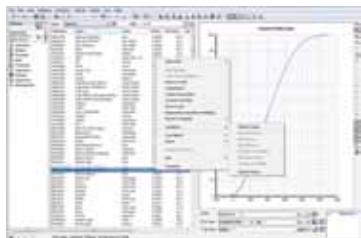## Software Provides Crude Assay Data for Refinery Optimization
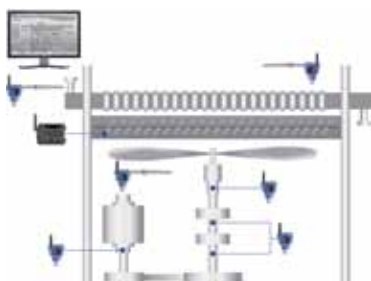

Spiral CrudeSuite is an enterprise toolset for sharing, managing, and modeling crude oil information that offers seamless access to the latest validated crude assay data. The knowledge-management module is now integrated with SimSci Pro/II design and ROMeo optimization software, which together allow companies to extract maximum value from their data. Engineers can design refinery processes using the company's SimSci Pro/II software; refineries can maximize profitability with the SimSci ROMeo optimization software.

Invensys
www.invensys.com

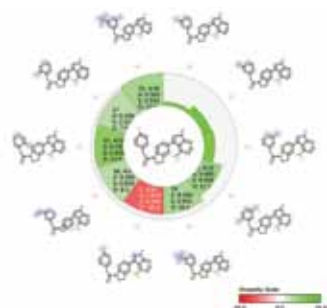## Monitoring Solution Cuts Production Losses

Air-cooled heat exchanger failures can limit cooling and reduce plant production. To limit downtime, the Air-Cooled Heat Exchanger Monitoring Solution is now a part of the Essential Asset Monitoring Suite. This software and a network of wireless or wired instruments reduce operating costs, helping to justify automated continuous online monitoring. Traditionally, plants perform periodic manual monitoring of air-cooled heat exchangers. But, because these manual measurements are infrequent, issues that rapidly develop or process conditions that cause asset failures are often missed. This monitoring system oversees and identifies the full range of failure modes so operators can adjust operation in a controlled manner and take corrective action if needed.

Emerson Process Management
www.emersonprocess.com

Module Provides Insights into Molecular Activity

The Activity Miner module for the company's Torch and Forge molecule-design software is an intuitive structure-activity relationship (SAR) interpretation tool that identifies key 3D structural and electrostatic changes that impact a molecule's biological activity. Activity Miner employs innovative science to calculate and compare the structural and activity differences between each pair of molecules in a dataset. Intuitive visualization tools make it easy to understand why a specific change results in improved activity, as well as why an apparently large change in chemistry results in a small change in activity.

Cresset
www.cresset-group.com

Update Supports Advanced Engineering Design Calculations

Mathcad Prime 3.0 is the latest version of this calculation software designed for solving, analyzing, and sharing engineering design knowledge. Improved calculation capabilities allow more complex equations to be solved. The software includes hundreds of mathematical functions, and allows users to define their own functions as well. Equations can be solved both numerically and symbolically. Version 3.0 has enhanced documentation capabilities, including the ability to create new worksheets based on existing personal or company-standardized templates. This version can also reuse existing algorithms already coded in C++, C, and Fortran, among other languages. A global definition operator allows the user to define constants and parameters for use anywhere in the worksheet. Additional enhancements include faster matrix decomposition functions, surface interpolation in contour plots, and various usability improvements.

PTC
www.ptc.com

Web-Based Toolkit Guides Electrode Selection

The Electrode ValueBox is an interactive, web-based toolkit that eases electrode selection and troubleshooting. It now includes the Sensor ProductGuide, which enables users to choose the optimal electrode for their application, as well as appropriate housings, cables, and transmitters, to ensure that products meet specifications. Conductivity, pH, dissolved oxygen (DO), oxygen-reduction potential (ORP), and cable guides can be accessed via product name or a search based on application criteria. Searches yield up-to-date product pages that feature technical datasheets, pictures, and links to additional information. Available in 27 languages, the Sensor ProductGuide is easily downloaded for use on a PC or iPad.

Mettler Toledo
www.mt.com