Alexium International Group Limited
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ASX: AJX

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ALEXIUM'S CLEANSHELL™ CB RESEARCH CONTRACT WITH US AIR FORCE TESTING WITH LIVE CHEMICAL WARFARE AGENTS (CWA'S) SARIN AND MUSTARD NERVE AGENTS

- **Alexium's Cleanshell CB™ treatment for textiles inhibits absorption of CWAs.**
- **Technical milestones on simulated CWA's met to enable start of live CWAs tests.**
- **Simulated tests have shown greater than 1000 times slower penetration of CWA's.**
- **Cleanshell CB™ shown to provide protection over weeks not just hours.**
- **Testing with live agents will provide validation against real CWA threats.**

Perth, WA and Greer, South Carolina, Alexium International Group Limited (Alexium) (ASX:AJX, AX:AJX. OTC QX:AXXIY) announced today that its Cleanshell CB™ treatment has moved forward for testing with live chemical warfare agents (CWAs) under its research contract with the US Air Force after evaluation on different fabric types and simulated CWA's.

Alexium's Cleanshell CB™ repellency treatment is targeted specifically to the treatment of the outershell fabric of Chemical and Biological protection ensembles. Cleanshell CB™ has shown dramatically increased repellency to simulants of CWAs such as sarin and mustard nerve agents but has also been optimized to provide excellent water and oil repellency as well as allowing for ease of movement in the field.

Over the past year, Alexium has been working with the US Air Force for the evaluation of Cleanshell CB™ on various fabrics. The goal of this work has been to evaluate the best fabrics for this application and to assess its efficacy with live CWAs. The benefit of the Cleanshell CB™ treatment is that it functions by repelling CWAs and inhibiting the absorption of agents into the fabric. Relative to a standard repellency treatment, the Cleanshell CB™ treatment increases the time for chemical warfare agent penetration from minutes to weeks (>1000 times slower penetration). Based on recent work with simulants for CWAs, the samples of Cleanshell CB™ treated fabrics have progressed to studies with live agents.

The Cleanshell CB™ treatment is applied via Alexium's patented Reactive Surface Treatment (RST). RST uses microwave-based technology to apply sub-micron coatings to a wide range of substrates. The resulting nanoscopic coating may chemically bond to the substrate or simply form an intractable coating at the substrate surface. This flexibility allows a wide range of materials to be treated — many of which cannot be functionalized with a durable coating via other traditional methods.

"The Cleanshell CB treatment has been an exciting product from our RST technology, and its progression to live agent testing is a key milestone. These live agent tests, which are undertaken under strict conditions in a secure US Department of Defense installation, are only undertaken after complete validation against simulated agents. The live agent test results will provide a definitive measure of Cleanshell CB protection against real CWAs threats" said Dr. Bob Brookins, Head of Research and Development for Alexium.

For more information visit: www.alexiuminternational.com

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About Alexium

Alexium International Group Limited (ASX:AJX, AX:AJX OTC QX:AXXIY) holds proprietary patent applications for a process developed initially by the US Department of Defense , which allows for the surface modification and attachment of nano-particles or multiple chemical functional groups to surfaces or substrates to provide functions such as water proofing, oil proofing, anti-microbial, non-stick and UV protection. Applications under development include but are not limited to textiles, paints, packaging, glass and building materials. Alexium's fire retardant treatment for 95% Nylon based products is marketed under the Ascalon™ trademark. Alexium's fire retardant treatment for nylon blended materials such as nylon/cotton (Nyco), is marketed under the Nycolon™ trade mark.