Rakan Bilaus brought his engineering experience at Process & Control Systems Department (P&CSD) and operational experience at Saudi Aramco’s Jeddah, Yanbu and SATORP refineries to his year-long training program with Honeywell-UOP. Coordinated by Aramco Training Services Company (ATSC), the program pairs Saudi Aramco professionals with leading international companies.

“The objective of my assignment is to become proficient in one of the most complex process technologies in refining and petrochemical facilities, namely the aromatics complex,” says Bilaus who joined Saudi Aramco in 2008 and led the Aromatics Processing Group at P&CSD before joining Honeywell-UOP.

He is designing new aromatics complexes, conducting feasibility studies of new technologies that are of interest to Saudi Aramco and working with operational support and troubleshooting groups to gain know-how in diagnosing and resolving complex issues in aromatics complexes.

Bilaus faced a learning curve after joining Honeywell-UOP, but has met the challenge. “The most demanding aspect of my assignment is the huge knowledge gap in technology design facing engineers coming from operational facilities and the short time available to fill that gap,” he says.

Bilaus’ efforts have already been successful. He designed the YASREF aromatics complex, which was recognized within Honeywell-UOP to be the most efficient design, requiring the least energy compared to any unit installed worldwide. “It was very challenging to discuss, validate, implement and verify brand new design ideas in an aromatics complex comprised of six distinctive and very integrated process units,” he says.

His improved design for a Polish MaxEne unit, a plant designed to increase production of olefins, aromatics and gasoline, is in the process for a U.S. patent. The design will increase production and lower capital, energy and operational costs.

“Rakan contributed significantly to Honeywell-UOP through his engineering and operational experience at Saudi Aramco. He introduced new design features never seen before in the MaxEne unit,” says Scott P. Lelito, Senior Manager, Engineering, at Honeywell-UOP.

Bilaus looks forward to bringing new design ideas and knowledge back to Saudi Aramco. “We have great design ideas that will make Saudi Aramco’s refining and petrochemicals facilities even more efficient,” he says.

There are nearly 150 Saudi Aramco professionals currently training at companies in North America. They are engaged on assignments in manufacturing, oil and gas, and electricity; in offices conducting financial and accounting activities; in security industries; in medical facilities; and in an array of other disciplines.

"We have great design ideas that will make Saudi Aramco’s refining and petrochemicals facilities even more efficient.”

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