**Evaluation of Silver-Exchanged Zeolites Under Development by University of Maine for Chemical Warfare Agent Decontamination Applications**

Authors: Mark D. Brickhouse; Teri A. Lalain; Terrence G. D’Onofrio; Lawrence R. Procell; Zachary B. Zander; EDGEWOOD CHEMICAL BIOLOGICAL CENTER ABERDEEN PROVING GROUND MD

... Department of Chemistry, University of Maine, for the destruction of chemical warfare agents. The hypothesis under investigation is that rapid decontamination can be achieved by ... field; therefore, the samples were used as received without drying or modifying. In the as-received state, the samples contain zeolitic water and are considered in a “hydrated” state. Drying or dehydrating the samples would create a different environment. The primary ... decontamination efficacy for several silver-doped zeolites against chemical agents to determine the most-active zeolites with or without photo activation.

**Physical Characteristics of Fire-Extinguishing Powders**

Authors: Anthony E. Finnerty; Lawrence J. Vande Kieft; Andrew Drysdale; ARMY RESEARCH LAB ABERDEEN PROVING GROUND MD

Powders are known to be highly efficient fire-extinguishing agents. There are powders available that, on both weight and volume bases, are more efficient than Halon 1301 as fire-extinguishing agents. A project was undertaken to examine several powders by both optical microscopy ... appeared to have very little agglomeration of the particles. The large amount of drying agent (approximately 8%) may explain this fact. In addition, most ... bicarbonate powders had similar average characteristic dimensions. Therefore, it is felt that they may perform similarly as fire-extinguishing agents.

**Some Aspects of the Evaluation of the Useful Life of Nylon Parachutes and Parachute Materials**

Authors: Louis J. Weiner; QUARTERMASTER RESEARCH AND DEVELOPMENT CENTER NATICK MA

... regarding serviceability may be made on a statistical sampling basis rather than 100% inspection. The specific studies which form a part of our current program are: Solar and ultra-violet radiation; Wetting and drying in sunlight and drying equipment; Permanent set during storage; Mechanical damage in use and maintenance; Durability of seams and thread; Deterioration due to chemical atmospheric agents; Fatigue due to repeated impact loading. (Author)

**Pressureless Sintering of Ceramic Composites**

Authors: Martin W. Weiser; NEW MEXICO UNIV ALBUQUERQUE

... was maximized at moderate levels of inclusion inhomogeneity. We also found that various salts were effective coagulating agents for slip casting Al2O3/ZrO2 composites. The drying of composites found that percolation limits the green density of particulate composites. The fracture toughness of Mn-Zn ferrites was increased ... coagulating. The hypothesis that, while the concrete is drying, others should avoid working on the roof where they may drop things on the new steps. * They may cooperate. If a truck is...

**Synchronization of Multiagent Plans Using a Temporal Logic Theorem Prover**

Authors: Christopher Stuart; SRI INTERNATIONAL MENLO PARK CA

... simple example is useful in considering aspects of the planning problem. The planning problem is to find some plan that can guide the activity of an agent or agents to achieve a desired goal. The particular subproblem considered here is that of resolving possible conflicts between elements of a plan. There are several ways ...