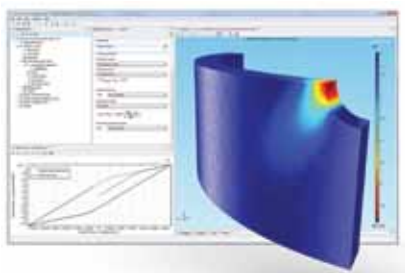# Software & Information Technology

Updated Software Includes LiveLink for Microsoft Excel

Multiphysics Version 4.3a expands simulation capabilities with numerous updates. The new LiveLink product for Microsoft Excel enables engineers to run Multiphysics directly from Excel. A tab in the ribbon toolbar in Excel controls the Multiphysics model, which allows for editing in Excel and instant synchronization with the model. Version 4.3a extends its support for cloud computing to Amazon's Elastic Compute Cloud, which delivers a scalable solution for running large simulations and solving large distributed models. The new Fatigue Module determines how many load cycles a structure can withstand with in-depth fatigue analysis methods. The ECAD Import Module imports electrical CAD files into Multiphysics quickly and easily. Computational fluid dynamics (CFD) capabilities have also received major upgrades in Version 4.3a, including expanded techniques for fluid-structure interaction (FSI).
COMSOL
www.comsol.com

Closed-Loop Control Enables Pulse-Free Performance

Intelligent closed-loop flow control has enhanced the Mitos P-Pump range with efficient control of flow-rates from 70 nL/min to 5 mL/min. Improved flowrate precision of the new software benefits the fields of droplet generation, microprocess engineering, and microreaction kinetics. By connecting a Mitos flowrate sensor between the pump and micro-fluidic device, a flowrate target can be entered directly on the Mitos P-Pump with no need for a computer. Systems can be extended to multiple P-Pumps with independent flowrate control. The flow control software ensures a coefficient of variation (CV) of less than 0.14% in droplet size.
Dolomite
www.dolomite-microfluidics.com

Software Provides an Automation Environment

The FAST/TOOLS R9.05 supervisory control and data acquisition (SCADA) software is a web-based real-time management and visualization package that offers enhanced data acquisition, system integration, and remote operations. Information can be shared with subscribers through a secure cloud service. The collaboration/decision support solution (CDSS) captures key operational, maintenance, and business information. Major production facilities, such as petrochemical complexes and power plants, as well as sub-processes, such as reactors and tank farms, can be monitored. Dashboards deliver cross-referenced information on business performance factors, along with data on energy efficiency, carbon emissions, and environmental compliance. Alarm system performance analysis (ASPA) defines key performance measure-ments, analyzes alarm system behavior, and presents this information effectively. An HTML5 web environment provides tablet and smartphone functionality.
Yokogawa Corp. of America
www.yokogawa.com

App and Website Provide Waterway Health Assessment

The How's My Waterway app and website offer information on the condition of thousands of lakes, rivers, and streams across the U.S. Information about the quality of local water bodies can be accessed from a smartphone, tablet, or computer by simply entering a ZIP code or city name. Each waterway is identified as unpolluted, polluted, or unassessed. A map option displays the search area with the results color-coded by assessment status. The app and website provide information on the type of pollution reported for that waterway, and the actions taken to reduce it.
U.S. Environmental Protection Agency
www.epa.gov/mywaterway

Labeling Software Complies with the Latest Standards

DuraSuite labeling software now complies with the HazCom 2012 and Globally Harmonized Standard (GHS) labeling and storage guidelines. Drop-down menus facilitate selection between seven HazCom- and four GHS-compliant labeling templates. A search function helps users choose chemicals by name, or by CAS, EC, or UN number. More than 1,500 chemicals are preloaded in the database to reduce entry time, and the interface allows layout changes to be made easily and accurately. Functions such as edit, save, and delete make this software easy to learn and employ.
Graphic Products, Inc.
www.DuraLabel.com