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FOSS

New FOSS NIR article: Real-Time Bioreactor Monitoring of Osmolality and pH Using Near-Infrared Spectroscopy

A new article from FOSS NIRSystems, Inc. was published in the April 2009 issue of *BioProcess International*, on the subject: *Real-Time Bioreactor Monitoring of Osmolality and pH Using Near-Infrared Spectroscopy*.

This article discusses how Near-Infrared spectroscopy can measure ionic concentrations in a cell culture process. Osmolality and pH are two important cell culture process parameters that are often monitored in an effort to improve mammalian cell cultures. Proper control of osmolality and pH can help optimize cell viability and growth by maintaining the isotonicity of the culture medium and regulating the transport of water and nutrients through cell membranes.

Near-Infrared spectroscopy can monitor a bioreactor *in situ* real-time, and is capable of replacing or supplementing osmolality and pH measurements off-line or current pH on-line methods. NIR spectroscopy may be used to improve cell viability and productivity with closed-loop feedback.

FOSS NIRSystems, Inc. is a unit of FOSS A/S and the world's leading supplier of laboratory, at-line and process NIR solutions. FOSS NIRSystems has more than 40 years of industry experience and over 20,000 successful installations worldwide. XDS NIR analyzers can be used throughout the manufacturing processes – from raw material inspection and in-process testing to final product release.

For more information about FOSS NIRSystems and its complete product line, contact:
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