

**SCHOOL OF ENGINEERING,  
AMRITA VISHWA VIDYAPEETHAM,  
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KOCHI 682041.**



श्रद्धावान् लभते ज्ञानम्

**BONAFIDE CERTIFICATE**

This is to certify that the thesis entitled “**NANO-BIO INTERACTIONS OF ZnO AND GRAPHENE NANOSYSTEMS: UNDERSTANDING THE POTENTIAL IN VITRO AND IN VIVO RESPONSE**” submitted by **Mr. Abhilash Sasidharan (KH.NS.D\*NMS07001)** for the award of the Degree of **Doctor of Philosophy** in the **School of Engineering** is a bonafide record of the work carried out by him under our guidance and supervision at Amrita Centre for Nanosciences and Molecular Medicine, Kochi. The content of the thesis, in full or parts have not been submitted to any other institute or university for the award of any other degree or diploma.

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**CERTIFICATE FROM DEAN OF RESEARCH**

“This is to certify that the thesis entitled submitted by **Mr. Abhilash Sasidharan** to Amrita Vishwa Vidyapeetham is a bonafide record of the research work carried out by him or her under the supervision and guidance of **Dr. Manzoor Koyakutty**, Professor, Amrita Centre for Nanosciences and Molecular Medicine, Kochi. The content of the thesis, in full or parts have not been submitted to any other institute or university for the award of any other degree or diploma.”

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Date: 07-11-2012

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