

Michael Koch,
University of Missouri, 2008
Oregon State University, 2010

Michael Koch has been a part of two separate Industrial Assessment Centers. During his undergraduate years, he was a member of the University of Missouri IAC. He then selected the Oregon State University for graduate school so he could continue his relationship with the IAC.

IAC Roots

Michael Koch has had a longstanding interest in energy efficiency and knew he wanted to pursue that area of engineering when he entered the University of Missouri in 2003 to study Mechanical Engineering. At the time he was unfamiliar with the IAC program, though he was focused on sustainability and environmentalism through his job at the University of Missouri campus power plant where he performed energy upgrades on campus buildings. Through one of his professors, Missouri IAC Assistant Director Dr. Sanjay Khanna, Michael was introduced to the IAC. The IAC appeared to offer him a bit more in-depth experience than the work he was doing at the time and he saw the program as a way to advance his interest in sustainability as well as making a positive impact on the world. While at the Missouri IAC, Michael served as Lead Student and participated in multiple assessments. For him, “The IAC provided the best opportunity to gain real world



Michael Koch collecting data from an ammonia screw compressor at a local seafood processor.

Courtesy of Cascade Energy



Michael Koch, IAC Lead Student Alumnus, University of Missouri and Oregon State University

Courtesy of Cascade Energy

experience and do hands-on work,” which Michael notes, “is much different than class work.”

It was that hands-on experience that allowed Michael to make the connections between academics and how things actually operate in an industrial setting. The IAC also helped him learn to balance ideas with practical applications, all while keeping a realistic budget in mind.

Michael noted that his experience as an undergraduate in an IAC program was so influential that one of his criteria when selecting a graduate program was the opportunity to continue his work with the IAC. Based on the recommendations of his Center Directors and communications with other IAC students, Michael elected to attend Oregon State University for graduate school. In 2008, he joined the OSU IAC where he built on his Lead Student experience and continued his leadership role. Michael was an Operations Manager at the Oregon State University IAC, with responsibilities that included organizing Energy Saving Assessments, overseeing report writing and data analysis reviews.

Michael took advantage of any opportunity he had to collaborate with other IAC students, particularly when he attended the annual IAC Lead Student Meeting.

“Mike’s work at the Oregon State University Industrial Assessment Center provided him with the ideal background and training for a career in industrial energy efficiency. When Mike started working for Cascade Energy as a project engineer, his valuable experience at the IAC allowed him to immediately tackle a variety of energy projects covering a broad array of industrial systems.”

-Dave Whitmore, P.E., Program Director, Cascade Energy

During the 2009 meeting, he teamed up with Kevin Ng, the Lead Student from the San Francisco State IAC, and gave a presentation titled *Utilization of Online Collaboration Tools*. In this presentation, he discussed the various ways he and other IAC students could use technology to reach across IAC centers and work together.

When asked about his most positive experiences at the IAC, Mike noted that there are many, but one that he recalls as being particularly meaningful is when he learned that his ideas or recommendations were being implemented by a company.

He recalled a particular assessment while at OSU that had a long term effect on his career. The company and IAC team were exploring the possibility of using a waste stream as fuel in the boiler. And while the project didn’t come to fruition, it served as an example of “out of the box” thinking that had huge potential energy savings and it was really exciting that a project of this magnitude was even being considered. Being part of that process, and seeing all that was possible, motivated Mike to continue working towards innovative energy efficiency and sustainability goals.

Career Highlights

Though Michael’s interest in efficiency and sustainability preceded his IAC experience, he does credit the program with sharpening the direction of his professional career. When entering the work force, his IAC experience drove him to look for companies focused on industrial efficiency. He was not surprised to find that many of his fellow IAC alumni were also working for these companies.

He recalled that many of the tasks he performed while at the IAC translated seamlessly to his first position out of school. He noted that after leaving OSU, he moved directly into a job doing the same thing he had done as an operations manager at the IAC.

He recalled that there were many similarities between the reports he did in the IAC and the reports he was preparing for companies in the northwestern United States. The IAC taught him what to look for on an assessment as well as how to interact with various members of staff from a plant; be they technical personnel or non-technical managers and executives.

Currently Michael works for Cascade Energy, a consulting company founded by fellow Oregon State University IAC alumni Marcus Wilcox. His first position with Cascade was a Project Engineer doing analyses of utility projects.

He has now moved into a more customer-facing role. He spends most of his time in the field working with customers to help them



Michael Koch collecting data on an assessment.

"I would say that IAC program participants get as involved as soon as possible. There are so many opportunities made available through the IAC, that you should not miss out on them."

—Michael Koch,
University of Missouri and
Oregon State IAC Alumni

identify industrial energy efficiency projects and to help them understand the funding opportunities that may be available to make the projects a reality.

He is typically involved in the project from inception to end, beginning with the idea phase and ending with the close-out and delivery of the incentive check for the energy savings that the company has realized.

Focus on the Future

Michael looks to stay in his current position for the foreseeable future. Mike views his new role at Cascade as the best of both worlds. He loves the balance between the technological understanding and customer facing communication. "It allows me to keep one foot in the engineering world and one foot in the field with customers and emerging technologies. I have more time in the field where I am really studying and understanding the projects and equipment in an in-depth way. Helping the client to understand the engineering behind the project as well as how to make the project a reality is very gratifying."

A Strong Energy Portfolio for a Strong America

Energy efficiency and renewable energy will mean a stronger economy, cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) invests in a diverse portfolio of energy technologies. The Advanced Manufacturing Office (AMO) within EERE is the lead government program working to increase the energy efficiency of the U.S. Industrial Sector.

ABOUT THE IAC PROGRAM:

A program area of AMO, the Industrial Assessment Centers (IACs) provide eligible small- and medium-sized manufacturers with no-cost energy assessments. Additionally, the IACs serve as a training ground for the next-generation of energy savvy engineers.

ADDITIONAL INFORMATION:

EERE website:

www.eere.energy.gov

AMO website:

www.eere.energy.gov/industry/

IAC student forum website:

www.iacforum.org



Courtesy of Michael Koch

Michael Koch – an outdoor enthusiast seen here surveying the Northwest landscape.