

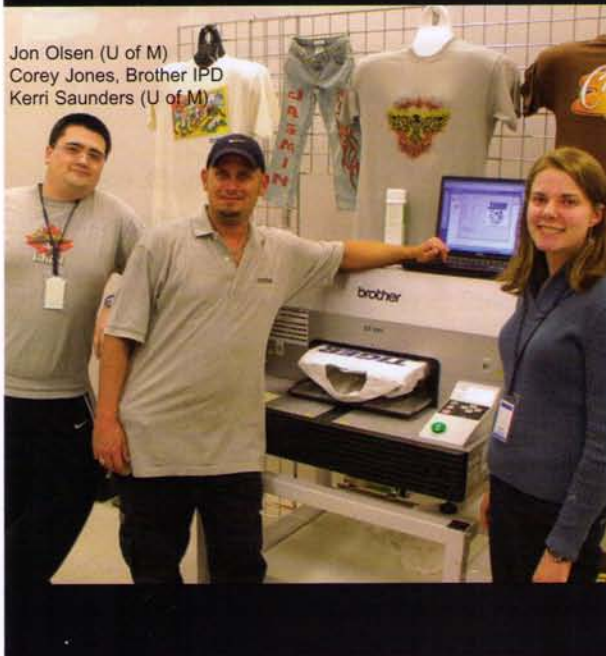
# Brother Tennessee's Partnership with the University of Memphis

by Farzad Parsapour & Rodney Loyd, BIC PDPM Tech Group



Dr. Farzad Parsapour  
Photo credit: Lindsay Lissau/U of Memphis

**B**rother has a strong history of community involvement and is committed to activities that support our philosophy of corporate social responsibility. An example of this is Brother Tennessee's partnership with the Herff College of Engineering at the University of Memphis. We believe that by supporting the University's Engineering Program we can be a positive influence on young engineering students, make a lasting impression about the Brother brand, and ultimately do our part to help build the future engineering workforce.

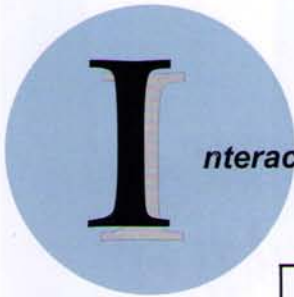


Jon Olsen (U of M)  
Corey Jones, Brother IPD  
Kerri Saunders (U of M)

Brother frequently interacts with the university's Engineering School, and provides a representative on the Electrical and Computer Engineering Department's Industrial Advisory Board. In addition, Brother has contributed to increasing understanding of emerging technology topics, most recently within the framework of the National Engineers Week at the University of Memphis.

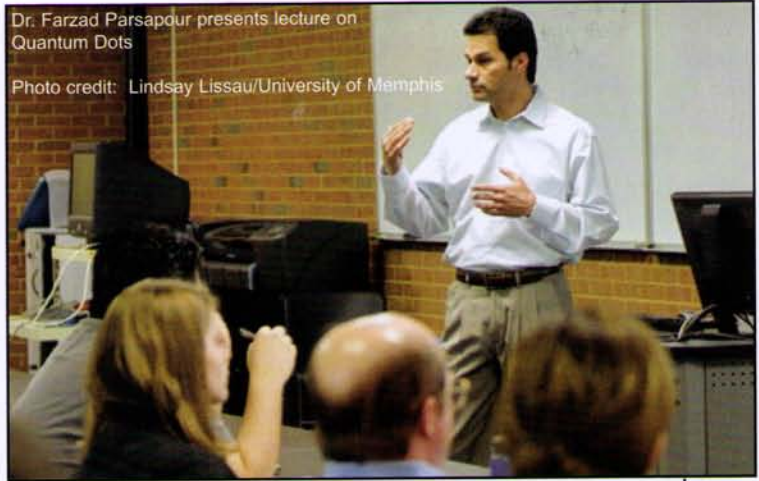
National Engineers Week provides a forum for engineering students and faculty to interact with practicing engineers and scientists, and gain a more thorough understanding of ongoing efforts in industry. This year, the Engineering School's organizers invited Dr. Farzad Parsapour, Senior Principal Engineer in PDPM's Technology Research and Advanced Development Group to present a lecture on Quantum Dots. The lecture provided an overview of unique properties of Quantum Dots (extremely small particles which can be thought of as tiny light bulbs with size-dependent color) and real-life applications due to these properties, including lighting and display technologies, solar cells, and nanomedicine. This was an excellent opportunity for Brother to present on internal research and development efforts related to future-generation optoelectronics, and showcase its technological expertise in a subfield of nanotechnology. The event was held on February 19 at the Herff College of Engineering and attended by over 20 students and faculty. Duration and breadth of discussions following the lecture exemplified students' and faculty's high level of interest in the subject matter. This interest may instigate a path to future collaboration on similar promising technologies with the University.





## **I**nteracting directly with the students ...

Additionally, Brother recently hosted a tour of the massive Jupiter facility for the school's Engineering and Computer Science students, which gave them an opportunity to see Brother from the inside. Our goal was to encourage the students in their pursuit of engineering and scientific careers, and give them a taste of corporate life in a high tech engineering and manufacturing environment. The tour included laboratory and departmental visits, and talks with Brother professionals in engineering, manufacturing, quality assurance, testing, compliance and advanced research. For many students this was their first visit to a major company like Brother, and they found it fascinating to see the



Dr. Farzad Parsapour presents lecture on Quantum Dots

Photo credit: Lindsay Lissau/University of Memphis

Brother also recently sponsored a robotics team from the university to compete in the regional IEEE SoutheastCON hardware competition (the IEEE's annual student conference). College teams from all over the Southeast competed by designing battery-free solar powered robots that could navigate an obstacle course, avoid hazards, and complete as many laps as possible around the test track. Although their robot did not sweep the competition, the experience was invaluable and gave the newly minted engineers a taste of designing a product to spec, working on a team, meeting a deadline and solving numerous engineering problems in the integration of the electrical, mechanical and software elements of the design. The students even created their own team jerseys using Brother's GT-541 garment printer thanks to the generosity of the IPD department.

Interacting directly with the students is rewarding for Brother employees as well. We see their enthusiasm, energy and excitement for new technology and knowledge, and this makes us more eager to share our own career experiences

people and processes in action that design, test and support the products they see in the stores.

and knowledge. In the end, the students are the future workforce, and we must do everything we can to encourage them and make them stronger.

Photo credit: Lindsay Lissau / University of Memphis

