

INTERNATIONAL BIODETERIORATION RESEARCH GROUP

Functional Fluids (FF) Project Group: Annual Report 2017

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The FF Project Group met twice in the 2017 period. Thirty participants attended a meeting in April in Berlin, Germany, and thirteen participants attended in November in Nara, Japan.

The work of the group in 2017 was focused on the development of a standard test method for textile spin finishes. Organisms, previously isolated from several examples of contaminated spin finishes, were used to challenge three fresh spin finish formulations, by a member of the IBRG. Low numbers of bacteria were recovered and the addition of nutrients, appeared to improve bacterial survival, in two of the spin finishes; it was subsequently discovered that the third spin finish contained some biocide. Work with eleven bacterial isolates in the more susceptible spin finish, recognised that only two of the eleven organisms were surviving.

Two members of the IBRG investigated shorter incubation times, assuming that the lack of available nutrients may be limiting growth. Inocula prepared in nutrient broth were more successful. Further discussion with industry about relevant aging procedures highlighted the fact that a spin finish is prepared at elevated temperature. This will be considered in further testing. Additionally, industry will deliver used spin finish directly from the production line to be inoculated in laboratory tests.

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