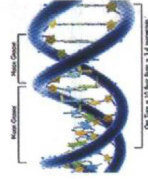
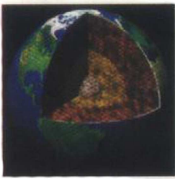


INTERNATIONAL RESEARCH CONFERENCE

Life Sciences **Earth Sciences** Management Sciences **Social Sciences** Computer Sciences **Economics**



Holiday Inn (Blossom Hall)
27th & 28th, October 2008

ABSTRACTS

DELEGATES FROM

PAKISTAN

BANGLADESH

FRANCE

GERMANY

INDIA

Higher Education
Commission

University of South Asia

Pakistan Academy
of Sciences

Programme International Research Conference 2008

Oct 27, 2008. Day 1 - Session 1

Chief Guest & Chairman	Dr. Ishfaq Ahmad, NI, HI, SI President, Pakistan Academy of Sciences Advisor, (Science and Technology in the Planning Commission) with the status of Minister of State, Government of Pakistan.
Vice Chairman	Prof. Dr. Sheikh Riazuddin Director General National Center of Excellence of Molecular Biology
Master of Ceremony	Dr. Shehzad Ansar
Stage Secretary	Mrs. Saadia Pirzada

Time 10:50 AM

Speaker	Mr. Muhammad Shahid
Title of Paper	Kinetic of lead phytoextraction by Attar of Roses Pelargonium cultivar cultivated on industrially acidic contaminated soil: (a field study)
Presentation & Q&A Time	20 mins & 5 mins

Time 11:15 AM

Speaker	Mr. Muhammad Afzal Awan
Title of Paper	The use of Authentic material in adult Pakistani ESL/EFL Classes: Advantages and Risks
Presentation & Q&A Time	20 mins & 5 mins

Time 11:35 AM

Speaker	Prof. Dr. Mohammad Salim Akhter
Title of Paper	The Plight of my Planet (Population explosion and its consequences)
Presentation & Q&A Time	20 mins & 5 mins

Tea Break: 12:00 am - 12:25 pm

Day 1 - Session 2

Chairman	Prof. Dr. M. D. Shami Senior Vice President, Islamic Academy of Science – Jordan.
Vice Chairman	Prof. Dr. Mujahid Kamran Vice Chancellor University of the Punjab, Lahore.
Master of Ceremony	Dr. Adnan N. Qureshi
Stage Secretary	Mrs. Najma Kabir

Time 12:25 PM

Speaker	Mirza Hasanuzzaman
Title of Paper	Effect of irrigation levels row spacing on the siliqua development and seed yield of rapeseed.
Presentation & Q&A Time	20 mins & 5 mins

Time 12:50 PM

Speaker	Prof. Dr. Habib-ur-Rehman
Title of Paper	Recent rising trends of Poverty in Pakistan Causes, Dynamics, Remedies
Presentation & Q&A Time	20 mins & 5 mins

Time	1:15 PM
Speaker	Dr. Zaib Hussain
Title of Paper	Leaching of Metals from industrial wastes and the Development of Methodology for the Characterization of Waste
Presentation & Q&A Time	20 mins & 5 mins
Lunch Break: 01:40 pm - 02:35 pm	

Day 1 - Session 3

Chairman	Prof. Dr. M. Qasim Jan Secretary General, Pakistan Academy of Sciences
Vice Chairman	Prof. Dr. Zafarullah Khan Vice Chancellor, King Edward Medical University, Lahore
Master of Ceremony	Dr. Usman Javaid
Stage Secretary	Ms. Sadia Qadeer

Time	2:35 PM
Speaker	Mr. P.K Chakarvarty
Title of Paper	Performance analysis of Computer Network Congestion Algorithms
Presentation & Q&A Time	20 mins & 5 mins

Time	3:00 PM
Speaker	Ms. Sumbul Khawaja
Title of Paper	A Compression Prototype for Urdu Digital Library
Presentation & Q&A Time	20 mins & 5 mins

Time	3:25 PM
Speaker	Mr. Azmat Ullah
Title of Paper	Scenarios Based view of Software Development Process
Presentation & Q&A Time	20 mins & 5 mins

Time	3:50 PM
Speaker	Mr. Junaid Hamid & Ahmed Amin
Title of Paper	Reverse Engineering tool framework
Presentation & Q&A Time	20 mins & 5 mins

Tea Break: 04:15 pm - 04:40 pm

Day 1 - Session 4

Chairman	Prof. Dr. Malik Hussain Mubasshir Vice Chancellor University of Health Sciences, Lahore
Vice Chairman	Prof. Dr. M. Zakria Butt Professor, Physics Deptt. University of Engineering & Technology, Lahore
Master of Ceremony	Mr. Sohail Nawaz Malhi
Stage Secretary	Dr. Farzana Farjood

Time 4:45 PM

Speaker Dr. Mohammad Mahmood Sabri
Title of Paper Islam & Natural Therapeutics Medicine
Presentation & Q&A Time 20 mins & 5 mins

Time 5:10 PM

Speaker Mr. M. Faisal Farid
Title of Paper Peer Observation - An innovative tool for Teachers
Presentation & Q&A Time 20 mins & 5 mins

Time 5:35 PM

Speaker Dr. Shagufta Andleeb
Title of Paper Bacterial Detoxification of an Organophosphate Insecticide
Presentation & Q&A Time 20 mins & 5 mins

Oct 28, 2008. Day 2 - Session 1

Chairman Prof. Dr. Naveed Malik
Rector
Virtual University of Pakistan, Lahore

Vice Chairman Prof. Dr. M. Amanat Ali Chaudhry
Dean, Civil Engineering Deptt.
University of South Asia, Lahore

Master of Ceremony Prof. Dr. Naeem
Stage Secretary Prof. Dr. Naseem Rauf

Time 9:00 AM

Speaker Dr. Yasmin Nilofer Farooqi
Title of Paper Gender Differences in Non-Fatal suicide attempts among Psychiatric Patients
Presentation & Q&A Time 20 mins & 5 mins

Time 9:25 AM

Speaker Badaruddin A. Memon & Gul Hassan Bhutto
Title of Paper The measurement of Indoor Bacterial Air contamination of coronary care unit (CCU)
Government Teaching / Civil Hospital Sukkur, Sindh
Presentation & Q&A Time 20 mins & 5 mins

Time 9:50 AM

Speaker Ms. Khadija Abbas
Title of Paper Rural-Urban Migration: Causes and Consequences
Presentation & Q&A Time 20 mins & 5 mins

Time 10:15 AM

Speaker M. M. Kamil Siddiqi
Title of Paper South Asia's relationship with the Corporate World
Presentation & Q&A Time 20 mins & 5 mins

Tea Break: 10:40 am - 11:15 am

Day 2 - Session 2

Chairman	Dr. Ahmed J. Durrani Vice Chancellor, Lahore University of Management Sciences, Lahore
Vice Chairman	Prof. Dr. M. H. Qazi / Prof. Dr. Haider Ali
Master of Ceremony	Mr. Nadeem Farooqi
Stage Secretary	Ms. Razia Bano

Time	11:15 AM
Speaker	Mr. Faisal Abbas
Title of Paper	Health status of population and its macroeconomic determinants: case study from Pakistan
Presentation & Q&A Time	20 mins & 5 mins

Time	11:40 AM
Speaker	Engr. M. Nadeem
Title of Paper	Notations for Facilitating Software Security Design
Presentation & Q&A Time	20 mins & 5 mins

Time	12:05 PM
Speaker	Mr. Shaukat Hussain & Ms. Sadaf Naz
Title of Paper	Effective use of modern technology in pre-service teacher training program
Presentation & Q&A Time	20 mins & 5 mins

Time	12:30 PM
Speaker	Ms. Shawana Fazal
Title of Paper	The relationship between study skills and Academic Achievement
Presentation & Q&A Time	20 mins & 5 mins

Tea Break: 12:55pm – 01:20 pm

Day 2 - Session 3

Chairman	Prof. Dr. Sartaj Aziz Vice Chancellor, Beaconhouse National University, Lahore
Vice Chairman	Prof. Dr. Manzur-ul-Haque Hashmi Fellow, Pakistan Academy of Sciences
Master of Ceremony	Mr. Ehsan Bari Bhatti
Stage Secretary	Ms. Ayesha Arshad

Time	1:25 PM
Speaker	Mr. M. Abdul Quader
Title of Paper	Location analysis of cyclone shelters in the Coastal Belt of Bangladesh
Presentation & Q&A Time	20 mins & 5 mins

Time	1:50 PM
Speaker	Mr. Tariq Mehmood & Mr. Khurram Aziz Fani
Title of Paper	Extent and Propensity of Outsourcing in Construction sector of Pakistan
Presentation & Q&A Time	20 mins & 5 mins

Time	2:15 PM
Speaker	Dr. Irfan Zia Qureshi
Title of Paper	Significant alteration in the levels of selected electrolytes and trace, elements as a result of acute toxicological exposure to combined metal salts of cobalt and manganese in laboratory rats.
Presentation & Q&A Time	20 mins & 5 mins

Time	2:40 PM
Speaker	Dr. Waheed M. Butt
Title of Paper	Science, Technology and Engineering- An integrated approach to Research & Development
Presentation & Q&A Time	20 mins & 5 mins

Lunch Break: 03:05 pm - 04:00 pm

Day 2 - Session 4

Chairman	Prof. Dr. Khairat Mohammad Ibne-Rasa Vice Chancellor Leads University, Lahore
Vice Chairman	Prof. Dr. Khalid Aftab Vice Chancellor Government College University, Lahore
Master of Ceremony	Mr. M. Rauf Butt
Stage Secretary	Mrs. Saadia Pirzada

Time	4:05 PM
Speaker	Dr. Arshad Javaid & Ms. Huma Idress
Title of Paper	Fungal metabolites as Bioherbicides for Management of Parthenium Weed
Presentation & Q&A Time	20 mins & 5 mins

Time	4:30 PM
Speaker	Dr. Nasrullah Khan
Title of Paper	Blood Powered Dead End Electric Power Plants
Presentation & Q&A Time	20 mins & 5 mins

Time	4:55 PM
Speaker	Dr. Shujaat Ali Shah
Title of Paper	The role of Quantitative techniques in Business Education and Industrial Development
Presentation & Q&A Time	20 mins & 5 mins

Time	5:20 PM
Speaker	Mr. Mehmood Sadiq Chairman University of South Asia & Sadiq Memorial Education Society
Title of Paper	Crisis Management in the Developing Countries
Presentation & Q&A Time	20 mins & 5 mins

Kinetic of lead phytoextraction by Attar of Roses *Pelargonium* cultivar cultivated on industrially contaminated soil: a field study

M. Shahid, M. Arshad, A. Alric, P. Pradere & C.J. Dumat.

Abstract

According to several laboratory studies, phytoremediation seems a promising technique for trace metal clean up, but its successful application in the field is still limited. Our field experiments on highly contaminated acidic soil (40000 ppm of total Pb), demonstrated the ability of Attar of Roses *Pelargonium* cultivar to hyper-accumulate lead (a relatively low available metal in soils) producing high biomass without morpho-phytotoxicity symptoms (Arshad et al., 2008).

Moreover an increase of lead phyto-extraction was observed with the age of the plant (between 2005 and 2007) which the activity increase the mobilization of lead in rhizosphere. The phytoextraction of the total Pb quantities from the studied surface soil could be realised in few decades using that hyper-accumulator *Pelargonium* plant. Optimisation of NPK and irrigation conditions and/or the use of chelates, i.e EDTA, humic substances and low weight organic acids (LMWOAs) could reasonably reduce the time of treatment at few months. Moreover, the use of *Pelargonium* for remediation has several additional practical, esthetical and economic advantages. The extraction of value-added essential oils from harvested biomass could offset the cost of deploying phytoremediation and renders it as a viable approach for remediating highly contaminated soils, on large scale.

Keywords: Pb uptake; *Pelargonium*; Phytoremediation; Cultivar; Soil-plant transfer; kinetic.

THE USE OF AUTHENTIC MATERIAL IN ADULT PAKISTANI ESL/EFL CLASSES: ADVANTAGES AND RISKS

Muhammad Afzal Awan
F.G College Islamabad

Abstract

Over the past sixteen years of my teaching career, I have been compromising on the prescribed syllabus which is generally un-natural, unauthentic and indifferent to the immediate as well as longer needs of the students. I have only tasted the real flavor of teaching ESL in the adult classroom where I have the liberty to pick and exploit the authentic texts both written and oral for addressing the pressing needs of students. This practice has always given me a sense of achievement. I have always noticed it with serious concern that majority of our graduates, even with multiple degrees in certain cases, are unable to qualify the simple English proficiency tests like IELTS, TOEFL etc. This predicament is enough to understand why Pakistani students knock the doors of language centers and language universities, for instance, National University of Modern Languages (NUML) Islamabad, former National Institute of Modern Languages, where enrollment for short English Language courses runs into tens and thousands of adult students annually. Although my concern in this research is to verify whether there are any risks or advantages in the use of authentic materials in ESL classroom of adult Pakistanis yet one can hardly see the adults in total disregard of their previous history of formal education. Therefore, this research will reflect upon the lack of authentic materials in Pakistani curricula of English in because of which learners' context is badly ignored and results in very poor application of the language learnt if at all. I hope my work will be of help for the fellow researchers, the classroom practitioners, the course designers and the policy makers.

The Plight of my Planet

-Population explosion and its consequences

Prof. Dr. Mohammad Salim Akhter Ph.D, SI
Chairman Organization Committee
International Research Conference Secretary,
Pakistan Academy of Sciences Lahore Chapter,
Vice Chancellor, University of South Asia,

Abstract

Our world is plagued by injustice cruelty torture and malice at present. The uneducated masses are controlled by the educated few, and the educated few are controlled by the wealthy. *Our planet* earth, where we live is their playground. Their lies are constantly hammered into our head until we take it as truth. We have two choices. The first and easiest choice is to sit by and watch our lives pass us by. The second choice is to *listen!* Listen to the cries and the sorrows of the world that we have created! Oh, indeed, our ascendants would certainly be outraged to see the state of our world today.

We, as a people, are far too concerned with the trifles of everyday catastrophe to see the genocide that is happening in our own back yards. The general public is constantly molested by the media in it's bloodbath of trying to achieve its goal. Things such as global warming, oil shortages and "terrorist threats" are much more prevalent in the minds of the public than the real problems of our world. This is just one example, too. There are many, many other things we are doing to destroy our environment permanently, our population explosion is heavily taxing our global recourses, i.e. fresh water, food and air.

More than 2.6 billion people – forty per cent of the world's population – lack basic sanitation facilities, and over one billion people still use unsafe drinking water sources. Inadequate access to safe water and sanitation services, coupled with poor hygiene practices, kills and sickens thousands of children every day, and leads to impoverishment and diminished opportunities for thousands more.

So, perhaps we can settle for sitting around and being spoon-fed by our television, or perhaps we can go out today and make a difference in someone's life. It is not the huge, extravagant that make the biggest difference, but the smaller, more subtle deeds that can make a huge impact on someone's life. If you won't do it for them, do it for yourself. You'll feel a lot better I'm sure.

Poor sanitation, water and hygiene have many other serious repercussions. Children – and particularly girls – are denied their right to education because their schools lack private and decent sanitation facilities. Women are forced to spend large parts of their day fetching water. Poor farmers and wage earners are less productive due to illness, health systems are overwhelmed and national economies suffer. Without WASH (water, sanitation and hygiene), sustainable development is impossible. In this paper a glimpse of horrifying facts regarding population explosion and its consequence have been highlighted.

Siliqua development of rapeseed (*Brassica campestris* L.) as affected by different irrigation levels and row spacings

Mirza Hasanuzzaman
Department of Agronomy, Faculty of Agriculture
Sher-e-Bangla Agricultural University, Dhaka-1207, Bangladesh

Abstract

Pod development in rapeseed planet is very much important to increase the seed and oil yield in rapeseed. Accumulation of dry matter in siliqua, number of siliqua per planet, length of siliqua and seeds per siliqua of rapeseed (*Brassica campestris* L. cv. SAU Sarisha-1) planets, were studied under three irrigation levels (no irrigation, one irrigation at 30 DAS and two irrigations at 30 and 60 DAS) and three row spacings (20 cm, 30 cm and 40 cm) managements. The experiment was undertaken at Sher-e-Bangla Agricultural University (SAU) Farm, Dhaka-1207, Bangladesh during the period from October, 2005 to January, 2006. The results revealed that the maximum dry accumulation in siliquae observed with two irrigations (at 30 DAS and 60 DAS) with 40 cm

row spacing. Number of siliquae per plant also affected by different irrigation levels and row spacing and also the highest number of siliquae was produced by two irrigation (at 30 DAS and 60 DAS) with 40 cm row spacing. At harvest, two irrigation produced the highest number of siliquae (120.3) which was statistically different from one irrigation (76.14) and no irrigation (control) treatments (30.99) and the differences were 288.2% and 145.7%, respectively over control. Length of siliquae as well as number of seeds per siliqua were also significantly affected by the combination of irrigation levels and row spacings.

Key Words: rapeseed, siliqua, dry matter, irrigation, row spacing

RECENT RISING TRENDS OF POVERTY IN PAKISTAN

Causes, Dynamics, Remedies

Dr. Habib-ur-Rahman

Head of Business Administration Department and teaching at Sarhad University of Science and Information Technology, Peshawar, Pakistan as Associate Professor and.

Abstract:

Global economy took a nose dive especially after 9/11 (2001) and subsequent brutal steps of the United States such as, war in Afghanistan and Iraq. Since Pakistan opted to serve as a front-line state in this war against terrorism, it was condemned to bear the brunt of this war and as a result suffered more than \$10 billion loss (for its participation in war in Afghanistan). This massive loss was never reclaimed, recompensed or replenished. Immediate effect of this catastrophic war, initially in our neighborhood and now in our own cities and streets, was an ever-increasing price-hike and ever-deepening poverty in Pakistan. Basic goods such as, wheat, rice, oil and sugar, fruits and vegetables, meat and beef, etc. become unavailable and unmanageable for the poor because of attaining the sky soaring prices. This tragic situation has been further aggravated by a series of other crises such as, water crisis leading to a sharp decline in agriculture sector; crisis of oil and energy leading to a decline in industrial sector; crisis of Law and order that led to the flight of money and maid from the country. Crisis of leadership and absence of proper wisdom and vision that may give hope to the nation. Crisis of education especially of vocational education, etc. Little education and skill kept the productivity low. Absence of employment opportunities and disguised unemployment caused the per capita income to be at lower ebb. All these elements have imperceptibly driven the country towards poverty, hunger, sadness and frustration, further pushing it to resentment, internal war and violence. Prolonged repressive and oppressive military rule has created a strange psycho-moral stress in the nation so much so that poor parents are obliged to embrace death along with their own children. Consequently more than 60% of the population is still leading a life before poverty line. If this sad and sadistic trend is not reversed any time soon, we are afraid, we might be forced to meet still more dire consequences. This brief article plans to discuss in some details the causes of our poverty, assess its dynamics and suggest some remedial measures to over-come this malady.

To present a true picture it is intended to make a sample survey for identifying the real problem and the actual situation people of Pakistan are living in.

Leaching of Copper Secondary Wastes

Zaib-un-Nisa Hussain, Sadia Ashraf, Sadia Javaid and Javairia Shafi

Department of Chemistry, Lahore College for Women University, Lahore

Abstract

The United Nations Basel Convention on the Transboundary Shipment of Hazardous Wastes was adopted to control the influx of hazardous materials being shipped from OECD countries to non-OECD countries. The ban allowed for developing countries to control the level of pollution and contamination prevailing in soils, water and the atmosphere. This study aims to look at the hazards posed by the secondary wastes industries, focusing in particular on copper slags, drosses and residues. To establish the levels of heavy metals becoming available in the environment, these wastes were extracted in different leach liquors. The results indicated that high levels of Cu, Pb and Zn were extracted with values of 10.1, 139.57 and 29.48 $\mu\text{g} / \text{L}$ respectively.

Keywords: Basel Convention, hazardous, wastes, slags, drosses, residues, leaching

Performance analysis of Computer Network Congestion algorithms

Pranab Kumar Chakravarty
Department of Computer Science, Computer Centre
Banaras Hindu University, Varanasi 221005, India

Abstract:

Congestion occurs in a computer network because of routers, switches etc. have packet queues in the buffers that hold the packets before and after processing. The main concern of congestion control is in data traffic. When a packet arrives at incoming interface, it undergoes the following steps before departing:

- (i) Packet is put at end of the input queue while waiting to be checked.
- (ii) The processing module of the router removes the packet from the input queue once it reaches the front of the queue and uses its routing table and its destination address to find the route.
- (iii) The packet is put in the appropriate output queue and waits its turn to be sent.

If the rate of packet arrival is higher than the packet processing rate, the input queues become longer. Further, if the packet departure rate is less than the packet processing rate, the output queues become longer. In the present work, we have compared Random Early Detection (RED) algorithm and proposed enhancement of the RED algorithm as Enhanced Random Early Detection (ERED) algorithm. We use network simulations (NS-2 simulator) to compare different algorithms and evaluate their performance under varying and well-defined network conditions.

Through the simulation results we observe that enhanced RED is better than RED because, packets loss and drop is less in the ERED than RED. The throughput is more in ERED than RED.

The following table would show the simulation results as follows:

Particulars	Enhanced RED algorithm	RED algorithm
Number of the generated packets	14913	14820
Number of the sent packets	14913	14820
Number of the forward packets	14747	14543
Number of the dropped packets	111	265
Number of the lost packets	170	281

A Compression Prototype for Urdu Digital Library

Sumbul Khawaja , Asadullah Shah, Kamran Khawaja and Prof. Mohammad Iqbal Bhatti
Department of Computer Science,
Isra University, Pakistan.

Abstract

The explosive growth of digital information places an ever-increasing burden on the library mechanisms used to store and retrieve it. Digital libraries contain large amount of all types of media i.e. text, images, audio, video and others. This huge amount of data presents the challenge of storing information effectively so that storage and retrieval of this information can be rapidly facilitated. In this paper, Urdu language text compression is considered in detail for digital libraries. In this regard, implementation of two compression techniques such as Huffman and Shannon-Fano has been done and their comparison has been done with standard storage techniques ASCII and Unicode.

Scenarios Based View of Software Development Process

Azmat Ullah
School of Computing and Information Technology
Beaconhouse National University, Lahore, Pakistan.

Abstract

Over the past few years use of scenarios in software development has attained a growing interest as a way to incorporate a focus on the future use of an application into the construction of software. Scenarios are mostly used in the design of user interfaces and hence focused on single user situations. The paper describes how scenarios are a common language throughout the whole system development, and present some scenario based communities. These communities are requirement planning, design, development, testing and maintenance.

Model based Reverse Engineering Tool Framework

Junaid Hamid and Nadim Asif
Computer science dept. The University of Lahore

Abstract

The objective of reverse engineering is to extract design information, functional specifications and, eventually, requirements from the program code. Reverse engineering techniques can help in maintenance of inadequately documented programs and in software re-engineering projects. Experimental studies on program understanding show that program comprehension involves creating multiple mental models of the software, identifying objects within each model, and establishing how the objects interact within and across models. If those program models are not properly documented, programmers recover them (usually in an incomplete and approximate form) from code and from other sources. The main objective of our approach is to smooth the progress of the framework of reverse engineering tools that are agile and generic, tools that can evolve in the operating environment and grow as our perceptive of the reverse engineering regulation advances.

Islam and Natural Therapeutics Medicine

Prof. Dr. Hissam-Ud-Deen Mansoori, Dr. Mohammad Mahmood Sabri and Mr. Muhammad Tariq Sami
H.E. J Research Institute of Chemistry, University of Karachi

Abstract

About 150 drugs derived from 100 species of medicinal plants are on the market. 25% of all prescribed medicine in the developed world contain ingredient derived from plants. Ref. Sharing Innovative Experience Vol. II P.No. 79 by Prof. Atta-Ur-Rehman and Prof. M. Iqbal Choudhry, H.E.J. Chemistry. In the current era according to Islamic concept of cure and treatment in the light of Islam,. In the present time homeopathy, allopathy, and Greek methodology is available in the world. In above references quotecode that the all drugs formed in made the plants and their roots, stem, fruits, bark, leaves and other parts of plants. Islamic Medicine such as mentioned in the Quran is a healing remedy.

Islam is the religion, which advocates all the principles of life; whatever it may be – spiritual, socio-economical, physical, and psychological. Islam preaches certain principles of life, which are equally important for healthy living as well as prevention of certain diseases. The principles are widely discussed in the Tibb-e-Nabvi. The

Tibb-e-Nabvi is the part of tibb, which is based on Quran and Hadith. Prophet Mohammad (ﷺ) gave different teachings, thought, principles and way of living. Almost every aspect of medical science is covered in the Tibb-e-Nabvi. Most of the principles of Islam are now proved and the light of scientific knowledge. There are different methods of cure the purpose to look these methods is to create awareness among, Muslims to cure these diseases, according to authentic methods.

Peer Observation—an Innovative Tool for Teachers

(A Qualitative Approach)

Muhammad Faisal Farid (PhD Scholar, Institute of Education & Research)
Punjab University, Lahore

Muhammad Imran Malik
PhD Scholar, FUIMCS, Foundation University Islamabad.

Abstract

Class room observations are part of our school culture but these observations are meant only for critically evaluating teachers for continuity of tenure and some monetary benefits. It lacks feedback on the part of observer to observees for their future professional development. Peer Observation is more than simple class room observation. It involves a systematic approach, with a pre determined set of objectives, a peer observation schedule, pre- and post- peer observation meetings and above all the commitment of the school management to achieve effective teaching and learning outcomes for total quality in education. This paper presents the launch of peer observation in a private school. The initial results were very encouraging which paved way towards improved school environment. We used our own made checklists for taking observations and reported the results to higher ups in the school organization so that they can launch peer observation programme as a tool for developing in-service teachers.

Key words: peer observation, evaluation, professional development, Pakistan

BACTERIAL DETOXIFICATION OF AN ORGANOPHOSPHATE INSECTICIDE

Shuagufta Andleeb: Department of Zoology, University of the Punjab, Lahore
Javed Iqbal Qazi: Department of Zoology, University of the Punjab, Lahore
Hamis Latif Sadiqui: Institute of chemistry, University of the Punjab, Lahore

Abstract

Inoculation of three different strains of *Pseudomonas* was profligated into media containing an organophosphate insecticide, malathion as sole source of carbon. Growth of these strains were obtained both as mono and co-culture for seven days. On seventh day of inoculation, bacteria free culture fluids were obtained from these bacterial cultures by passing through syringe filters (0.2 micron meter). These cell free culture fluids as well as uninoculated fluids were analysed for degradation of the insecticide by gas chromatography and mass spectrometry (GC-MS). Malathion was not detected in the cell free culture fluids paradoxically to the untreated ones. All of the three strains used in this study, appeared efficient in degrading the insecticide in both culturing conditions.

Key words: *Pseudomonas*, detoxification, malathion, bioremediation.

Gender Differences in Non-Fatal Suicide Attempts among Psychiatric and Medical Patients in Pakistan

Yasmin N. Farooqi Ph.D.
Professo Department of Applied Psychology
Quaid e Azam Campus, University of the Punjab, Lahore.

Ms. Safia Mahr
Department of Applied Psychology
Quaid e Azam Campus, University of the Punjab, Lahore.

Abstract

The current research investigates gender differences in the rate of non-fatal suicide attempts; and nature of suicide precipitants and methods of suicide among psychiatric and medical patients, in Pakistan. Furthermore, role of demographic variables in non-fatal suicide attempts, such as, age, education, marital status, socio-economic status and education were compared across genders. The sample was composed of 50 already diagnosed psychiatric and medical patients (25 males and 25 females). 30 patients were drawn from Psychiatry and 20 patients from Emergency Medical wards of Jinnah, Services, Mayo and Ganga Ram hospitals. A questionnaire and psychiatric / medical records were used to gather information regarding non-fatal suicide attempts from psychiatric and medical patients. T-test ($t=-2.13$; $df=48$, $*p<0.05$) indicates female patients have a higher rate of non-fatal suicide attempts as compared to male patients. Chi square indicates there are significant gender differences in the reported suicide precipitants ($\chi^2=15.51$; $df=3$, $*p<0.05$) and suicide methods ($\chi^2=7.4$; $df=2$, $*p<0.05$). Factor analysis reveals 3 factors: Self-annihilating thoughts, Self-defeating thoughts and Suicide intent. The findings of this research can be used by the helping professionals for the screening of the patients at risk for suicide; and for treatment and management of suicide cases.

THE MEASUREMENT OF INDOOR BACTERIAL AIR CONTAMINATION OF CORONARY CARE UNIT (CCU) GOVERNMENT TEACHING/ CIVIL HOSPITAL SUKKUR, SINDH.

Badaruddin A. Memon and Gul Hassan Bhutto

Department of Microbiology, Shah Abdul Latif University Khairpur Sindh Pakistan

Abstract

Objective: In order to measure the index of bacterial air contamination of coronary care unit (CCU) Sukkur, the different rooms (CCU beds), recovery rooms and cardiac wards were monitored.

Design: A comparative study

Place and duration of study: Coronary care unit (CCU) government teaching/ civil hospital Sukkur, Sindh from June 2004 to August 2004.

Materials and Methods: Three samples were taken from each investigating location by passive sampling as according to Fisher 1/1/1 scheme (for 1 hour, 1 meter above from the floor, at least 1 meter away from wall or any obstacle).

Results: According to these results the mean colony forming units (CFU/dm²) of CCU rooms 1-6 presented (713, 544, 631, 668, 388.33, and 559) respectively. The mean colony forming units of three recovering rooms stood as (461, 446.33, 378) respectively whereas mean CFUs of two cardiac wards (one of the male & other for female) showed (437, and 353) respectively. Gram-negative bacilli group were observed predominantly followed by Gram-positive cocci group.

Conclusion: The indoor air quality of CCU Sukkur was highly contaminated when compared with the standard acceptance level.

Rural-Urban Migration: Causes and Consequences

Khadija Abbas and Fatima Ikram

Migration is result of economic opportunities and attraction in places other than that of origin. Unemployed persons are much likely to migrate with a hope for a better future economically than are employed persons. There have been high rates of rural-urban migration during recent years in Pakistan. The paper aims to explore two main aspects of migration from rural to urban areas. First, the reasons of migration (both economic and non economic); second is to explore the employment status of rural urban migrants. Pakistan is a developing country; urbanization is very important issue both for policy makers and social scientists. The reasons of rural to urban migration can be social/cultural i.e., marriages, family movements, standard of life, education etc. and the most frequent reason of such migration is job search, poverty and lack of employment opportunities in rural areas. The second main aim of this study focuses on the employment status of these rural-urban migrants. This paper seeks to investigate the sectors in which migrants most actively seek employment, the kinds of employment they

find and how their employment affects the economy. The data for this study is taken from the nationwide Pakistan Labor Force Survey 2005-06. The paper will focus on household level rather than macro level activity. The study will also present the proportion on females and age cohorts in such movements. The study is important because it would be helpful for understanding the application of some aspects of Human Capital Theory and Harris-Todaro's classical theory of migration.

Key Words: Regional Migration, Household Migration Analysis, Causes and Consequences of Migration
Jel Classification: R23, R20

South Asia's relationship with the Corporate World

Kamil Siddiqi

Hamdard Institute of Information Technology, Hamdard University

Abstract

In the beginning, conventional wisdom failed to visualize the inception of a corporate world. Even Adam Smith considered it a fad that would not last. Today the corporate revolution has captured the world and fashioned it into a system whose control could always remain in the hands of the corporate giants.

The Malthusian Theory would have come true had it not been for the MNCs who came forward and enhanced world productivity to the extent that today our world even being crowded with six billion human souls is definitely in a position to fulfill their basic needs and save something. The credit, therefore, goes to the MNCs. However, this does not mean that poverty has been wiped out from the world: every third inhabitant of it is living below the absolute poverty line.

But the blame for this misery does not fall wholly upon the multinationals, many of the politicians and bureaucrats round the world are responsible too. Poverty and economic disparity are the major causes of rise in crimes in both developed and developing countries today, South Asia notwithstanding!

Health status of population and its macroeconomic determinants: case study from Pakistan

Faisal Abbas

Junior Researcher

Centre for Development Research (ZEF) University of Bonn, Germany.

Abstract

Human development remained a corner stone on development policy debate across the globe. While Health is one of the basic capabilities that generate economic freedom. It is a widely recognized fact that improved health not only lowers mortality, but also contributes to productivity. The availability of health care services and the physical, and socio economic environment in which a person live, broadly determines disease pattern, health status and therefore the quality of life. Instead of income, this study uses intrinsically valued commodities like better health status in terms of reduced infant mortality and increased life expectancy as an indicator of development. Despite of economic improvement, social and demographic indicators in Pakistan presents a dismal picture. Nevertheless, Pakistan still has one of the highest infant mortality rates and low life expectancy compared with the other developing countries. Keeping in view the likely role that health status can play in economic development of Pakistan the present study make use of time series data spanning 1972 to 2006. The study aims at answering the following questions: What factors (economic, demographic, social and political) determines the health status improvement in Pakistan? What role health spending and inequality can play in explaining infant mortality and life expectancy? Whether improved health status has causal relation with public health spending and prevailing income inequality as well as with health personnel? What is the likely effect of policy variables like mothers' education, unemployment, urban population growth i.e. urbanization and physician population ratio in improving health status? This study is unique in the sense that it is first of its kind that uses the time series data and applied co integration analysis in a developing country context to draw attention towards the long run relationship between health status and macroeconomic policy variables. The study employs the Augmented Dickey Fuller (ADF) and Philip Perron (PP) tests to examine the issue of stationarity

and unit root. Johansen full information maximum likelihood (FIML) multivariate co integration approach is used to determine the factors responsible in explaining the long run relationship between health status and other variables in Pakistan. A vector error correction model (VECM) is specified to capture the short run dynamics and Impulse response analysis (IRA) is employed by giving shocks to health status and its impact on economic development and vice versa. This analysis helps in better resource allocation and targeted intervention, for better population health in cost effective manner.

Notations for Facilitating Software Security Design

Engr. Muhammad Nadeem

Chairman Department of Computer Engineering,
BUITMS, Quetta,

Abstract

The conventional software designing tools do not address the software security design, the security considerations are taken care of independently and there is no unified mechanism to design software's functional requirements along with the security requirements, it allows the applications more vulnerable to the security threats, this is especially true in client-server / web based systems.

In this research designing notations are being proposed that can be integrated with the existing designing tools to address software security design. The notations have less abstraction in order to design security requirements more clearly and effectively.

Designing the security of an application is a combination of the "existing SDLC (System Development Life Cycle)" and the notations proposed in this research. There is no reason to wipe the software slate clean in order to adopt software security design. We know how to build software; the trick to effective software security is to integrate the proposed approach into currently used set of design tools.

Security is not a feature that can be added to software. There is no convenient "security" pull-down menu where security can be selected and magic things happen.

Because security is not a feature, it can't be "bolted on" after other software features are codified, nor can it be "patched in" after attacks have occurred in the field. Instead, security must be built in from the very beginning (requirements specification) and included in every subsequent System Development Life Cycle phase.

Attackers are not standard-issue customers; they are bad people with malicious intent who want your software to act in some unanticipated way to their benefit. An attacker's goal is to think of something you didn't think of and exploit it in a way you didn't expect to the gain of the attacker and probably to your detriment. If the development process doesn't address unexpected or abnormal behavior, then an attacker usually has plenty of raw materials to work with.

EFFECTIVE USE OF MODERN TECHNOLOGY IN PRE-SERVICE TEACHER TRAINING PROGRAM

Shaukat Hussain,
Assistant Professor

Sadaf Naz
Lecturer, Department of Education, Hazara University, Mansehra

Abstract

The quality and performance of teachers have always been a focus of concern (Ballou & Podgursky, 1997). The knowledge, skills and attitudes, a teacher possesses are essential components in the teaching and learning process. Teacher training institutions are charged to provide students with a comprehensive foundation of content knowledge and pedagogical skills.

Issues such as how, when, and why we should provide future teachers with expertise in the use of technology and the internet are questions that are of great importance in initial and continuing teacher training. Faculty and students have to adjust to the pedagogy that uses instructional technology as an integral component in teaching. The teacher trainers who have not used instructional technology to accomplish course objectives in the past now

have to be trained to do so, and they very often include a component in the course that provides information to students about the technology itself (Hazari, 1998). Prospective teachers must be trained to work with instructional technology in order to be successful with in the classrooms.

In this article, the authors have tried to focus prospective teachers, school-based personnel and teacher- trainer in deep and engaging ways. The authors have illustrated this perspective and then proposed implications for teacher training institutions.

The authors have recommended that technology be used in teacher training to (a) produce technically trained professionals, (b) strengthen the practice–theory relationship, (c) provide more practice-centered training, and (d) reflect deeply into the practice of teaching. The authors have also discussed the implication process and provided examples of institutional practices.

THE RELATIONSHIP BETWEEN STUDY SKILLS AND ACADEMIC ACHIEVEMENT

Ms. Shawana Fazal, Hazara University, Mansehra, NWFP

Dr. Shaukat Hussain, Hazara University, Mansehra, NWFP

Dr. Muhammad Iqbal Majoka, Hazara University, Mansehra, NWFP

Abstract

This study was conducted to find out the relationship between study skills used by the students and their academic achievement. The objectives of the study were: a) to identify various study skills used by the learners, b) to assess which study skill is more related to academic achievement and c) to make a comparison between study skills used by girls and boys. This study was conducted in five males' and five females' colleges of Abbottabad district. The sample consisted of all the 300 intermediate (part II) students, out of which 173 were girls and 127 were boys. A questionnaire probing different study skills was used as a tool for the collection of data related to study skills, while marks scored by the selected students in annual examination (2006) Board of Intermediate and Secondary Education Abbottabad, were taken as academic achievement. Statistical analysis of the data obtained indicated that the relationship between individual study skills' score and academic achievement was relatively low except in time management, reading and note taking. Furthermore, it has also been found that the students with high grades possessed a wide range of study skills and used them more effectively than the students with low grades. The analysis further revealed that the girls have been found using a variety of study skills for various contexts as compared to the boys.

Location Analysis of Cyclone Shelters in the Coastal Belt of Bangladesh

MOHAMMAD ABDUL QUADER

Dhaka, Bangladesh

Abstract

About 1, 33,000 people were dead or missing by Cyclone Nargis on May 2, 2008 in Myanmar from which Bangladesh has been escaped fortunately. But Bangladesh has been hit by Cyclone SIDR on November 15, 2007 which accounted a casualty of 3,347 people. The aforementioned two cyclones indicated the high vulnerability of the Coastal Belt of Bangladesh to Cyclone and storm surge. Bangladesh is the worst affected by natural hazards among the Coastal Zones of the world, Bangladesh has been hit by 70 severe cyclones (mostly accompanied by storm surges) during the years from 1797 to 2007. About five million people were estimated to be living in high-risk areas along the three coastal zones of Bangladesh in the 90s. four million of these live in 'very high-risk' areas. However, only 10 per cent of the actual population in the high-risk areas could be accommodated in safe places. Some of the shelters built in the 70s and the 80s are now located far inland away from the surge-prone areas because the coastline has advanced southward due to silt deposition. So to reduce the vulnerability of the people living in coastal belt of Bangladesh present research has tried best to identify the location suitability of existing Cyclone Shelters. 204 Cyclone Shelters in five districts of three coastal zones have been visited and 50 focus group discussions have been conducted during the field survey. The study revealed that the existing cyclone shelter are inadequate in number and near about 5 million people living in the study districts don't have access to safe places during disaster.

Extent and Propensity of Outsourcing in Construction Sector of Pakistan

Aziz Fani, Khurram, Basra, Rizwan, Mehmood, Tariq, Mustafa and Maryam

Abstract

Contractual agreements have assumed significant complexity in recent times because of emergence of strategies like outsourcing and partnering. Outsourcing is the transfer or delegation to an external service provider the operation and day-to-day management of a business process. The objective of this research paper is to analyze the extent and propensity of outsourcing in construction sector. The exploratory research used communication technique and was conducted in field setting. Data was collected using pre-printed structured questionnaire. Questionnaires were developed in both languages due the very nature of the respondents. The population consists of people who have, currently or in last 1 year, outsourced one or more their functions to a contractor. A sample of 100 houses was selected to analyze extent and propensity of outsourcing. Data was collected from five cities of Pakistan viz Gujranwala, Sialkot, Wazirabad and Lahore and was analyzed through Statistical Program for Social Sciences (Version 15). Factor loading using principal component analysis through Varimax rotation with Kaiser Normalization was conducted. Total variance explained and rotated component matrix along with Barlett's test of sphericity and Kaiser-Myers-Olkin test of sample adequacy are reported in the paper. The findings of this paper will help understand the rational of the outsourcing in construction sector and will help the contractor firms to develop their strategies accordingly.

Significant Alteration in the Levels of Selected Electrolytes and Trace Elements as a Result of Acute Toxicological Exposure to Combined Metal Salts of Cobalt and Manganese in Laboratory Rats

Amir, S., Naseem, S., Habib, S., Rafique, N., Younis, R., Kanwal, S., and Qureshi, I. Z.
Laboratory of Animal Physiology, Department of Animal Sciences, Faculty of Biological Sciences,
Quaid-i-Azam University Islamabad, Pakistan

Abstract

Soils and wetlands of Pakistan are heavily infested with industrial refuse of various kinds containing among others, a substantial amount of toxic heavy metals. Toxic effects due to single metal exposure are well known but similar effects in combination are relatively unknown. The present study was designed in laboratory rats with a view to determining the effects of cobalt and manganese in combination on the concentration of bodily electrolytes and trace elements. Hepatotoxicity was also studied. Animals were exposed for five consecutive days to sub-acute dose of the two metals, 9:85 mg/kg.b.w cobalt and manganese respectively. Statistical analysis employed one-way ANOVA and Duncan's multiple range tests. Results showed increase ($P < 0.001$) in cobalt, manganese and calcium concentration in the liver, heart, brain, muscle, kidney and whole blood as compared to control rats. Calcium concentration was decreased ($P < 0.001$) in the lungs while, nickel concentration decreased ($P < 0.001$) in the brain and spleen. Potassium concentration was greater ($P < 0.001$) in all tissues but there occurred a decrease ($P < 0.001$) in sodium concentration of blood, heart, liver, muscle and kidney. ALP, AST and ALT and bilirubin levels were on the rise ($P < 0.001$). The study concludes that heavy metals administered in combination pose a serious toxic threat for physiological well being of the animals.

SCIENCE, TECHNOLOGY AND ENGINEERING – AN INTEGRATED APPROACH TO RESEARCH AND DEVELOPMENT

Dr. W. M. Butt
Managing Director, Technology Management International (Pvt) Ltd (TECHMA)

Abstract

Science is the study of the natural world and universe. It refers to a system of acquiring knowledge by mean of observations and experimentation. The scientific method is the way human reason and logic are applied to the

material world to gain knowledge. The objective of science is to produce useful models of reality leading to the development of inventions.

Technology is defined as the understanding of how to make and do things or the processes by which scientific inventions are converted into useful goods and services with the help of labour, energy and raw materials. Technology has become a major force that transforms and adds new dimensions to our lives. It has become the predominant agent for change in our lives-to-day.

FUNGAL METABOLITES AS BIOHERBICIDES FOR MANAGEMENT OF PARTHENIUM WEED

Arshad Javaid and Huma Idress

Institute of Mycology & Plant Pathology, University of the Punjab Lahore, Pakistan

Abstract

Parthenium (*Parthenium hysteraphorus* L.), an alien invasive weed, is widely spreading throughout Pakistan. Worldwide it has been designated as one of the most troublesome weed species. Various synthetic herbicides are known to control this weed, however, health concern problems associated with these agrochemicals warrant alternative strategies which are based on biological products. In the present study metabolites of nine plant pathogenic fungi viz. *Alternaria alternata*, *Drechslera hawaiiensis*, *Fusarium solani*, *Drechslera biseptata*, *Fusarium oxysporum*, *Drechslera australiensis*, *Monilia stophila*, *Drechslera rostrata* and *Cladosporium* sp., were evaluated for their herbicidal potential against parthenium weed. These fungi were grown in 100 ml of 2% malt extract broth in 250 ml conical flasks for 15 days. The metabolites were passed through muslin cloth followed by filtration through filter paper. In a laboratory bioassay, effect of original (100%) and well as lower concentrations (75%, 50% and 25%) of these metabolites was studied on germination and early seedling growth of parthenium. Metabolites of *A. alternata* were found most toxic resulting in 70-90% reduction in germination, 34-66% in shoot length, 60-80% in root length and 52-76 in phytomass of target weed. Metabolite of *F. solani* and *D. rostrata* were also found highly effective against parthenium weed. Metabolites of other fungal species generally showed variable effects. Foliar spray bioassay was performed using metabolites of three fungal species namely *A. alternata*, *F. solani* and *D. rostrata*, which exhibited significant herbicidal activity in laboratory bioassays. In this experiment, 3-sprays of fungal metabolites, with 5 days intervals each, were carried out on one-week and two-weeks old pot grown seedlings of parthenium weed. Metabolites of *A. alternata* and *F. solani* markedly suppressed root and shoot growth of parthenium weed.

Blood Powered Dead End Electric Power Plants

N. Khan, N. Abas, Z. Saleem

Renewable Energy Laboratory, Comsats Institute of Information Technology
Park Road Chakshahzad, Islamabad

Abstract

Effects of climate change have started appearing with dire irreversible impacts and consequences. Global warming is responsible for energy, power, water, food crises; rainstorms, droughts, and horrible cyclones. Water shortage, hunger, floods, diseases, dirty environment and dead heat would be the ultimate consequences of excessive consumption of fossil fuels. Carbon dioxide concentration has already risen to 386.7-ppm in atmosphere and is exponentially increasing everyday. This paper proposes a novel exercise of halting further misuse of fossil fuels and learning ways how to transform the industrial and essential energy needs to alternate power sources. We can learn an important training before we are forced to face the natural end of fossil fuels. We must probe oceans, land and skies to evaluate our dependence on nature. We report here some cost effective methods of generating electricity without using dirty fossil fuels, disputed dams, dangerous uranium, expensive photovoltaic panels, unaffordable fuel cells and obnoxious chemicals. Ancient wisdom employing state of the art engineering tools to be described in this paper require knowledge of neither any complex tensor nor microelectronics chips rather it is robust cheaper technology that everybody can afford to implement at his/her own without anymore dependence on imported raw materials.

Keywords: Energy crisis, Global warming, Power crisis, Sustainable development.

The Role of Quantitative Techniques in Business Education and Industrial Development

S.A. Shah

The Institute of Management Sciences(IMS)

Abstract

The paper describes the important role played by a sound knowledge of quantitative techniques and their applications to real life problems in business education and industrial development. Examples are given that highlight useful application of calculus ,linear programming and computer techniques to a variety of real life problems.

Crisis Management in the Developing Countries

Mr. Mehmood Sadiq

Chairman University of South Asia

Abstract

Developing and transition countries suffer serious consequences from any prolonged tightening of credit or sustained global slowdown We are concerned by the impact of the turmoil in world financial markets and the continued high prices of fuel, food even basic necessity of life.

Developing countries, many of them already hit hard by high prices for energy and essential foodstuffs, risk very serious setbacks to their efforts to improve the lives of their population from any prolonged tightening of credit or a sustained global slowdown. The poorest and most vulnerable groups risk the most serious --and in some cases permanent damage. 100 million people have already been driven into poverty this year and that number will grow.

World should not forget the other crisis, referring to the crisis of rising food and energy prices in poor countries.
