

**The Government of the Union of Myanmar  
Ministry of Education**

**Department of Higher Education (Lower Myanmar)  
and  
Department of Higher Education (Upper Myanmar)**

**Universities  
Research Journal**

# Universities Research Journal 2008

## Vol. 1, No. 3

### Editorial Board

#### **Editors in Chief**

Prof. Dr. Saw Hla Myint, Head of the Department of Chemistry, University of Yangon

Prof. Dr. Thein Thein Win, Head of the Department of Chemistry, Yangon Institute of Education

Prof. Dr. Thida Win, Department of Chemistry, University of Mandalay

Prof. Dr. Win Win Thar, Head of the Department of Physics, University of Yangon

Dr. Khin Tint, Associate Professor, Head of the Department of Physics, Yangon Institute of Education

Prof. Dr. Yin Mya, Head of the Department of Physics, University of Mandalay

Prof. Daw Nwe Nwe Win, Head of the Department of Computer Studies, University of Yangon

#### **Editors**

Prof. Tin Kyaing, Head of the Department of Chemistry, Yangon University of Distance Education

Prof. Khin Khin Saw, Head of the Department of Chemistry, University of Dagon

Prof. Dr. Aye Aye Tun, Head of the Department of Chemistry, University of Sittway

Prof. Dr. Tin Tin, Head of the Department of Chemistry, University of Pyay

Prof. Dr. Daw Hla Than, Head of the Department of Chemistry, University of Dawei

Prof. Dr Phway Phway, Head of the Department of Chemistry, University of East Yangon

Prof. Dr. Khin Myo Nwe, Head of the Department of Chemistry, University of Hinthada

Prof. Dr. Myint Myint Sein, Head of the Department of Chemistry, University of Mandalay

Prof. Dr. Aye Aye Wai, Head of the Department of Chemistry, University of Magway

Prof. Khin Hnin Lwin, Head of the Department of Chemistry, University of Monywa

Prof . Dr. Sein Sein Aung, Department of Chemistry, University of Panglong

Prof. Dr. Tha Zin, Head of Chemistry Department, University of Loikaw

Prof. San San Wai, Head of the Department of Chemistry, University of Lashio

Prof. Dr. Aye Myatt Mynn, Head of the Department of Physics, University of Mawlamyine

Prof. Dr. Than Hla, Head of the Department of Physics, Yangon University of Distance Education

Prof. Dr. Khin Mar Kyu, Head of the Department of Physics, University of Dagon

Prof. Dr. Thet Tun Aung, Head of the Department of Physics, University of Patheingyi

Prof. Dr. Daw Thein Win, Head of the Department of Physics, University of Sittway

Prof. Dr. Khin Soe Win, Head of the Department of Physics, University of Pyaw

Prof. Dr. Myint Myint Moe, Head of the Department of Physics, University of Dawei

Associate Prof. Dr Ni Ni Zin, Head of the Department of Physics, University of East Yangon

Prof. Dr Tin Tin Win, Head of Department of Physics, University of West Yangon

Prof. Dr. Mya Mya Win, Head of the Department of Physics, University of Hinthada

Prof. Myint Yee, Head of the Department of Physics, University of Maubin

Prof. Dr. Myint Myint Tun, Head of the Department of Physics, University of Hpa-an

Prof. Dr. Than Win, Head of the Department of Physics, University of Myeik

Prof. Swe Swe Yi, Head of the Department of Physics, University of Monywa

Prof. Dr. Thet Thet, Head of the Department of Physics, Mandalay University of Distance Education

Prof. Dr. May Yee Thein, Head of Physics Department, University of Panglong

Prof. Dr. Soe Soe Nwe, Head of the Department of Physics, University of Lashio

Prof. Dr. Khin May Oo, Head of Department of Physics, Myinchan Degree College

## Contents

	<b>Page</b>
Determination of Calorie Contents of Myanmar Snacks from Thanlyin Township <i>Nyo Nyo Aung, Mya Mya Mu and Myat Sandar Hla</i>	1
Analysis of the Carbonate in Limestone from Loikaw Area <i>Tha Zin, Than Than Myint and Ni Ni Sein</i>	19
Preparation and Application of Intercalated Zinc Oxide Carbon Molecular Sieves <i>Mya Thuzar, Nyunt Wynn and Khin Mar Tun</i>	31
Process Development of Lentil flour- based Adhesive for Woodworking Industries <i>Tin Sein</i>	39
Isolation, Identification and Antibacterial Activity of Some Xanthones Present in Fruit Hulls of <i>Garcinia Mangostana</i> Linn. <i>Sandar Aung, Aye Aye Tun, San San Aye, and Maung Maung Htay</i>	47
Studies on an Unknown Compound from <i>Argyrea barbigera</i> Choisy <i>Htay Htay Win</i>	57
An Antioxidant Organic Compound Isolated from the Stem of <i>Hypericum calycinum</i> L. (Pyin-nyar-lin-kar) <i>Thida Win, Thant Thant Htwe, Myint Myint Sein and Joerg Heilmann</i>	71
Repellent Action of Citronella Oil Against <i>Aedes Aegypti</i> Mosquito <i>Ei Ei Soe</i>	81
Investigation of the Antioxidant Activity of <i>Cydonia cathayensis</i> Hemsl. (Chinsaw-ga) Fruit <i>San San Oo</i>	95
Isolation and Structural Elucidation of an Unknown Biologically Active Compound from Myanmar Traditional Indigenous Medicinal Plant <i>Clerodendrum serratum</i> SPRENG (Yin-bya-net) <i>Aye Myint, Myint Myint Sein and Mya Aye</i>	105





















