The First International Congress of Interdisciplinary Research and Development (INRIT-2011) was held in Bangkok, Thailand from 31 May to June 1, 2011. It was organized by the Interdisciplinary Network of the Royal Institute of Thailand (INRIT) under the Royal Patronage of HRH Princess Maha Chakri Sirindhorn and was supported by Thailand Chapter of the Internet Society, Thailand Chapter of the Association for Computing Machinery, Thailand Chapter of the Computer Society of the IEEE and The College of Internet Distance Education of Assumption University. I am very pleased to see that this edition of IJCIM includes selected articles from this conference.

The research articles included in this 1st special edition of IJCIM are a proof of our commitment to serve the community of researchers. I highly appreciate the dedication of all the authors who have worked hard and got their research published. We will continue to work together to making our journal better. We are currently working on updating our IJCIM website for a global reach. I therefore invite to send your papers on topics of current interest in computer sciences, Internet technologies and management. Please look at the details of the format required for publication at journal website at www.ijcim.th.org. Please send your papers for the upcoming issues to me (charm@ksc.au.edu). I will get your paper reviewed by the experts in your field, and if the initial response is favorable, I will request you to submit your camera-ready final paper as soon as a possible for publication in the next editions of IJCIM.

This issue of IJCIM contains ten papers selected from INRIT-2011 which cover a good range of countries ranging from Hong Kong, Korea and Malaysia, Pakistan to Thailand. The main thrust of each paper is summarized next.

The first paper titled “Evaluation on Integrating Sustainable Ideas into Interior Design Students Project” by R.B. Talib and M.Z. Sulieman from Malaysia is focused on a very interesting topic. Nowadays, the people want to play bigger role in implementing the interior tasks and eager to use or have the green or sustainable building ideas for implementing them into their interior and also on their exterior design projects. So, interior design with sustainable factors has become more important. Their research has become a sort of initial platform to measure on the student’s sensitivity in applying interior design sustainable issues into their academic studio projects. This discusses the design studio project that addresses sustainability through an environmentally based research focus.

The second paper titled “Developing English Communication Competency: An Experiment with Instructional Design” written by Anjali Thakur is focused on Instructional Design (ID) approach for improving the language competency as well as communication competency in the Technology and Professional courses classrooms. This paper is an attempt to point out the stumbling blocks of ELT (English Language Teaching) and Developing English Communication Competency and to share the fruitful academic experience that is based on ID, which uses a scientific method that follows: Development → Implementation → Evaluation → Maintenance logically.
The third paper titled “Value Creation through Design: Goal and Constraint Case Study of Thailand’s Furniture Industry” is written by Arttawut Changvittay in collaboration with Yuttanant Boonyongmaneerat and Pongpun Anuntvoranich. One important factor needed in order to be successful is innovation. Most of innovations actually come from researches; however according to the survey, researches in Thailand have not developed much further to be either innovative or commercially successful. Referring to the data submitted by the Department of exports, Thailand’s furniture industry gains the most revenue for the country when compared to all other design industries. This study attempts to find out more about the topic of Value Creation through Design in this furniture industry.

The fourth paper titled “The participatory action research on diverting water from Chantaburi to Rayong provinces project in period of 2009 – 2010” is written by Pichai Saranrom and Duangta Saranrom. This research is based on cooperation among 4-key sectors in Thailand-Council of Ministers, Ministry of Natural Resource and Environment, Ministry of agriculture and cooperation and Concern peoples from Chantaburi province earn their living by agricultural production which is opposite to life based on industrial production in Rayong province. This paper provides insight into the problems of water shortage in Rayong province due to low natural. This paper highlights the need to solve the problem of water shortage crisis by diverting water from Chantaburi to Rayong provinces.

The fifth paper “Making local check dams for natural water preservation in Trad province of Thailand” is written by Pichai Saranrom. This paper is focused on the study of natural water preservation in Trad province of Thailand. Main objectives of this study include screening for advantage and disadvantage of ten former check dams in Thailand, making the proper check dam for local material utilization and collect data on preserving water resources. Step by step this paper explains the collaboration among stakeholders for making a pilot model of check dam for preserving the natural water from rainy season up to dry season with the use of cheap and local available materials.

The Sixth paper titled “Pregnancy and Discrimination: Effect of the case Beatrice a/p At Fernandez v Sistem Penerbangan Malaysia and Others” is written by Maizatul Azila Binti Chee, Din, Hawa Binti Rahmat and Rohaidah Binti Mashudi explores the Federal Constitution of Malaysia which guarantees equality before the law to prohibit gender discrimination. This paper presents the weaknesses and lacuna faces pertaining to Malaysian gender equality law particularly from the perspective of employment in the private sector, pregnancy and gender discrimination. This paper refers to Beatrice Fernandez case as the main the legislature to review of the existing provision of law in interpreting gender equality provisions in the Federal Constitution of Malaysia.

The seventh paper titled “Pseudorandom Binary Sequence Generation for Stream Ciphers” is written by Raghava Nallanthighal and Vijeta Rani presents a new algorithm that can be used to generate a long, highly random cryptographic binary key from any binary file. The file used as input to the proposed algorithm contains huge amount of redundancy. The proposed algorithm by these two authors attempts to reduce the redundancy in the input file. The output obtained from the proposed algorithm is a long, highly random binary key. The generated key can be used to encrypt any type of data file using a stream cipher encryption algorithm. The key files obtained from the algorithm implementation are successfully tested by the well known ENT test suite for statistical validation.
The eight paper titled as “The Application of Three Herbs; Chrysanthemum indicum, Centella asiatica, and Andrographis paniculata to Reduce Bacteria in Cow Milk” written by Christina Vania Utami and Saarce Elsye Hatane Malihel Gorjian explores a new choice of milk preservation method by using the natural edible antibiotic as an alternative way to solve the problem of milk contamination. This paper discusses the role of three local herbs; Chrysanthemum indicum, Centella asiatica, and Andrographis paniculata for their antibacterial activity on bacteria in cow milk. All of the herbs are extracted by soaking the dried ones in 95% ethanol, getting the liquid part only, dried it in water bath until it becomes slurry, and diluted it for 10 mg/ml in 95% ethanol. The extracted herbs are then added to cow milk. The advantage of this treatment for cow milk is to extend its shelf life as an inventory and minimize the processing costs. Aim of this study is to compare the effectiveness of antibacterial activity among these three herbs and extend the shelf life and decrease the production cost of cow milk.

The ninth paper titled “Managerial Implications of Korea’s International Travel Market Demand” is written by Sungchae Jung studies emphasizes that for tourism development, policy and the promotion of travel destination, it is necessary to achieve a clear profile of the travel behavior and trends of effective, differed and potential demand. This study attempts to analyze the changing patterns of Korea’s inbound and outbound travel demand. The aim of this study is to determine the probability of being tourist as a function of characteristics. The results of this study provide a valuable resource for tourism practitioners and policy makers.

The last paper included in the journal is titled “Effect of Emotional Intelligence and Perceived Work Environment on Performance of Bankers” and is written by Afifa Anjum and Huma Ali. This collaborative research investigated the effect of emotional intelligence and perceived work environment on performance of bankers in Pakistan. Emotional Intelligence was measured using the scale of Schutte et al. (1996). For Perceived Work Environment (PWE), indigenous scale was constructed by the researchers and Performance Appraisal Form was also constructed by the author. Final mode of this study showed that perceived work environment was not affected by emotional intelligence; rather both had independent significant effect on level of performance. Higher emotional intelligence and positive perception of work environment significantly improved performance.

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