



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	Ms_BJAST_20290
Title of the Manuscript:	Electron Microscopy Documents The Microorganisms' Biodestructive Action On Polyurethane And The Production, Internalization And Vesicular Trafficking Of Nanoparticles
Type of Article:	Original research papers

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
Plagiarism issue has been resolved. As the remainder of the authors comments do not seriously address my original comments, I have nothing further to add. At a minimum, the publication should provide sufficient detail on the material and methods that it can be reproduced by someone other than the authors. For example, Lines 90-92 "The preparation of biological specimens for scanning or transmission electron microscopy consisted in primary fixation, washing, and secondary fixation." Primary fixative was what, washed with what, secondary fixed with what? There are a plethora of choices.	Here are details of sample preparation that have been inserted in the final revision of manuscript (lines 92-111) Samples were prepared either for conventional SEM or TEM. Each sample was processed according to the following fixation procedures: aldehyde primary fixation, osmium postfixation and staining with lead citrate. More precisely: -Primary fixation :1% glutaraldehyde and 0.4% paraformaldehyde in 0.1% M sodium cacodylate buffer (pH 7.4) for 2.5 hours -Osmium postfixation: 1% Osmium tetroxide in distilled water (1 hour) -Washing in distilled water (3x10min) -Dehydration in a graded series of ethanol (from 30% to absolute ethanol) each step 10 min and rinsing in acetone (3x10 min) At this point the samples used for the FIB/SEM observation were dried, mounted on an aluminum stub and coated with a 5-nm-thick gold layer in a SPI-Module Sputter/Carbon Coater System (SPI Inc., USA) Instead the samples observed with the TEM underwent : -Embedment in plastic (Agar) -Cutting with ultramicrotome (Chemical-physical methods of drying were not applied in accordance with the traditional techniques, because standard drying operations led to structural changes of both the biofilm and the cells [38]). -Contrasting with copper sulphate and Alcian Blue in order to have a better view of the exopolysaccharide (EPS) matrix of the biofilm [39]. All preparation steps were done at room temperature