

OCTOBER | AD CLOSE: SEPTEMBER 6 | MATERIAL DUE: SEPTEMBER 9



## UPCOMING FEATURES

[DOWNLOAD THE 2022 MEDIA KIT](#)

### TOPIC: WATER TREATMENT

#### FEATURE REPORTS

**Summary:** Part 1 of this month's two-part Feature Report on water treatment focuses on the membrane technologies that are available for various water-treatment applications. The article includes discussion of reverse-osmosis membranes, as well as nanofiltration (NF), ultrafiltration (UF), and microfiltration (MF). Their use and applications are a function of the chemical characteristics of the contaminants removed and pressure requirements of each technology. Part 2 discusses strategies that water-treatment operators can follow to ensure that their wastewater is in compliance with local and federal discharge requirements.

**Related equipment and services:** All types of membranes and associated components; instrumentation and analytical devices used for controlling, monitoring, measuring and analyzing water quality and flow characteristics.

**Relevant industries:** Industrial water treatment plants at CPI facilities, desalination plants

### TOPIC: MILLING IN THE PHARMACEUTICAL INDUSTRY

#### FEATURE REPORTS

**Summary:** Milling is a common technique used for the reduction and control of particle size distribution for active pharmaceutical ingredients (API), many of which are crystalline solids. Regulatory expectations require API of high purity, and consistent, well-understood physical properties. The particle characteristics of API impact bioavailability parameters such as solubility and surface area, and important powder characteristics such as flowability and compressibility when formulated into drug product such as tablets, capsules, suspensions and inhalation products. Mills are useful tools to generate API particles properties with desired and consistent properties, through size reduction and surface modification mechanisms. The use of mills in the pharmaceutical industry remains prevalent, due to their modular nature, predictable performance, and wide range of equipment availability. The choice of mill for a specific application is dependent on the performance capabilities relative to the properties of the feed material, as well as any constraints particular to the mill that is being considered for the function. These topics and more are discussed in this month's Feature Report.

**Related equipment and services:** All types of grinders and mills, particle size analyzers, screens and classifiers, and more

**Relevant industries:** Pharmaceuticals, food, and fine chemicals

### TOPIC: DECARBONIZATION

#### NEWSFRONT

**Summary:** Given the massive challenge of establishing manufacturing operations in the chemical process industries (CPI) that achieve net-zero carbon emissions, it is likely that carbon capture, utilization and storage (CCUS) will play a significant role. This Newsfront article will describe some of the recent developments, advancements and initiatives surrounding CCUS. The evolution of the technology may offer clues about the future of CCUS and its impact on the energy transition over the next crucial decades.

**Related equipment and services:** Any process equipment, hardware, software, instrumentation and others aimed at increasing efficiency and sustainability of chemical processes, including emissions reduction, the use of renewable energy and others.

**Relevant industries:** All sectors of the CPI are concerned with decarbonization, energy transition and sustainability. Editorial material for consideration should be sent to senior editor Scott Jenkins ([sjenkins@chemengonline.com](mailto:sjenkins@chemengonline.com))

## TOPIC: COST ESTIMATION

### FACTS AT YOUR FINGERTIPS

**Summary:** When evaluating investments related to energy-transition and circular-economy initiatives, it is often the case that considering initial investment costs alone is not sufficient to determine the best alternatives in a project. Lifecycle cost analysis (LCCA) is a tool that can be used to select those alternatives that will bring the best overall value to the project. This one-page reference will provide a refresher on the basics of LCCA methodology.

**Related equipment and services:** Design software, Modular construction, cost estimation tools

**Relevant industries:** All sectors of the CPI are concerned with cost estimating

## TOPIC: MOBILE DEVICES AND APPLICATIONS

### FOCUS

**Summary:** Mobile devices play a key role in the transformation of Industry 4.0 and the Industrial Internet of Things (IIoT). Unlike conventional smartphones, tablets and other devices, those used in industrial setting have to be designed to operate safely in hazardous areas. But just like consumer devices, new applications, operating systems and devices themselves are introduced regularly. This month's Focus presents the latest devices and applications (apps) recently introduced to the market.

**Related equipment and services:** Smartphones, tablets, smart glasses, helmets, and devices that use virtual and augmented reality, and software applications.

**Relevant industries:** All sectors of the CPI.

Editorial material for consideration should be sent to senior editor Gerald Ondrey ([gondrey@chemengonline.com](mailto:gondrey@chemengonline.com))

## TOPIC: MAINTENANCE AND INSTALLATION OF SAFETY-RELIEF VALVES

### ENGINEERING PRACTICE

**Summary:** Properly functioning safety-relief valves help prevent catastrophic failures in process plants. Their installation and maintenance schedule are critical operations for ensuring safety and protecting equipment. This article provides information on proper installation of safety-relief valves and their ongoing maintenance.

**Related equipment and services:** Safety valves, pressure-relief valves, rupture disks, pressure vessels, pressure gages, sensors, process safety equipment, explosion-suppression systems

**Relevant industries:** Safety-relief valves are common throughout the CPI, especially in petroleum refining, petrochemicals, chemicals and others

## TOPIC: DISTILLATION

### THE TOWER DOCTOR

**Summary:** The Tower Doctor presents lessons learned from actual troubleshooting experiences by a distillation expert. This installment discusses the effect that tower pressure has on capacity.

**Related equipment and services:** All distillation column internals

**Relevant industries:** All sectors of the CPI that use distillation

---

## MARKETING RESOURCES

- [2022 Editorial Calendar](#)
- [2022 Media Kit](#)
- [Emedia Trends](#)
- [Editorial Submissions](#)
- [BPA Statement](#)
- [Emedia Survey Data](#)



---

**FOR ADVERTISING OPPORTUNITIES, PLEASE CONTACT  
YOUR CHEMICAL ENGINEERING SALES REPRESENTATIVE**

**TERRY DAVIS**

Tel: 404-481-0254

CONNECTICUT, DISTRICT OF COLUMBIA,  
DELAWARE, GEORGIA, MAINE, MARYLAND,  
MASSACHUSETTS, NEW HAMPSHIRE, NEW  
JERSEY, NEW YORK, PENNSYLVANIA,  
RHODE ISLAND, VERMONT, CANADA, LATIN  
AMERICA

**JASON BULLOCK**

Tel: 713-974-0911

ALABAMA, ALASKA, ARIZONA, ARKANSAS,  
CALIFORNIA, COLORADO, FLORIDA, IDAHO,  
HAWAII, IDAHO, ILLINOIS, INDIANA, IOWA,  
KANSAS, KENTUCKY, LOUISIANA,  
MICHIGAN, MINNESOTA, MISSISSIPPI,  
MONTANA, MISSOURI, NEBRASKA, NEVADA,  
NEW MEXICO, NORTH CAROLINA, NORTH  
DAKOTA, OHIO, OKLAHOMA, OREGON,  
SOUTH CAROLINA, SOUTH DAKOTA,  
TENNESSEE, TEXAS, UTAH, VIRGINIA,  
WEST VIRGINIA, WYOMING, WASHINGTON,  
WISCONSIN

**PETRA TRAUTES**

Tel: 49-69-58604760

EUROPEAN SALES MANAGER AUSTRIA,  
BENELUX, CZECH REPUBLIC, EASTERN  
EUROPE, GERMANY, SCANDINAVIA,  
SWITZERLAND, UNITED KINGDOM

**DIPALI DHAR**

Tel: 718-263-1162

India Sales Representative

**KATSUHIRO ISHII**

Tel: 81-3-5691-3335

Japan Sales Representative

**RUDY TENG**

Tel: +86 13818181202

(China), +886 921322428 (Taiwan)  
Asia Sales Representative ASIA-PACIFIC,  
HONG KONG, PEOPLE'S REPUBLIC OF  
CHINA, TAIWAN

**OCTOBER | AD CLOSE: SEPTEMBER 6 | MATERIAL DUE: SEPTEMBER 9**

[View in web browser](#)

This message was sent to jmcphail@accessintel.com

To ensure delivery to your inbox, [add us to your address book](#)

Chemical Engineering \* Access Intelligence LLC \* 9211 Corporate Blvd., 4th Floor, Rockville, MD 20850

[Update My Preferences](#) | [Unsubscribe](#) | [Privacy Policy](#) | [Contact Us](#)