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## **SnO<sub>2</sub> NCs morphology control during microwave synthesis**

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### **Abstract content <br> &nbsp; (Max 300 words)**

SnO<sub>2</sub> nanocrystals (NCs) are industrially important, n-type metal oxide materials with a range of potential applications including transparent conductive electrodes, photovoltaic devices, gas sensors, and detection of metal ions. Such applications require SnO<sub>2</sub> NCs with a specific morphology. Therefore, it is important to investigate parameters influencing these morphologies. In this work, the influence of water and 2-propanol on the morphology of SnO<sub>2</sub> NCs synthesized by the microwave method has been studied. Results show a varying SnO<sub>2</sub> NCs were obtained as the compositions of water and 2-propanol were varied during the microwave synthesis. The SnO<sub>2</sub> were characterized by TEM, SEM, XRD, Raman and PL.

### **Apply to be<br> consider for a student <br> &nbsp; award (Yes / No)?**

Yes

### **Level for award<br>&nbsp;(Hons, MSc, <br> &nbsp; PhD)?**

PhD

### **Main supervisor (name and email)<br>and his / her institution**

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

No

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