

CONTENTS

WELCOME ADDRESS

DIOSCORO L. UMALI, President, National Academy of Science and Technology	1
---	---

INTRODUCTION OF OF GUEST SPEAKER

DIOSCORO L. UMALI	5
-------------------------	---

KEYNOTE ADDRESS

CEFERINO L. FOLLOSCO, Secretary, Department of Science and Technology	7
--	---

PLENARY PAPER

BIENVENIDO NEBRES. Building for the Year 2000: Report of the Presidential Task Force on Science and Technology Development	15
--	----

MATHEMATICAL, PHYSICAL AND ENGINEERING SCIENCES

ALEXIS BELONIO. Design and Performance Evaluation of a Batch Type Rice Hull Gasifier Stove	31
---	----

EDGAR E. ESCULTURA. Topological and Algebraic Structures of R^{n+1} Induced by Relaxed Trajectories	45
--	----

SEVERINO M. GERVACIO. Minimizing the Maximum Difference Between Integer Labels of Adjacent Vertices in a Graph	65
--	----

FELINO P. LANSIGAN. Use of Simulation in Evaluating Potential Yield and Weather-Related Variability in Crop Production	71
--	----

CLARO T. LLAGUNO. A Cubic Equation of State for Phase Equilibrium Calculations	81
---	----

BIOLOGICAL SCIENCES

SALCEDO L. EDUARDO. Scanning Electron Microscopy of the Integumental Surfaces of Adult <i>GNATHOSTOMA</i> <i>DOLORESI</i> Tubanagui, 1925, a Parasite of Pigs in the Philippines	97
---	----

AMELIA P. GUEVARA, CLARA Y. LIM-SYLIANCO, FABIAN DAYRIT and PAUL FINCH, Antimutagens from <i>MOMORDICA CHARANTIA</i> LINN	103
SATURNINA C. HALOS. Cellulose Biodegradation Studies: Application of rDNA and Protoplast Fusion Techniques	113
ANNABELLE A. HERRERA and CORAZON MONICA BAYLOSSIS. Sublethal Effects of Cadmium on Ovarian Morphogenesis in Tilapia Nilotica	129
GLORINA N. POCSIDIO. Determination of Toxicity of Some Coral Reef Crabs of La Union, Philippines	135
SOCIAL SCIENCES	
LUIS DERY. The Era of the Kris: Moro Raids in Sorsogon and Kabikolan and Their Impact on Philippine History, 1571-1896	145
QUINTIN L. KINTANAR and ALBERTO ROMUALDEZ. Evolving, Crafting and Implementing the Philippine National Drug Policy and the Generics Act of 1988 – A model in Science and Technology Policy Making	167
AGRICULTURAL SCIENCES	
FRANCISCO M. BASUEL. Effects of Varying Levels of Sabawil (<i>Mucuna Pruriens</i> (L) D.C.) Leaf Meal on the Growth Performance of Broilers	179
BERNABE B. COCJIN, FE C. EVANGELIO and ROLA BRIZUELA SALIDAGA, Fresh Coconut Meat in Poultry Rations	189
CESAR G. DEMAYO, R.C. SAXENA and A.A. BARRION. Electrophoretic Analysis of Genetic Variation in Brown Planthopper <i>Nilaparvata Lugens</i> (STAL) (Homoptera: Delphacidae) and Green Leafhopper <i>Nephotettix Virescens</i> (Distant) (Homoptera: Cicadellidae) in the Philippines	199
HEALTH SCIENCES	
LOURDES J. CRUZ and GLORIA P. CORPUZ, μ -Conotoxins: Specific Blockers of Muscle Sodium Channel	225
CLARA Y. LIM-SYLIANCO and A.P. GUEVARA. Inhibitory Effects of Some Amino Acids on Somatic and Germ Cell Genotoxicity of Some Anticancer Agents	233
MANUEL M. DAYRIT, NINO ISMAEL S. PASTOR, IVY L. GOPE, NICOLAS B. BAUTISTA, JR., FELINA M. WHITE, VIVIAN S. LOFRANCO, ROSARIO MARILYN S. BENABAYE, MARK E. WHITE. Epidemics of Paralytic Shellfish Poisoning in the Philippines, 1988-1989 Lessons in Science and Public Policy	243

