

Prof. Dr. SABU THOMAS, B.Tech, Ph.D., CChem. FRSC.
Professor of Polymer Science and Technology
School of Chemical Sciences
Mahatma Gandhi University
Priyadarshini Hills P. O.
Kottayam, 686 560
Kerala, India



CERTIFICATE

This is to certify that the thesis entitled “**Pineapple Leaf/Glass Hybrid Fibre Reinforced Polyester Composites**” is an authentic record of the research work carried out by **Ms. L. Uma Devi** under the joint supervision and guidance of Dr. S.S.Bhagawan, Professor, Department of Chemical Engg & Material Science, Amrita Vishwa Vidyapeetham and myself in partial fulfillment of the requirements for the award of the degree of **Doctor of Philosophy in Chemistry** under the Faculty of Science of the Mahatma Gandhi University, Kottayam. The work presented in this thesis has not been submitted for any other degree or diploma earlier. It is also certified that Ms. L. Uma Devi has fulfilled the course requirements for the Ph.D Degree of Mahatma Gandhi University.

Kottayam
October 2010

Prof. (Dr.) Sabu Thomas
(Supervising Teacher)



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AMRITA School of Engineering

Amritapun
Bangalore
Coimbatore
Kochi
Mysore


Ettimadai P.O., Coimbatore - 641 105, Tamil Nadu, INDIA. Phone :+91 (422) 2656422 / 2422, Fax: +91 (422) 2656274 E-mail:ase@amrita.edu

Dr. S. S. Bhagawan
Professor
Department of Chemical Engg & Material Science
Email : ss_bhagawan@cb.amrita.edu

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(Supervising Teacher)