

## AdEdge Technologies Introduces Arsenic Removal Media

AdEdge Technologies, a worldwide provider of cutting edge adsorbents, brings a new arsenic removal media, AD33, to the water purification market. AD33 is targeted for residential, environmental, and small municipal water treatment applications.

According to AdEdge, AD33 removes both arsenic III and arsenic V and is very effective in removing other heavy metals such as lead, copper, and antimony, all while maintaining current drinking water standards. AD33 can be used as a stand-alone treatment method, making it ideal for point-of-use and point-of-entry residential applications. However, it is also suitable for use in small municipal and industrial applications, including environmental remediation.

AdEdge Technologies was recently formed by experts in the water purification and process separation industries. They also supply specialty adsorbents to the process separations and chromatography marketplaces.

Visit [www.AdEdgeTech.com](http://www.AdEdgeTech.com) for more information.

## ASR System Solutions Meets Storage and Recovery Needs

ASR System Solutions, LLC provides engineered aquifer storage and recovery systems, including the full integration of system enclosures, piping, control valves, actuators instrumentation, flow meters, electrical and computer controls, and automation. Their systems include all software, client-specific custom programming, and control logic design for a fully automatic aquifer storage and recovery (ASR) system. ASR's systems are designed for below-grade or above-ground installations and can be provided in vault, building, or skid-mounted versions. All systems are compatible with either submersible or turbine pump design.

## FracMan® for Discrete Fracture Network Modeling

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Discrete fracture network (DFN) modeling is popular for simulating flow and transport in fractured systems. Contrary to an equivalent porous media (EPM) model, which employs average parameter values within each grid cell, the DFN method explicitly defines the geometry of each fracture in the model domain. FracMan®, a suite of codes for fracture simulation developed by Golder Associates Incorporated, is an established DFN modeling code. The FracMan suite provides tools for discrete feature data analysis, geologic modeling, spatial analysis, visualization, flow and transport, and geomechanics. A graphical user interface (GUI) is provided for most of the software components that operate on a PC platform. UNIX versions are also available for some components. New GUI interfaces allow fracture visualization and lessen the time

required to learn input file syntax and code operation.

The learning curve for this product can be long, depending on the user's modeling background. However, technical assistance is available to licensed users and training workshops are offered. A general limitation of DFN modeling is the computational expense of specifying fractures as discrete objects. With recent improvements in both the capabilities of the FracMan software and computer processor speed, now it is possible to simulate field scale flow and transport involving thousands of fractures, although simulating high fracture density in large volumes may require fracture network simplification. Computational expense of a DFN model can be large, but simulators such as FracMan make it feasible to model discrete fracture flow for practical applications. Contact Golder Associates ([www.golder.com](http://www.golder.com)) for licensing terms, pricing, and availability.

Visit [www.mines.edu/igwmc](http://www.mines.edu/igwmc) for more modeling software information.

Software design and computer controls allow for fully automatic local and remote control utilizing a touch screen operator interface that incorporates realistic and detailed system graphics. Software/hardware design makes the system capable

of networking with existing or planned SCADA systems and can run one or multiple well sites, including future well-site additions.

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