb to light up?

REFERENCES

https://www.sciencebuddies.org/science-fair-projects/project-ideas/Energy_p015/energy-power/make-a-battery-from-coins

To view all past “ChemShorts for Kids”, go to:
<https://chicagoacs.org/ChemShorts>

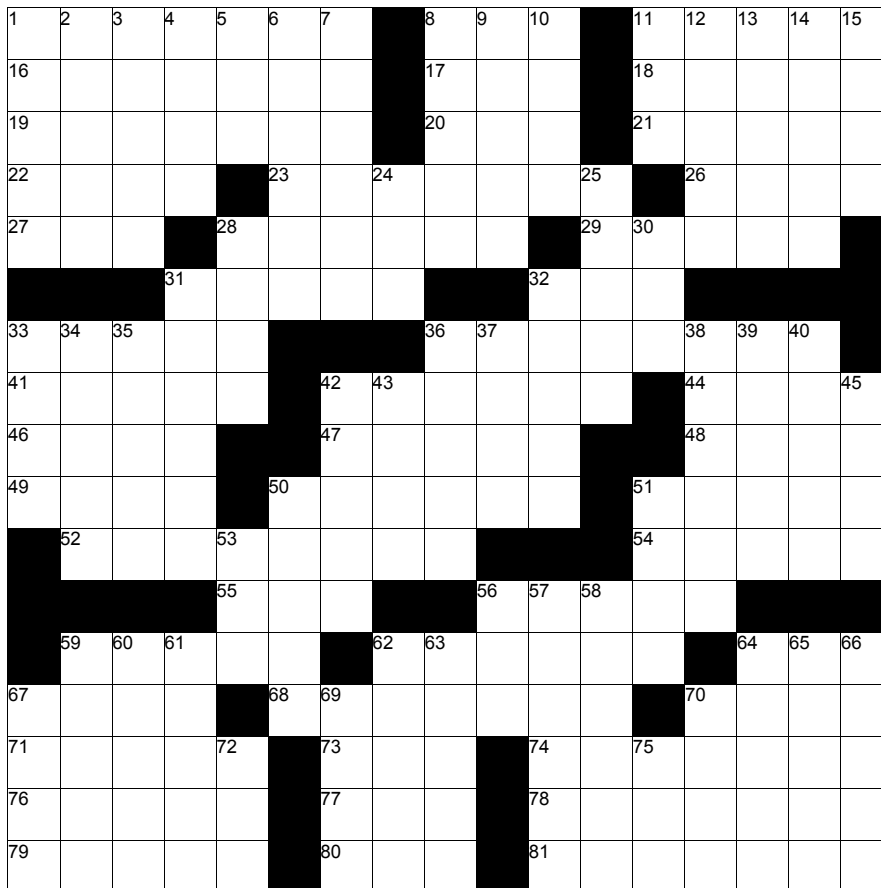
ABOUT THE AUTHOR *Dr. Paul Brandt is the Chair at the Department of Chemistry and Physics at North Central College in Naperville, Ill. He enjoys writing Chemistry Shorts for Kids for the ACS Chicago Section's newsletter. ChemShorts used with permission by the author.*

CROSSWORD PUZZLE IT'S A GAS

ABOUT THE AUTHOR Robert Pike is a professor of chemistry at The College of William & Mary. He is an inorganic chemist with interests in Materials for Sensors and Catalysts, Metal-Organic Networks Chemistry, X-Ray Crystallography, and Chemistry Education, in addition to creating crossword puzzles. Crossword used with permission by the author.

ACROSS

1. Cholesterol drugs
8. Acidic gas
11. Roundabouts
16. Fertilizer gas
17. Just like
18. It's called a "tall" at Starbucks
19. Excited
20. Caught
21. Hues
22. Deep sleep cycles
23. Law suit goal sometimes
26. Unfixed gas
27. Article in Paris Match
28. Resizes
29. Anyone
31. Silver, e.g.
32. Gelatinous mess
33. A substance separated from a mixture
36. Nobel winner
41. Part of TNT
42. Like many sweaters
44. Cool in 90's slang
46. S curve
47. Stinky gas
48. Tuscan city
49. Father
50. Camilla Parker
51. Egyptian board game
52. Bronze, e.g.
54. Top scout
55. A deer, a female deer...
56. Fossilized sap
59. Tie or racetrack
62. Natural gas
64. Mason School deg.
67. Food for 61 down
68. Personal aviation milestone
70. Onomatopoeic word
71. Letter closer
73. Letter opener
74. Rock genre
76. Norway to the Norwegians
77. Deadly gas
78. In view
79. Tennis ball gas
80. Assault weapons
81. Hair aplenty



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DOWN

1. Mad dog warning sound
2. With 3 down, describes 47 across
3. See 2 down
4. Just like
5. The tax man, abbrev.
6. Delivery method for 24 down
7. Calm
8. Horrible comic character
9. Chunky shoes
10. Deceased
11. When the Vikings game is scheduled, abbrev.
12. Nomenclature term for the C=N group
13. Goes off on
14. Disinfectant gas
15. What's more
24. Pharma. product
25. Kind of enemy
28. Ten to the minus 18 prefix
30. Garden tool
31. Portable room divider
32. Jeans brand
33. _____ Slaughter, Hall of Fame baseball player
34. Finger or number
35. Wombs
36. Humble
37. Plant balm
38. Seem
39. Addams family helping hand
40. Artist's stand
42. Intact
43. Paramagnetic gas
45. London art gallery
50. Electrophoresis transfers
51. Sybil
53. Fuss
56. Top 100 movies org.
57. Believer in universal unity
58. Foul up
59. Haughty
60. San Antonio team
61. Royal pet
62. Reaction of an alkyne and an azide
63. Band section
64. Shapeless masses
65. Block of synthetically-produced crystal material
66. Church sections
67. Rand and others
69. Industrial and laboratory watchdog org.
70. Mendel's samples
72. Box on a form
75. Born

FIND THE SOLUTION
WWW.ACSRICHLAND.ORG/NEWS

ABOUT ACS LOGOS - THEN & NOW



You may have noticed that the ACS logo on our newsletter's first page has changed. The ACS has replaced the familiar logo featuring a phoenix and kaliapparatus with an updated one.

The old logo has not been retired completely, however. More information on the logo change may be found at <https://brand.acs.org/document/88/en#/background/a-more-connected-ac>

Interestingly, the Midland ACS Section has a page devoted to the history of the ACS logo. It may be found at <https://midlandacs100.org/acs-logo-history/>



2028 NORM THEME & LOGO CONTEST

The Richland Section will host the ACS 2028 Northwest Regional Meeting (NORM 2028) in June 2028 on the Pacific Northwest National Laboratory's campus.

We need a theme (aka slogan) and a logo. So, we are running a contest. Submit your logo/theme suggestions to NORM2028@outlook.com by November 15, 2026! Nice prizes for all entries and of course a grand prize if yours is used. Here is what we used when we hosted NORM 2018:



UPCOMING EVENTS

NOVEMBER 6

ANNUAL MEMBER RECOGNITION SOCIAL 6-8:30PM

Riverview Room, Richland Community Center, 500 Amon Park Dr., Richland, WA 99352

Information: sonia.alcantaranguiano@pnnl.gov

RSVP: https://docs.google.com/forms/d/e/1FAIpQLSegNw7PLbZGP2dmgDoXfpel81IskJs2n_zQZBN1v5EtfYGx5A/viewform?usp=publish-editor

NOVEMBER 15

SECTION ELECTION BALLOTS DUE

Sonia Alcantar-Anguiano: sonia.alcantaranguiano@pnnl.gov



POINT TO PONDER

"Be yourself; everyone else is taken."

– Oscar Wilde

◆◆◆◆◆◆◆◆◆◆ **LEARN MORE ONLINE AT WWW.ACSRICHLAND.ORG** ◆◆◆◆◆◆◆◆◆◆

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