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ALEXIUM FORMS TECHNICAL ADVISORY BOARD

Dr. Chris Cole, Professor Emirita and Director of the Clemson Apparel Research Center will chair Alexium's newly introduced Technical Advisory Board. The Advisory Board will provide technical guidance, as well as help strengthen the product development pipeline, intellectual property strategy, and the commercialization path.

Dr. Cole received her B.S. degree in Chemistry from the University of North Carolina at Chapel Hill and her Ph.D. in Physical Chemistry from Massachusetts Institute of Technology (MIT). She was a Postdoctoral student



under Dr. Robert H. Barker at Clemson University before joining the faculty of the School of Textiles in 1976. Dr. Cole performed guest work at the Center for Fire Research at the National Institute for Science and Technology and was a visiting researcher at the University of Science and Technology in Hong Kong. She serves as an external examiner, proposal reviewer and consultant to several educational and governmental groups in Hong Kong. In 1987, she co-founded Clemson Apparel Research, a multidisciplinary center at Clemson University that focuses on working with apparel manufacturers to improve their commercial viability. Dr. Cole's general areas of research include all aspects of apparel manufacturing, textile testing, product development, shade sorting, and production support.

Nycolon™ **Establishes A** ew Benchmark .aur derability Nycolon™, Alexium's -nøvel flame retardant treatment for nylon-cotton fabric blends has established a new benchmark for launderability. Proven to be durable for 50 washes, this level marks a critical threshold for the commercialization process of Wycolon™. Over the past few months, `)Ålexium Government Solutions has optimized the processing parameters for the Nycolon treatment. This process has significantly improved the wash durability. Building on recent work, Alexium plans to conduct a production scale line trial of Nycolon in September.

INDEPENDENT LABORATORY STUDIES CERTIFY ASCALON™ PERFORMANCE

Alexium has completed a process of expanding its database on vertical burn performance of its Ascalon™ technology by independent certification of Flame Retardance (FR) performance. The aim of the independent testing is to provide guides for variable production set ups used by different factories and to widen the potential product applications of this breakthrough nylon FR technology. The independent testing was undertaken at four different testing facilities took place at Magill Services Inc. of Conway, South Carolina. Magill is an ISO17025 approved textile and apparel testing laboratory, (Accreditation No. 67822) with over 20 years' experience as a US Department of Defense, QLL certified testing facility (#18030).

Magill Services also holds a USA/Canada Joint Certification (#0066762).

The results from the four different test facility set ups show a high 75% correlation and performance that exceeds product requirements with the remainder showing higher results, typical of the variability seen in the vertical burn test using different set ups.



Using the data from the study and insight gained from the testing community, Alexium has been able to make small changes to the technology which improved key FR performance measures by 44% and reduced variability in those measures by 58%.

"Although we were certainly pleased with the solid performance from Ascalon™ through independent testing, we also saw the data as an opportunity to take the quality of the product to a new level for the benefit of our current, as well as our potential, manufacturing partners. Importantly, we are now able to provide confidence from independent tests for our future manufacturing partners, for important manufacturing mileposts such as percentage first quality and on-time delivery"

-Dirk Van Hyning,

-Head of Product Development and Commercial Transfer

HIGHLIGHTING ALEXIUM'S PARTNERSHIPS NORTH CAROLINA STATE UNIVERSITY



For over three years now, Alexium has worked in collaboration with one of the United States' premier textile research university, North Carolina State University. Again in September, Alexium will travel to North Carolina State University for the first Nycolon™ trial run. The Dyeing and Finishing Pilot Lab, run by Mr. Jeff Krauss and his support staff, has an array of machinery available for industry service work. Capabilities include prototyping of dyes, coatings, chemical finishes and mechanical finishes. Processing of synthetic or natural yarns, fibers, garments and fabrics is also available.

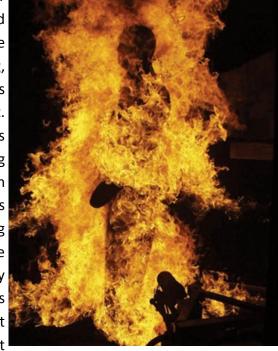
"We appreciate the collaboration with NCSU and sincerely appreciate the effort by Jeff Krauss and his team in demonstrating our treatments at the production trial levels. NCSU's pilot facilities offer tremendous equipment capabilities and is an ideal environment to stage our technology for the next level and commercial transition."

-Stefan Susta

-COO of Alexium.

In addition to world class research, testing, and pilot production capabilities, NCSU offers very unique testing facilities for studying the performance of flame

retardant (FR) fabrics and garments. For example, in the Textile Protection and Comfort Center, operated as part of the NCSU Department of Textile Engineering, Chemistry, three mannequins play key roles in determining FR protection and comfort. The lab is able to measure how textiles respond to extreme conditions by recreating real world environments around each clothed mannequin. PyroMan endures conditions that mimic a burning building with 122 thermal heat sensors that are able to record heat flux while being blasted by eight propane-gas burners. RadMan, who is still under development, has sensors that record the radiant heat of simulated forest



fires. The third unnamed mannequin has thermal sensors, articulated joints and more than 100 sweating pores, so that the performance of uniforms and outdoor clothing can be tested.

NICK'S CHALLENGE TO CONQUER CANCER

Nicholas Clark, Alexium's Chief Executive Officer & Executive Director, is taking on the courageous bike ride from Greenville, South Carolina to Lewiston, Maine. This

ride is in support of cancer research, outreach, and advocacy. Taking place October 5th— October 14th, there will be four teams riding relay style, with six



members per team riding in five hour shifts. Because each team is driving 15 hours per day, there will be medical, mechanical and nutrition staff, as well as fluids and massage therapy available on each route.

The Challenge to Conquer Cancer, a non-profit corporation, exists to promote the advancement of cancer research and advocacy efforts locally, regionally and nationally through fund-raising fitness events.

STAFF BIO JONAS LARUE

RESEARCH COORDINATOR

Jonas Larue is the current Research Coordinator at the Greer, S.C. Alexium facility, where he started as a Research and Development Chemist. He graduated from the University of South Carolina Upstate, with a Bachelor of Science in Biology. He is currently attending Lehigh University for a Master's Degree in Polymer Science and Engineering. He will appear on both the Nylon and Nylon/Cotton patents for Alexium.



He enjoys spending time with his wife, hiking, cycling, and generally being outdoors.

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