

PRESS RELEASE

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NASA Chooses DEM Solution's EDEM Software to Model Lunar Dust and Regolith

Lebanon, NH, USA (April 29, 2008) – DEM Solutions, a world leader in discrete element modeling software, has been awarded a significant new contract in support of NASA's exploration technology programs. DEM Solutions will collaborate with scientists and engineers at NASA's Kennedy Space Center (KSC) to add new modeling capabilities to DEM Solutions' EDEM™ software, enabling NASA's Dust Mitigation and In-Situ Resource Utilization (ISRU) programs to model the unique physical and electrostatic characteristics of lunar and martian dust and rock (regolith) in the design of new technologies for dust mitigation, and excavation, handling and processing of granular material under low gravity conditions.

EDEM is an advanced DEM (Discrete Element Method) software used for the simulation, analysis, and visualization of particulate solids handling and processing operations across a broad range of industries. It provides a powerful, but easy-to-use tool for engineers to model the complex behavior of industrial particulate processes and obtain high-resolution information on bulk particle flow and interactions with equipment and surrounding media. It is used to evaluate and improve particle handling equipment and process design through testing of virtual prototypes so saving time and cost in physical testing and increasing product quality and reliability.

Under a previous contract, DEM Solutions engineers successfully teamed with the Electrostatics and Surface Physics laboratory at the KSC to develop advanced electrostatic models in EDEM for simulation of tribocharging of particles in contact with charged surfaces. The new contract will continue the enhancement EDEM software to meet NASA's advanced modelling needs in the area of particle electrostatics and interactions with electric and magnetic fields as well as handling and processing of lunar regolith. DEM Solutions engineers will contribute to the Dust Mitigation program, which is developing technologies for removal of dust from lunar equipment, such as optical and thermal radiator surfaces, connectors, and seals, and with the ISRU program, which is developing technologies for processing lunar regolith to generate oxygen and other raw materials necessary for long-term survival on the moon.

Dr. John Favier, CEO of DEM Solutions, commented:

“We are delighted to be continuing our collaboration with NASA and contributing to development of technologies in support of their lunar program. This project will further extend the capabilities of our EDEM software to provide more accurate models of particle electrostatics and interactions with electric and magnetic fields which are critical to effective simulation of handling and processing of highly charged lunar dust and regolith.”

For more information about the Electrostatics and Surface Physics Laboratory at the NASA Kennedy Space Center visit: <http://empl.ksc.nasa.gov/>.

About DEM Solutions

DEM Solutions partners with their customers to improve their products and processes by simulating and analyzing operations at the particle scale. First released in 2005, EDEM software is now used in the design and analysis of particulate handling, processing, and manufacturing operations in almost every industry sector and engineering discipline. EDEM provides companies with a tool to substantially reduce the number of physical prototypes and tests required to get a product to market or a process on-stream. It is used to help trouble-shoot difficult particulate processes and, because it is physics-based, it can greatly improve understanding of system fundamentals leading to better product and process design and innovation.

DEM Solutions' corporate headquarters are located in Edinburgh, Scotland with offices in Lebanon, New Hampshire, USA and sales offices and distributor representation worldwide.

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For additional information about DEM Solutions, please visit <http://www.dem-solutions.com>. For additional information about the electrostatics laboratory at the NASA Kennedy Space Center visit <http://empl.ksc.nasa.gov/>