National AIChE honors

Oct. 17, 2016

Spartan Engineers to receive top prizes at the AIChE Annual Student Conference - again!

Students from the MSU Department of Chemical Engineering & Materials Science have been among the nation’s top winners in AIChE national contests through the years. AIChE is the global organization for chemical engineers.

In 2016, add Rebecca Carlson and Ariel Rose (’16 CHEMS) to the long list. They will be honored at the AIChE Annual Student Conference in San Francisco, Nov. 11-14, for first prize, the William Cunningham Award – team category, in the AIChE 2016 Student Design Competition.

They join Rebecca Jacobs (’16, CHEMS) who also took top prize in the contest this year.

Jacobs will receive the Walter Howard Design Award in the SACHE Student Competition for Safety in Design. She won best application for her design to upscale safe biomedical engineering practices to a manufacturing level.

Team category -- Rebecca Carlson and Ariel Rose

“For this year’s design competition, we were asked to design a process to manufacture neural stem cells from adult-derived precursors for treatment of spinal cord injuries at a commercial scale,” Rose explained.

“In our solution, we did our best to consider many facets of this complex problem. We investigated the demand for treatments, modeled bioreactor conditions, and scheduled batches to maximize equipment use. We also made sure that our process and facility met industry guidelines for a safe, high-quality product,” Rose added.
Carlson is a senior in chemical engineering.

Rose graduated in May 2016 with a degree in chemical engineering. She is a manufacturing engineer at P&G.

**Safety in Design -- Rebecca Jacobs**

梭朵林

“我通过将生物医学工程的实践方法提升到制造水平来解决这个问题。”杰克逊说。“设计聚焦于生物工程化的细胞类型，这些细胞类型能可靠地重新编程并促进成人干细胞的增殖，从而实现大量制造，并确保产品的安全性。

“我喜欢参加AIChE的设计比赛，因为它将我在课堂上获得的化学工程知识与我的创造力和创新的热情结合起来。”

杰克逊于2016年5月毕业，目前是通用磨坊的制造和工程助理。

**A first for MSU**

国家在两个类别中的认可尤其值得注意——这是MSU首次有两女队赢得全国团队比赛，马丁·霍利，MSU化学工程和材料科学系教授和前系主任说。他目前是工程学院高级副院长和MSU复合车辆研究中心主任。

“赢得这个比赛是对我们整体项目的实力的证明，因为问题是写由一个团队写的。”

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of practitioners and represents what the profession expects senior chemical engineers can do by the time they graduate," he said.

"Winning this competition is the best professional credential a graduating senior chemical engineer can have on their CV," Hawley added.

AlChE
The AIChE annual meeting is the premier educational forum for chemical engineers interested in innovation and professional growth. Academic and industry experts cover a wide range of topics relevant to cutting-edge research, new technologies, and emerging growth areas in chemical engineering.

Related Website: AlChe Student Design Competition – Team
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