

[Subscribe](#) | [Search Archive](#) | [Contact Us](#) | [Frequently Asked Questions](#)

**Home**

**Classifieds**

- Autos/Boats/RVs
- Garage Sales
- Merchandise
- Real Estate
- Top Jobs
- Place An Ad!

**Mid-Missouri Marketplace**

- Retail/Shopping
- Restaurants
- Hotels
- More...

**Departments**

- News
- Business
- A-Z Stock Listings
- Money & Markets
- Technology
- Sports
- For the Record
- Obituaries
- Commentary
- Features
- Pulse
- Food
- Calendars
- Go!
- Ovation
- Entertainment
- Columnists
- Podcasts
- Darkow Cartoons
- Sudoku

**Multimedia**

- Slide Shows
- Audio Slide Shows
- Video
- Photo Blog
- Reader Photos



**Blogs**

- City Beat
- Capitol Notes
- Class Notes
- Cool Dry Place
- Exclamation Points
- Game Over
- North County News
- Police Scanner
- Where's Judy?

**Sports Blogs**

- Behind The Stripes
- Courtside View
- Prep Repartee

**Trib Board**

- Arts Forum
- Food Forum
- News Forum
- Sports Forum

**Special Sections**

- Special Ad Sections
- Special Sports Sections



# Students plug into battery technology

**By JEWEL GOPWANI Detroit Free Press**

*Published Friday, March 14, 2008*

DETROIT - Sarah Herman is learning to become a mechanical engineer, following in the footsteps of her dad, who works for General Motors Corp.

But instead of focusing on the engines of today, the 22-year-old senior at the University of Michigan is trying to figure out how to help people adopt more Earth-friendly sources of power.

She is one of a few students selected to be part of a new graduate program at the university aimed at teaching engineers to be fluent in the fast-changing technology that drives lithium-ion batteries.

"It finally seemed like a place for me to get my feet wet and really start ... making a change," Herman said. "That's what's so exciting."

Chances are, Herman will have plenty of job offers. As automakers and suppliers promise electric-drive vehicles, they're finding a shortage of engineers who know their way around a lithium-ion battery.

"It's an emerging field. There's a lot of interest in the area and there's not a lot of history of this knowledge, so it's not easy to find the right people," said Kregg Wiggins, who heads the North American powertrain division of Continental AG. The company, in a partnership with A123 Systems, is developing a prototype battery pack for the Chevrolet Volt plug-in hybrid concept.

That is why Ann Marie Sastry, a professor at Michigan's College of Engineering, started the graduate program on energy systems.

"We firmly believe that we're creating leaders. We need people who have not only technical excellence, but also vision and strategic skills," said Sastry, who is working with GM and DTE Energy to develop the program.

The University of Michigan isn't alone. Schools across the country are adding classes and programs to teach engineering students about advanced battery technology. But some experts say they're not moving fast enough.

"There aren't enough faculty in the U.S. qualified to teach the subject," said Manahem Andermen, who heads an automotive battery consulting firm. That is because those who are qualified to teach are needed at the companies that have made promises to deliver lithium-ion-based hybrids by 2010, he said.

There is a small but growing class of engineers, though, ready to jump into the field.

"It's almost like we have a '60s revolution going on again," said Mary Ann Wright, vice president of Johnson Controls' hybrid battery business. "These kids are saying the world is not sustainable with our present behaviors. ... I think there's some ownership and concern on their part for what the future is going to look like for them."

While that is helpful for beginning positions, it is tougher to find more experienced engineers versed in advanced batteries. For four months, Azure Dynamics Corp., based in Oak Park, Mich., has been looking for an engineer with a decade of experience to lead a team focused on energy storage systems.

"It's a pretty rare person. The field has only been around for about that long," said Ron Iacobelli, chief technology officer at Azure, which makes hybrid and electric powertrain systems for commercial vehicles.

Sastry has tried to address the gap by folding public policy and business

**Sudoku Puzzles**

1	3	6				7
9	2	5	8		6	1
				1	2	
2			1		5	
	1	2	6	5	3	
	6	3				1
	4	8				
2	7		4	9	8	3
8			6	4	2	

• [Play Sudoku Online](#)

**On the Web**



• [mopublicnotices.com](http://mopublicnotices.com)

elements into her program.

That is the kind of knowledge Herman said she needs to reach her goals. "I just think the Earth is a beautiful place," Herman said "I can use my talents to really keep it that way."

[Search Archive](#)

[Subscribe](#)

[Contact  
Circulation](#)

[Newsroom Staff  
Directory](#)

[Tribune Jobs](#)

[Tribune in  
Education](#)

[Advertising Rates](#)

[Commercial  
Printing](#)



Advertisement

**Smart gifts for people who love Mid-Missouri!**

Gift subscription, Darkow posters and more!

**Packages for every budget!**

Get home delivery of the Tribune starting as low as \$2.00 per week!

Copyright © 2008 The Columbia Daily Tribune. All Rights Reserved.

COLUMBIA DAILY  
**TRIBUNE**

The Columbia Daily Tribune  
101 North 4th Street, Columbia, MO 65201

[Contact Us](#) | [Anonymous Tips](#) | [Search](#) | [Subscribe](#)