

# Table of Contents

## Session 1 Bioscience, Biochemistry and Bioinformatics

Advanced Numerical Representation of DNA Sequences <i>Swarna bai Arniker and Hon Keung Kwan</i>	1
Learning the Diversity and Evolutionary Pattern of the Dengue Virus <i>M. M. A. T. N. Mannapperuma, M. W. A. C. R. Wijesinghe and A. R. Weerasinghe</i>	6
A Novel <i>In-Silico</i> Drug Designing Approach for Identification of Natural Compounds for Treatment of Hypothyroid <i>Pankhuri Wanjari and R.M Jayadeepa</i>	12
Systematic study of <i>acuABC</i> operon in <i>Bacillus subtilis</i> 168 <i>Pratibha Sharma and Santosh Noronha</i>	17
Relationship between Leaf Chlorophyll Content and Carbon Isotope Discrimination in Soybean <i>Madhavan Soundararajan</i>	22

## Session 2 Bioscience, Biochemistry and Bioinformatics

BChemical Composition and Antimicrobial of Essential Oil of <i>Artemisia kermanensis</i> <i>A.GanjaliP and M.Pourramezani HaratiTP</i>	28
Urinary $\alpha$ - Glutathione-s-transferase Variations in Cisplatin Treated Cancer Patients with and without Kidney Injury <i>Saleena Ummer, Athiyamaan M S, Vadhiraja B M, Raveendra Prabhu and Nalini K</i>	32
A Preliminary Study for Sperm Sexing by Using Sucrose Density Gradients in Jersey Bull at Artificial Insemination Centre at Thirunelvely (Northern Province of Sri Lanka) <i>Nilani Kanesharatnam, Thampoe Eswaramohan and Kandiah Balasubramaniam</i>	37
Gene Expression Study of Breast Cancer Cell in Response to Aloe Emodin Treatment <i>Indah Mohd Amin, Siti H Sheikh Abdul Kadir, Nik Mohd Mazuan Nik Mohd Rosdy and Narimah AH Hasani</i>	41
Mathematical Modeling of Motor Imagery Non-invasive Electroencephalogram (EEG) via statistical methods and Probabilistic Neural Network for Brain-Computer-Interface (BCI) <i>Angikar Sarkar and Samayita Ganguly</i>	46

## Session 3 Bioscience, Biochemistry and Bioinformatics

Qamar – A More Accurate DNA Sequencing Error Correcting Algorithm <i>Mohammed Sahli and Tetsuo Shibuya</i>	53
An Algorithm for Classifying DNA Reads <i>Mohammed Sahli and Tetsuo Shibuya</i>	59
Phytochemical Analysis and Antibacterial Efficacy of Babchi Oil ( <i>Psoralea corylifolia</i> ) Against Multi-drug Resistant Clinical Isolates <i>Sharmishtha Purkayastha and Praveen Dahiya</i>	64
Simulation of Metabolic Pathway Model Using Petri Net Approach <i>Rose Mary Simon and Chaithra G</i>	69
MDA Effect of the Thiosemicarbazone Derivative Schiff Base 1-(1-mesityl-1-methylcyclobutane-3-yl)-2-suksinimido Etanon Thiosemicarbazone in Rabbits	74

*Aysel Sari and Alaaddin Cukurovali*

Involvement of Chromosome 5R Carrying the Genes Controlling Yield and Yield Stability in Rye (*Secale Cereale* Cv. Imperial) 78

*Ezatollah Farshadfar, Mohsen Farshadfar and Masoud Kiani*

**Session 4 Petroleum Industry and Energy**

Mechanism of Excessive Water Production in an Iranian Offshore Oilfield 86

*Abbas Ali Changanvaie, Kazem Lovimi and Abbas Khaksar*

Application of Committee Machine Neural Networks Utilized with Fuzzy Genetic Algorithm (FGA CMNN) in Prediction of Permeability: A Case Study from the Rag-e-Sefid Oilfield, Iran 91

*Amin Amini, Naser Ebadati and Mohammadreza Ameri Mahabadian*

Author Index 97