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**Post Graduate Department of Biotechnology**

Date : 02-08-24

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**Professor and Head, Department of Biotechnology**

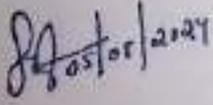
**CERTIFICATE**

Certified that the dissertation entitled "EVALUATION OF BIOACTIVITIES OF ESSENTIAL OIL AND ZNO NANOPARTICLES SYNTHESISED BY USING *MURRAYA KOENIGII* EXTRACT" is an authentic record of three months research work done by Miss. Anjitha M, (Reg No: 220011021829) under supervision and guidance of Prof (Dr.) Nisha Raj S, SAS SNDP Yogam College Konni, in partial fulfillment of the requirement for the award of degree of Master Science in Biotechnology. This dissertation has not formed the basis of award of any degree or diploma earlier.

  
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**CERTIFICATE**

Certified that the dissertation entitled "DEVELOPMENT OF TAMARIND EXTRACT INCORPORATED CASEIN FILMS AS EDIBLE COATING ON *CARISSA CARANDAS LINN.*" is an authentic record of research work done by Miss. ANUMOL K A under the supervision and guidance of Prof. (Dr.) Nandakumar Kalarikkal, Senior Professor (Rtd.) SPAP, International Centre for Ultrafast Studies & International and Inter University Centre for Nanoscience and Nanotechnology, Mahatma Gandhi University, Kottayam, and the co-supervision of Dr. Rakhimol K R, Assistant Professor, School of Polymer Science and Technology, Mahatma Gandhi University, Kottayam in partial fulfillment of the requirement for the award of the Degree of Master of Science in Biotechnology. This dissertation has not formed the basis for the award of any degree or diploma earlier.

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**CERTIFICATE**

Certified that the dissertation entitled "DEVELOPMENT OF ZERO EFFLUENT PROCESS FOR COMPOSTING OF COIR PITH USING MICRO-FLORA" is an authentic record of research work done by Miss. ARUNIMA J H, under the supervision and guidance of Dr. S. RADHAKRISHNAN, Senior Scientific Officer, Department of Microbiology, Central Coir Research Institute, Kalavoor, Alappuzha in partial fulfillment of the requirement for the award of the degree of master of science in Biotechnology. This dissertation has not formed the basis for the award of any degree or diploma earlier.

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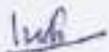
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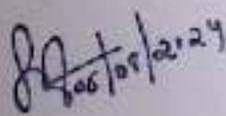
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Certified that the dissertation entitled "ADSORPTIVE REMOVAL OF METHYLENE BLUE FROM SYNTHETIC WASTE WATER USING *CURCUMA ANGUSTIFOLIA* STEM FIBERS" is an authentic record of three months research work done by Miss. Arya A, (Reg No: 220011021832) under supervision and guidance of Prof (Dr.) Nisha Raj S, SAS SNDP Yogam College Konni, in partial fulfillment of the requirement for the award of degree of Master Science in Biotechnology, This dissertation has not formed the basis of award of any degree or diploma earlier.

  
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**CERTIFICATE**

Certified that the dissertation entitled "EFFECT OF INHIBITORS ON SQUALENE PRODUCTION BY METHYLOTROPHIC YEAST *PICHIA PASTORIS*" is an authentic record of research work done by Ms. **ATHIRA RAVI KUNNELPARAMPIL** under the supervision and guidance of **Dr. P. A. BALAKUMARAN, SCIENTIST, CSIR-NIIST** in partial fulfillment of the requirement for the award of the Degree of Master of Science in Biotechnology. This dissertation has not formed the basis for the award of any degree or diploma earlier.

*Indhu*  
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## CERTIFICATE

Certified that the dissertation entitled "CHARACTERISATION AND BIOPROSPECTING OF ENDOPHYTIC BACTERIA ISOLATED FROM *Hemigraphiscolorata*" is an authentic record of three months research work done by Miss. Chippymol S, (Reg No: 220011021835) under supervision and guidance of Prof (Dr.) Nisha Raj S, SAS SNDP Yogam College Konni, in partial fulfillment of the requirement for the award of degree of Master Science in Biotechnology, This dissertation has not formed the basis of award of any degree or diploma earlier.

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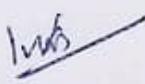
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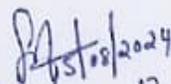
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Certified that the dissertation entitled "**BIODEGRADATION OF TENDER COCONUT HUSK USING MICROBES AND ITS STANDARDIZATION FOR AGRICULTURE END USE**" is the authentic record of research work done by **MISS.DRISYA.O.**, under supervision and guidance of **Dr.S.RADHAKRISHNAN**, Senior Scientific Officer, Department of Microbiology at the Central Coir Research Institute, Kalavoor, Alappuzha in partial fulfilment of the requirement for the award of degree of master of science in Biotechnology. This dissertation has not formed the basis for the award of any degree or diploma earlier.

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Certified that the dissertation entitled "ENHANCEMENT OF RICE PROTEIN PROFILE BY SUPPLEMENTING PROTEINS FROM DIFFERENT SOURCES THROUGH FORTIFICATION" is an authentic record of research work done by Ms. FEBINA FARSANA P, under the supervision and guidance of Dr. C. ANANDHARAMAKRISHNAN, Director, Council of Scientific and Industrial Research-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST), in partial fulfillment of the requirement for the award of the degree of master of science in Biotechnology. This dissertation has not formed the basis for the award of any degree or diploma earlier.

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