Missouri university professor works on carbon dioxide device

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COLUMBIA, MO. - A University of Missouri professor is working with two students to create a device to remove carbon dioxide from the emissions of fossil fuel power plants.


Jacoby says the process involves channeling power plant emissions through a chamber that uses high pressure to separate carbon dioxide from other gasses. Jacoby says initial tests have had positive results.

According to Jacoby, he hopes that the technology can work at coal power plants or any facility that uses fossil fuel. He said the key is constructing a separator that is capable of handling the amount of emissions power plants produce.

Once the carbon dioxide has been separated, Jacoby said it would be injected deep underground.
The professor's plan is to begin testing at the University of Missouri Power Plant within the next six months.

Doctoral student Allen Busick, who is working with Jacoby on the project, says the process costs about 25 percent less than any method of carbon capture currently in use.

Post-doctoral researcher Reza Espanani is also working on the project and said "it is fantastic when you are working on a project with such potential and solving the problems step by step."

The project recently received a $50,000 grant from the university system.

Jim Wilbur, managing engineer at the school's power plant, said he has been consulting with Jacoby about testing the process.

"I see a lot of promise with the equipment, especially if it's a useful resource for industry," Wilbur said.

THE CHRONICLE OF HIGHER EDUCATION

The U. of Missouri Press Almost Closed 4 Years Ago. Here’s How It Bounced Back.

Four years ago Timothy M. Wolfe, then president of the University of Missouri system, announced without warning that its academic press would shut down. The outcry was immediate and explosive.

"It was like somebody going into a library or university and burning it down," says Bruce Joshua Miller. "With one stroke of the pen: destroyed."

Mr. Miller, president of Miller Trade Book Marketing, has worked in academic publishing for more than 30 years. Along with Ned Stuckey-French, an associate professor of English at Florida State University, he galvanized a social-media movement that clamored for the press to stay open.

Eventually the movement got its way. Mr. Wolfe reversed his decision a few months later; the press stayed open for business.

But in the interim, it had to surrender every project it had in progress. Many authors took their books to other presses, and more than a year’s worth of revenue was lost, says David M. Rosenbaum, the press’s director.
After the reversal, the staff scrambled to compile a new list of authors, mainly by phoning scholars with whom it had already built relationships. The message: "We’re still here, we have the same clout, and we were going to do right by their books," says Tracy Tritschler, the press’s business manager.

Missouri faced an extreme version of a challenge that has vexed many financially strapped academic presses: how to publish distinctive scholarly work and maintain fiscal stability.

The press has tried a range of tactics familiar to modern presses — strengthening ties to the flagship campus, homing in on its areas of expertise, and using metadata and analytics to contend with an ever-shifting publishing market that increasingly operates online. Those approaches have helped put the Missouri press on firmer footing, but the publisher’s challenges are far from over.

‘A Tight Walk’

In the aftermath of the near shutdown, the press’s staff was pared down. The press, which has about a dozen mostly full-time employees, used to operate with twice that number, says Mr. Rosenbaum. Layoffs mostly were made in the warehousing and fulfillment departments, which no longer exist. The cuts did not stem solely from the closure plan, Ms. Tritschler says. The press had undergone a wave of retirements and was already trying to reduce its deficits by 2012.

Still, the layoffs hurt. "We lost a lot of institutional memory that way, as well as the cost of laying people off," says Mr. Rosenbaum. "It’s a cost that we still bear." Meanwhile, he says, it took significant time for the press to recoup revenue from the steep drop in revenue spurred by the canceled projects.

The press’s annual subsidy from the university is now $400,000, the same level of support it received in 2012. That covers less than one-third of the press’s overall expenses, according to Mr. Rosenbaum. But "it’s not all doom and gloom," he says.

He predicts the press will be self-supporting within two years. Since he was hired, in 2013, after working in commercial publishing, the press’s bottom line has improved by about $100,000 annually — first because it has cut expenses, but more recently because of growth in sales revenue.

Mr. Rosenbaum attributes some of the upswing to a renewed focus on what customers want. The press’s marketing staff has sharpened its collection of metadata, enabling it to predict the terms most likely to bring its books to the top of online search results.

The press also analyzes information about customers to market to them in a process that’s "remarkably similar to how we all imagine the Amazon algorithm works," says Stephanie L. Williams, the marketing manager.
Another shift: The press has adjusted to diminishing demand for the traditional monograph, which had been a mainstay of academic publishing. "We are doing a good job of realistically assessing the size of the market and erring on the side of lower expectations," Ms. Williams says.

Still, balancing the fiscal responsibilities of a business with the mission to publish work that might not otherwise be commercially available can be "a tight walk sometimes," says Ms. Tritschler.

Like many other academic publishers, the Missouri press uses revenue from popular texts — like *Dick Cole’s War: Doolittle Raider, Hump Pilot, Air Commando*, by Dennis R. Okerstrom, an English professor at Park University, in Missouri — to subsidize the publication of books that are academically important but "can’t quite make it" on their own, Ms. Tritschler says. But every book is expected to at least cover its production costs.

"In the end it doesn’t matter how good of a book it is," she says. "It has to be sellable."

*A Natural Home*

After it staved off closure, the press — which had previously operated under the university system’s auspices — moved under the wing and then onto the campus of the flagship, in Columbia. That rearrangement helped the press weave tighter bonds with the university community, says Ms. Tritschler. "Having this proximity has allowed us to open some doors that had been closed on us before."

The new locale also allowed the press to develop relationships with Columbia-based organizations, like the Kinder Institute on Constitutional Democracy, and to befriend scholars on the flagship campus with expertise in the press’s specialties.

Instead of publishing "orphans" — books on subjects on which the press does not have a significant backlist — Missouri has concentrated on topics that it considers areas of strength, such as African-American studies, literary criticism, local history, and journalism, says Ms. Tritschler.

A recently published book, *Lloyd Gaines and the Fight to End Segregation*, exemplifies that strategy. The text was written by William T. Horner, a professor of political science on the Columbia campus, and James W. Endersby, an associate professor in the same department.

The authors proposed the book to the university press right before it was temporarily shuttered. When he heard about the closure, Mr. Horner says he was upset: Even though other academic presses published on civil rights, the Missouri press had seemed like "such a natural home" for their work.

The book delves into a largely forgotten 1938 Supreme Court case in which Lloyd L. Gaines, an African-American man, successfully sued the University of Missouri School of Law after being denied admission based on his race. Mr. Gaines’s name now graces the university’s Black Culture Center.
The case is a touchstone for understanding the messy junction between race and higher education, one that is still being navigated by the university. Last fall student protests over race relations on the Columbia campus prompted Mr. Wolfe and the flagship’s chancellor, R. Bowen Loftin, to resign.

The book came out just as those protests were beginning. Though the timing was a coincidence, Mr. Horner says he and Mr. Endersby were aware of the controversy over race and how knowledge of the Gaines case could contribute to it.

"We both felt a real sense of responsibility in talking about things that happened a long time ago, but sort of saying this stuff still matters," Mr. Horner says.

Courting Missouri professors and publishing on African-American history are nothing new for the press, says Mr. Rosenbaum, the director. Continuing to do so in light of the student protests extends the tradition. "That context is important to us," he says, "but it’s always been important to us."

'Back in the Ballgame'

All presses, not just Missouri’s, have had to contend with the changing landscape of academic publishing, Ms. Tritschler says.

Library budgets continue to shrink. Local bricks-and-mortar bookstores used to provide a large chunk of presses’ revenue. But when megastores like Barnes & Noble cropped up, the local stores were crippled, and the book-buying process became centralized.

"You had a buyer in New York deciding what somebody in Columbia wanted to read," she says. The advent of online markets like Amazon "kind of put us back in the ballgame" by allowing the press to have as much visibility as larger publishers do, says Ms. Tritschler.

But partnerships with web monoliths can also have drawbacks. Because they provide a hefty portion of sales, online retailers have leverage, enabling them to demand that academic presses meet their deadlines and standards.

Presses also have to grapple with the mounting push toward open-access publishing, which "nobody’s figured out how to pay for yet," says Mr. Miller, the book marketer.

Despite the disruption caused by its near closure, the Missouri press has stayed committed to its mission of publishing original work by, for, and about Missourians, says Ms. Tritschler, who has worked there for 28 years.

"It could have been easier to try to find another job, or whatever, because of the stresses and strain," she says. "But everybody around here, we don’t look at this as just another job."
Gas leak reported at MU Orthopedic Institute

The Tuesday morning gas line hit makes it the seventh one struck in central Columbia.

COLUMBIA, Mo. - The Columbia Fire Department and Ameren responded to a broken gas line Tuesday morning outside the Missouri Orthopedic Institute.

The intersections of Stadium Boulevard and Monk Drive, as well as Monk Drive and Hospital Drive, closed while Ameren crews fixed the line. The leak was reported at around 8:45 a.m. Monday morning. University Hospital spokesperson Jeff Hoelscher told ABC 17 News no one evacuated any buildings during the repair. Hoelscher said a construction crew working on the expansion of the Orthopedic Institute struck the gas line.

The struck line makes it the seventh gas leak caused by a third-party contractor this year in central Columbia, according to Ameren Missouri Gas Operations Director Mike Holman told ABC 17 News. That includes downtown, where several large construction projects are underway. Holman said the excavating crew on Monk Drive did make the necessary notification to dig, by contacting the Missouri One Call System, but did not know as of Tuesday evening whether a locating crew went out for Ameren to find the pipes there. For the other six strikes, though, Holman said crews did perform "locates" of their utility.

Holman reported an increase in year-to-date requests to locate their lines in the area. So far in 2016, Ameren has performed nearly 400 "locates", nearing the same amount for this time in 2015 at 430. Holman said the construction boom mixed with a tangle of utilities downtown could account for the increase in struck lines.

"With the congestion that we have in between gas, water, cable, electric, sewer and fiber, with the economic growth and construction that's occurring, that's why I believe we're seeing these third-party damages," Holman said.

Utility companies like Ameren must report to the MOCS the areas of Missouri they want to be notified about when construction companies dig. When a company gives a notice of a project, it must provide the center the location and what methods they plan to use when they dig, executive director John Lansford said. MOCS references the notice with what utilities are in that area, and
lets both parties know of the project. Utility companies then have two days to "locate" their utilities, and mark them with specifically colored flags.

Lansford said utility and construction companies can suffer $10,000 civil penalties each day for failing to report a dig, or for failing to perform a "locate," Lansford said.

At least one gas line strike was to an "unmarked" line. A City of Columbia stormwater crew struck a line on Broadway, east of Tenth Street on June 22, according to city spokesman Steve Sapp. While they made the call to MOCS, and Ameren performed a "locate," the crew still struck a gas line. Had the stormwater crew known of that line's presence, they would have instead used hand tools to dig, Sapp said.

Holman said Ameren reviewed its process after that. The company hires USIC to perform its "locates" in Columbia, and did so for the Broadway project. While they appropriately marked a gas line being used by the buildings there, USIC was not aware of an "abandoned" line that Ameren disconnected and "capped."

"We had it mapped, it just didn't show up on the records that our locating company had," Holman said.

Holman said since the incident, Ameren has changed the way it and USIC work downtown.

**MISSOURIAN**

**Open mic event at MU hopes to engage racial climate**

PAULA TREDWAY, 13 hrs ago

COLUMBIA — The rap group Public Enemy released its song "Fear of a Black Planet" 26 years ago. But the song's lyrics feel like they could have been written yesterday.

“Are you afraid of the mix of black and white?” Chuck D raps in the first verse. "We're livin' in a land where the law say the mixing of race makes the blood impure.”

**On Wednesday, MU's Black Studies Department will use that song as a way to engage with the nation's current racial climate. Entitled "Fear of a Black Planet," the open mic event will be held at 6 p.m. on Wednesday at The Shack in the MU Student Center.**
“I hope people take away that we’re all human beings," said Stephanie Shonekan, an MU professor and organizer of the event. "There is nothing to fear of people who are different."

The event was organized to help MU students and staff, as well as Columbia as a whole, talk about the current state of the United States in light of last week's shootings. Unlike the Grieve-In last week, this event will not have any set speakers but will be open for anyone to react to the song's lyrics and share their own stories.

Shonekan hopes this will be the first of many events that will bring the community together to help better understand one another.

MISSOURIAN

"Pokemon Go" phenomenon sends players across town, campus

MISSOURIAN STAFF, 14 hrs ago

COLUMBIA — Shelter Gardens on West Broadway is usually a quiet spot where people might enjoy a lunch or take a quick break during a busy workday.

On Monday, however, the calm scene was interrupted by shouts of “There’s a Pokemon!” from a group playing the interactive game "Pokemon Go" on their phones.

The game, released by Niantic Inc. on Thursday, uses augmented reality to bring the characters from the popular Nintendo franchise into the real world. Players use their mobile phone camera to search for and capture creatures called Pokemon.

In less than a week, the app has been downloaded 7.5 million times and is generating $1.6 million in revenue per day, according to estimates from market research firm Sensor Tower. The sudden success was a boon for Nintendo, which is an investor in Niantic and Pokemon Co., gaining over $9 billion in market value.
Among the visitors to Shelter Gardens on Monday was Hilary Myers, a mother of two from Fayette, Missouri, who said "Pokemon Go" has been a great activity for her family.

“I have a really active family. We always like to be out and about, and I usually limit the amount of time my boys are able to play video games,” Myers said. “But my kids and I go outside and play Pokemon together.”

Myers also believes it can help people become more comfortable socializing.

“It’s been helping people with anxiety and depression feel better and talk to new people,” Myers said. “It’s one small thing that can make such a difference.”

That's been the experience of Mariah Austin, 24, who is an avid gamer and Pokemon fan.

“The game really brings people together,” Austin said. “As someone with anxiety, it gets me out of my comfort zone, and I get to meet people.”

Many of the “Pokestops” — locations where players can find special items — are located at landmarks and other popular spots in the real world.

“I get to see new parts of the city that I’ve never noticed before,” said Austin, who has lived in Columbia since she was two years old. “It kind of gives us the freedom to improve our city by exploring and seeing what needs to be fixed. I usually pick up trash while I’m hunting.”

In downtown Columbia, employees could be seen playing the game alongside college students and families.

Jeffrey Richter, a budget analyst for the city, was out on his lunch break underneath The Suspended Globe at Landmark Bank on Broadway.

“I like that the stops are little pieces of art, making people look around their city and find things that they may not have noticed that they walk by every day,” Richter said.
The MU campus also has been full of "Pokemon Go" players — so much so that MU released a map of all the in-game hot spots on campus.

Blair Baucom, a courier for Landmark Bank, found herself on campus on Monday, phone in hand.

“I love it. I was planning on not getting it, but it’s addicting, and it got me to go outside more during my lunch break,” Baucom said.

For MU student Robert Mecchi, a sociology senior, the game is a nice distraction during summer school.

"Pokemon Go" is the most fun I’ve ever had walking around campus, and I would recommend traveling in groups so you can spread out and find as many as possible,” Mecchi said.

Traveling in groups also helps ensure personal safety during the game, which has been implicated in minor injuries and even a robbery in St. Louis.

The MU Police Department and the Missouri Department of Transportation both have posted messages on social media advising players to not play "Pokemon Go" while driving and to be safe at all times.

But Myers believes the safety of gamers is not a problem as long as people are aware of the potential hazards.

“You still have to use common sense when you’re playing it,” Myers said. “You have to make sure you’re aware of your surroundings.”