



**University of Dundee**

## **A cost effective hydrogel test kit for pre and post blast trinitrotoluene**

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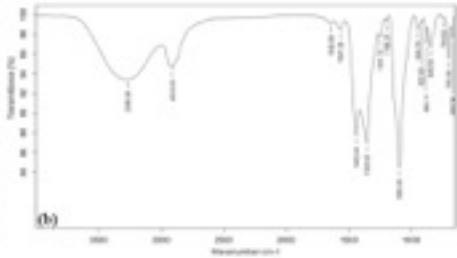
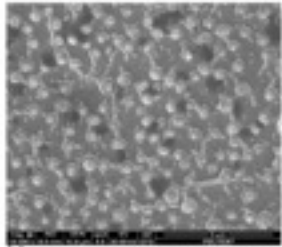
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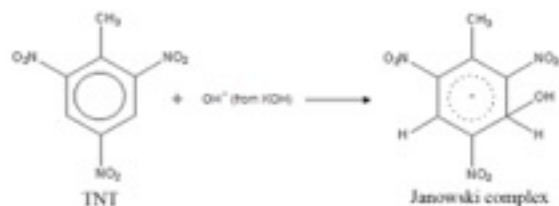
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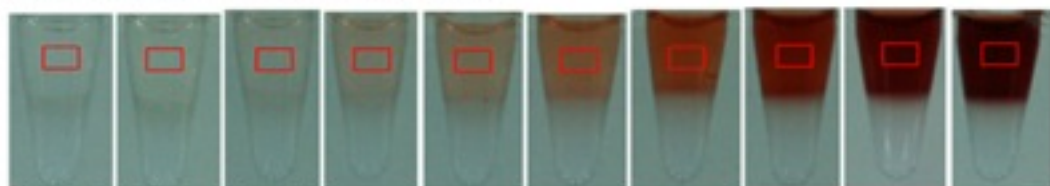
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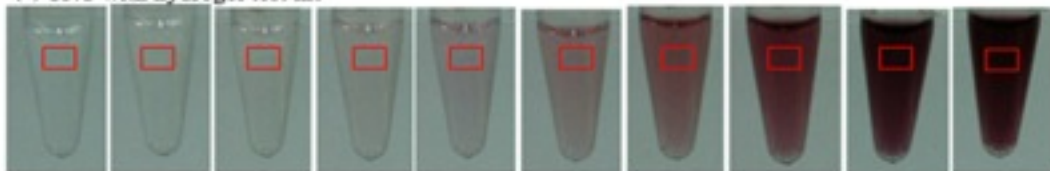




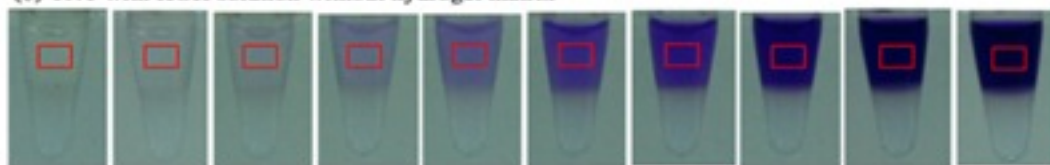
(a) Chemical reaction of TNT and KOH solution [15, 16]



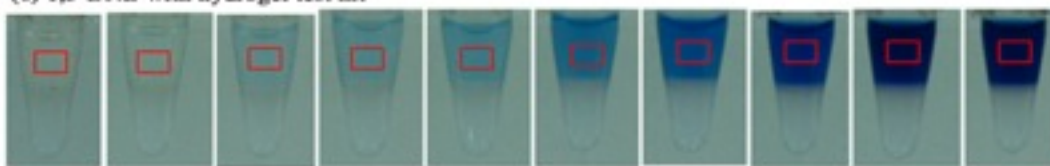
(b) TNT with hydrogel test kit



(c) TNT with KOH solution without hydrogel matrix

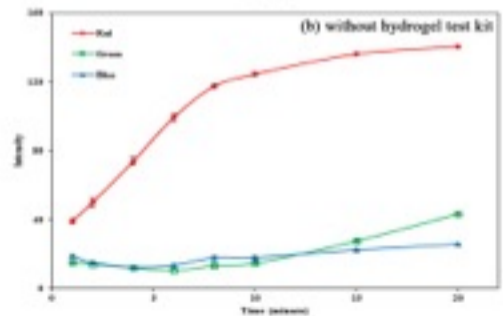
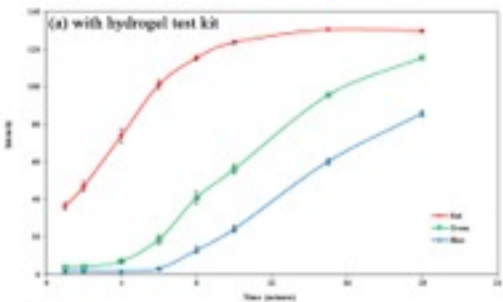


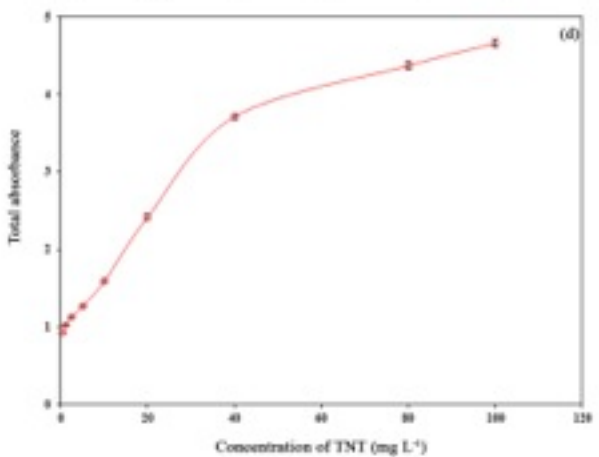
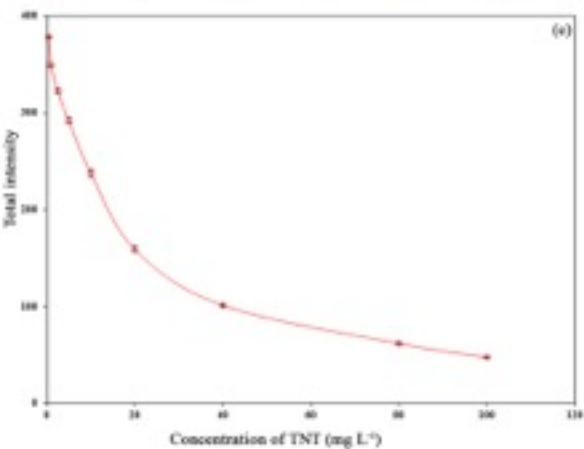
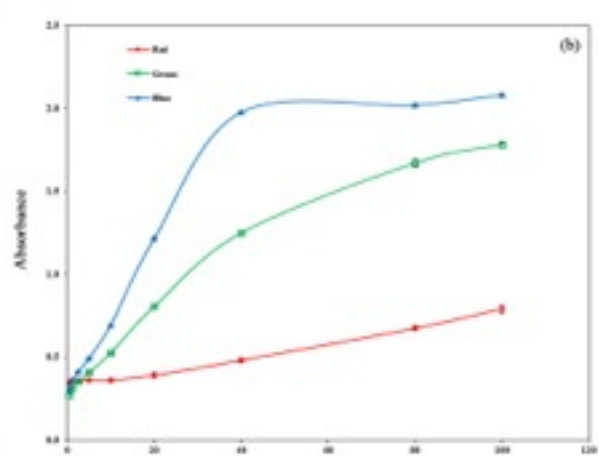
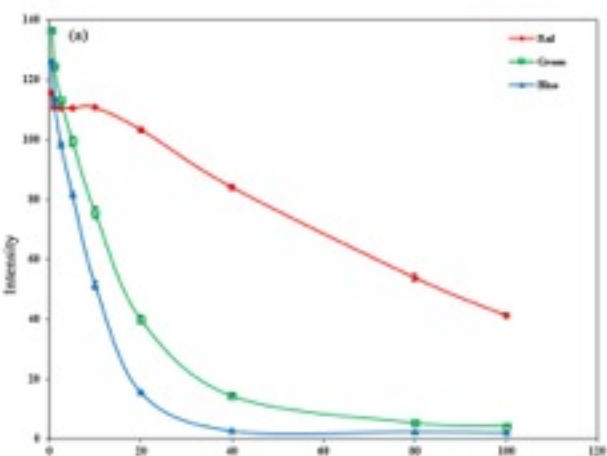
(d) 1,3-DNB with hydrogel test kit



(e) 2,4-DNT with hydrogel test kit

Blank    0.5    1.0    2.5    5.0    10    20    40    80    100 (mg/L)





% Homology

