

CORRECTION

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Correction: Modifying bacterial cellulose dispersions with deep eutectic solvent and pectin to tune the properties of open-celled foams

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Correction for 'Modifying bacterial cellulose dispersions with deep eutectic solvent and pectin to tune the properties of open-celled foams' by Hareesh Iyer *et al.*, *RSC Appl. Polym.*, 2025, **3**, 407–419, <https://doi.org/10.1039/D4LP00348A>.

The authors regret that the baseline treatment method used for the untreated BC control sample in the original article was incorrect. This issue was identified while repeating the control SAXS measurements for subsequent projects. After re-analysing the SAXS data with the correct baseline treatment, the authors observed numerical differences for the untreated BC sample that lead to two value changes in the main text (section 3.1.1; second paragraph) and one line entry in the ESI (Table S1). The corrected section 3.1.1 (second paragraph) and Table S1 are shown below with the changes highlighted in bold text. The ESI has also been updated with the corrected Table S1 and replaced online.

Section 3.1.1 (second paragraph)

Comparing SAXS data for untreated BC and DES-treated BC, we see significantly different behavior induced by the DES treatment (see ESI Table S1). The size of the entangled region (R_g) for un-treated BC is measured as ~ 226 Å and ~ 3279 Å for DES-treated BC, an order of magnitude difference. This may be explained by the defibrillation of the cellulose fibers due to DES treatment, leading to more overlapping fibers at each point of contact. The DES treatment shows the opposite effect on mesh size (ξ), where the mesh size of the DES-treated BC (220 Å) is **an order of magnitude** smaller than that of the non-treated BC (298 Å). Therefore, the defibrillated DES-treated BC forms a network of entanglements that result in a smaller mesh size, compared to the non-treated BC which forms a significantly looser mesh structure.

Table S1 SAXS model fitting parameters.

| Sample | Scale | Bkg (cm ⁻¹) | I_G (cm ⁻¹) | I_L (cm ⁻¹) | R_g (Å) | D | ξ (Å) |
|-------------|--------------|-------------------------|---------------------------|---------------------------|---------------|-------------|---------------|
| DES BC | 80.55 | 0.02 | 320.76 | 10.75 | 3278.7 | 3.24 | 219.88 |
| BC | 0.078 | 0.00 | 147.11 | 10 800 | 225.91 | 2.90 | 297.86 |
| 20% pectin | 65.09 | 0.01 | 247.1 | 14.16 | 2607.4 | 3.13 | 258.34 |
| 40% pectin | 8.37 | 0.02 | 202.45 | 81.19 | 2149.8 | 3.19 | 241.97 |
| 60% pectin | 4.40 | 0.02 | 152.03 | 123.21 | 1760.8 | 3.18 | 256.1 |
| 80% pectin | 3.85 | 0.01 | 175.07 | 95.81 | 1955.8 | 3.10 | 290.53 |
| 100% pectin | 2.86 | 0.01 | 2.23 | 654.9 | 402.34 | 2.46 | 2576.2 |

An independent expert has assessed the corrections and confirmed that they do not alter the conclusions, interpretations, or discussion points presented in the original article.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

