



April 9, 2018

Email Alerts Online Edition Subscribe Welcome! Login

E-Edition SUBSCRIBE

48° Overcast

Navigation menu: News, Opinion, People, Sports, Community, Marketplace, Weekly Specials, Customer Service, Classifieds, Careers, Advertise

DON'T MISS: E-EDITION PHOTOS AND VIDEOS OIL & GAS NEWS: IN THE PIPELINE HIGH SCHOOL SPORTS ARCHIVES

Home News Education ECISD

UT Austin lecturer presents 'Fun with Chemistry'

Story Comments Image (4)

Print Font Size:

All Fired Up



Odessa American/Mark Rogers

Dr. Kate Biberdorf blows corn starch to make a fire ball in her demonstration. University of Texas Chemistry professor Dr. Kate Biberdorf gave her "Fun with Chemistry" demonstration to Permian High School students Monday afternoon. She gave the same demonstration to Odessa High School students earlier in the day.

Previous Next



Posted: Tuesday, April 3, 2018 3:45 pm By Ruth Campbell rcampbell@oaoa.com



Posted on Apr 3, 2018 by Ruth Campbell

University of Texas at Austin general chemistry instructor Kate Biberdorf showed high school students in Odessa the

fun that can be had with various chemical compounds, some of which can be found at home.

Biberdorf, who also is a lecturer and director of demonstrations and outreach UT Austin, visited Odessa and Permian high schools to present "Fun with Chemistry."

Search bar with Site and Web radio buttons



Today's Edition



Odessa American/Mark Rogers

Dr. Kate Biberdorf performs an oscillating chemical reaction with the help of an astonished 15-year-old Devon Zeigenbein. University of Texas Chemistry professor Dr. Kate Biberdorf gave her "Fun with Chemistry" demonstration to Permian High School students Monday afternoon. She gave the same demonstration to Odessa High School students earlier in the day.



[Buy this photo](#)

[View all 4 images in gallery.](#)

Two experiments

- **Elephant's toothpaste:** Hydrogen peroxide, dish soap and potassium iodide. The potassium iodide and the "hydrogen peroxide react as we release oxygen gas, which is what's trapped by the dish soap, so that's what shot out the top was the oxygen gas in the dish soap," said University of Texas at Austin general chemistry instructor Kate Biberdorf. It shoots a plume of yellow out of a flask that resembles yellow insulation.
- **Thundercloud:** Take hot water that's about 80 degrees Celsius and dump it into a bucket of liquid nitrogen, which is about minus 194 degrees Celsius. Biberdorf said what happens is the thermal energy is transferred from the hot water to the liquid nitrogen "and we release a cloud of nitrogen gas." "It's a beautiful physical change. It's my favorite demonstration. It's always how I end shows, unless I can't get my hands on liquid nitrogen," she said. Biberdorf, who visited Odessa and Permian high schools Monday, also is a lecturer and director of demonstrations and outreach UT Austin.

More Information

- UT Austin department of chemistry.

At age 4, Biberdorf said, her father told her he didn't care what she did, but she had to try and do her best. That's the message she imparted to Permian High School students in their auditorium Monday.

She also succeeded in giving students a different perspective on chemistry. Sixteen-year-old sophomore Brooklyn Briles said the subject was something that never really interested her.

"... Chemistry had never been something I was excited to go to until today. It kind of opened my eyes into something that could be a possibility for me in the future," Briles said.

What changed her mind?

"Honestly, just the demonstrations and the fact that she was so excited about it. I've never seen someone so excited about chemistry in my life," Briles said.

Alejandro Tarango, a 16-year-old sophomore, was one of the volunteers picked to help Biberdorf during the demonstrations. He was already convinced science was fun and he's considering going into genetic engineering.

"Science was always cool to me; just facts; this and that. I love school and ever since I was a little kid I've always been interested in science and chemical reactions. Just seeing the energy in how she makes a living brings joy to others. It just really brings me joy and I love science. This has been a great experience.

Biberdorf said she travels to schools nationwide and had different audiences at OHS and Permian. She added that visiting schools helps her to become a better professor.

"That's really fun for me to kind of tailor the presentation based on the group. The first group at Odessa High School really wanted to know the nitty-gritty of the science. They wanted deeper explanations. This group (at PHS) was a little more for the presentation value, so it was a little more fun for me for the second one. I really liked it. These students are incredible and I hope they come to UT Austin," Biberdorf said.

Biberdorf was brought to Odessa by the Ector County Independent School District Innovation Department, PICK Education and the Education Foundation of Odessa, a news release said.

Ruth Campbell covers education for the Odessa American. Reach her at 432-333-7765 or 432-333-7765 or rcampbell@oaoa.com



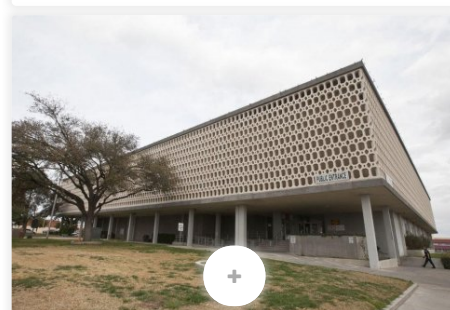
Odessa American

f Follow

Five things you need to know today, April 9.

[#Fivethings \(Five things you need to know today, April 9\)](#)

AN HOUR AGO



Surf's Up
 The Beach Boys Tribute
FREE CONCERT! MAY 4th
[Click here for details](#)

SOCIAL MARKETPLACE

Discuss

Print

Posted in ECISD on *Tuesday, April 3, 2018 3:45 pm.* | Tags: [Ut](#), [Permian High School](#), [Kate Biberdorf](#), [Brooklyn Briles](#), [Ut Austin Lecturer](#), [Odessa High School](#), [Alejandro Tarango](#), [Professor](#), [Ector County Independent School District Innovation Department](#), [Permian](#), [Education Foundation Of Odessa](#), [Chemical Compounds](#), [Genetic Engineering](#), [Chemical Reactions](#), [University Of Texas At Austin](#), [University Of Texas](#), [Fun With Chemistry](#)

Sponsored From Around the Web