

## INTERNATIONAL BIODETERIORATION RESEARCH GROUP

### Polymer Dispersion Working Group: Annual Report 2014

Report No: IBRG/PDG/13/019

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The Polymer Dispersion Group held two meetings during 2014; in Prague in April and Athens in October. A paper on the statistical validation of the Group's test method was submitted for publication and subsequently revised. There was discussion of further preliminary results on a possible collaborative experiment to investigate the growth of yeasts in a model polymer dispersion and further revisions to the Group's test method were carried out.

John Gillatt of Thor Specialities (UK) Ltd continued to perform the role of Chair with Kyle Allison of IMSL, previously Acting Technical Secretary, taking over that position on a more permanent basis. The help of Kevin Roden of Thor Specialities as a previous Acting Technical Secretary is noted with grateful thanks.

During the year, two meetings of the group took place. The twenty seventh meeting was held in April 2014 at The Vila Lanna, Prague, Czech Republic attended by 22 participants with the twenty eighth meeting taking place at the Callirhoe Hotel, Athens, Greece at which 15 delegates were present. Kyle Allison of IMSL took on the role of Technical Secretary. It was noted that the Chair of the group will retire in the near future and a new Chair therefore needs to be appointed.

The primary aim of the Group continues to be the development of a standard method which could be used within the scope of the EU Biocidal Products Regulations (BPR) as an efficacy test for biocides used in polymer dispersions and similar materials and for evaluating the performance of biocides in such products. In addition, the remit of the Group includes investigating the biodeterioration of polymer dispersions in general and other relevant, related issues.

To date the former Polymer Emulsion Project and the Polymer Dispersion Group have completed eight collaborative experiments, some with several phases. The results of the eighth were statistically analysed and confirmed the Group's method for evaluating biocides in polymer dispersions to be robust, repeatable and reproducible. A paper for publication (*The Microbial Resistance of Polymer Dispersions and the Efficacy of Polymer Dispersion Biocides – a Statistically Validated Method*, Gillatt, Julian, et. al) was submitted to International Biodeterioration & Biodegradation and is, after amendment, currently in review with publication due shortly.

A preliminary collaborative experiment to investigate the growth of yeasts in a model polymer dispersion has been carried out using a number of organisms submitted by participants. Growth of these in the dispersed powder polymer used for the bacterial work was not as confluent as had been hoped or expected and this project will be reviewed during 2015 with a view to identifying a group of relevant organisms and/or medium.

The Group's test method (*The Evaluation of Biocidal Substances and Products in Aqueous-Based Polymer Dispersions*, currently document IBRG PD13/018/1.0 - April 2015) was updated following the autumn 2014 meeting. It continues to be available for revision at each of the Group's meetings but, especially in respect of the testing of bacteria in polymer dispersions is now considered complete and available for publication.

John Gillatt:  
Kyle Allison

Chair of the IBRG Polymer Dispersion Group  
Technical Secretary of the IBRG Polymer Dispersion Group