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STRUCTURAL AND OPTICAL PROPERTIES OF BIOSYNTHESIZED ZINC OXIDE NANOPARTICLES

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ZnO nanoparticles were successfully synthesized using the eco-friendly green method, where Zinc nitrate was reacted with the extract of *Callistemon Viminalis*' (Bottle Brush). The structural and optical properties were determined using X-Ray diffraction and Photoluminescence (PL) spectroscopy. The XRD showed that zincite was synthesized having a hexagonal structure and a room temperature PL was used to determine the luminescence, strong emission peaks were observed at 377,6nm, 491,8nm and 533,6nm. These emissions show that ZnO is a suitable material to be used for luminescence.

Apply to be considered for a student award (Yes / No)?

Yes

Level for award (Hons, MSc, PhD, N/A)?

MSc

Main supervisor (name and email)&br>and his / her institution

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**Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?**

Yes

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