ICAMMM 2015 : 17th International Conference on Applied Mechanics, Materials, and Manufacturing

Jeddah, Saudi Arabia
January 26 - 27, 2015

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Presentation Program
Conference Program

148 Oral	**Suspected Odyssean Malaria Outbreak in Gauteng Province, September 2014** Patience Manjengwa-Hungwe, Carmen White University of Pretoria South Africa
149 Oral	**Insecticide Susceptibility Analysis of Anopheles Gambiae Complex** Ntsieni R Ramalwa, Belinda L Spilling, Eunice Misiani, Tiaan de Jager, Shüne V Oliver, Aaron Mabuza, Devanand P Moonasar, and Lizette L. Koekemoer National Institute of communicable diseases South Africa
150 Oral	**Clinical Pathway for Postoperative Organ Transplantation** Tahsien Okasha Faculty of Nursing / Cairo University Egypt
151 Oral	**Analyzing the effect of unhealthy human behavior to the spread of avian flu and possible future epidemic** Wuryatmo Sidik, Murk Bottema and Mariuz Bedger Flinders University Austria
152 Poster	**Papular-purpuric "gloves and socks" syndrome associated with B19V infection in a 10-year-old Kuwaiti child: A case report and literature review.** Hanan A Bin Nakhi, Seany T Varghese, Zahra Qabazard Adan Hospital Kuwait
153 Poster	**Post-Streptococcal Cutaneous Vasculitis: A Case Report of an Unusual Presentation of a Common Infection** Hanan A. Bin Nakhi, Hatem Ibrahim, Zahra Qabazard Adan Hospital Kuwait
154 Poster	**Kawasaki Disease in a Two Months Kuwaiti Girl: A Case Report and Literature Review.** Hanan Bin Nakhi, Asaad M. Albadrawi, Maged Al Shahat, Entesar Mandani Adan Hospital Kuwait
155 Oral	**Water Productivity and Sensitivity Tolerance Stress Indices in Five Soybean Cultivars (Glycine Max L.) at Different Levels of Water Deficit** Hassan Masoumi, Rashed Alavi, Mahmoud Reza Khorshidian Yekom Consulting Engineeres Iran, Islamic Republic Of

SESSION 10

Chair : Ahmed Sarhan

156 Oral	**Optimizing of the Micro EDM Parameters in Drilling of Titanium Ti-6Al-4V Alloy for Higher Machining Accuracy-Fuzzy Modelling** Ahmed A. D. Sarhan, Mum Wai Yip, M. Sayuti, Lim Siew Fen University of Malaya Malaysia
157 Oral	**Effect of Core Stability Exercises on Trunk Proprioception in Healthy Adult Individuals** Omaima E. S. Mohammed, Amira A. A. Abdallah, Amal A. M. El Borady faculty of physical therapy, Cairo University Egypt
158 Oral	**Reduced Differential Transform Methods for Solving the Fractional Diffusion Equations** Yildiray Keskin, Omer Acan, Murat Akkus SELCUK UNIVERSITY Turkey
159 Oral	**Non-Linear Free Vibration Analysis of Laminated Composite Beams Resting on Non-Linear Pasternak Elastic Foundation: A Homogenization Procedure** Merrimi El Bekkaye, El Bikri Khalid, Benamar Rhali Université Mohammed V de Rabat Morocco
160 Oral	**A Study on the Solutions of the 2-Dimensional and Forth-Order Partial Differential Equations** O. Acan, Y. Keskin Selcuk University Turkey
161 Oral	**System Identification and Quantitative Feedback Theory Design of a Lathe Spindle** M. Khairudin Yogyakarta State University Indonesia
162 Poster	**A Comparative Study Mechanical Properties of Polytetrafluoroethylene Materials Synthesized by Non-Conventional and Conventional Techniques** H. Lahlali F. El Haouzi, A.M.Al-Baradi, I. El Aboudi, M. El Azhari, A. Mdarhri University cadi ayyad Morocco
163 Poster	**Absorption Kinetic and Tensile Mechanical Properties of Swollen Elastomer/Carbon Black Nanocomposites using Typical Solvents** F. Elhaouzi, H. Lahlali, M. Zaghrioui, I. El Aboudi A. BelfKira, A. Mdarhri Faculty of Science and Technology Morocco
164 Poster	**Mechanical Behavior of Dense Mullite-zirconia Composites Obtained by Reaction Sintering of Zircon and Boehmite** H. Belhouchet, M. Hamidouche, N. Bouaouadja, V. Garnier, G. Fantozzi University of M'sila Algeria
165 Oral	**Performance Comparisons between PID and Adaptive PID Controllers for Travel Angle Control of a Bench-Top Helicopter** H. Mansor, S. B. Mohd-Noor, T. S. Gunawan, S. Khan, N. I. Othman, N. Tazali, R. B. Islam International Islamic University Malaysia (IIUM) Malaysia
166 Oral	**Experimental Study of Flow Characteristics for a Cylinder with Respect to Attached Flexible Strip Body of Various Reynolds Number** S. Teksin, S. Yayla Yuzuncu Yil University Turkey
167 Oral	**Geometrically Linear Symmetric Free Vibration Analysis of Sandwich Beam** Ibnorachid Zakaria, El Bikri Khalid, Benamar Rhali, Farah Abdoun Ecole Normale Supérieure de l Morocco
168 Oral	**Magnetoelectric Effect in Polyvinylidene Fluoride Beta Phase Thin Films** Belouadah Rabah, Guyomar Daneil, Guiffard Benoit Msila Algeria
169 Poster	**Prediction Study of the Structural, Elastic and Electronic Properties of the Parent and Martensitic Phases of Nonferrous Ti, Zr and Hf Pure Metals** Tayeb Chihi, Messaoud Fatmi Setif 1 Algeria
170 Oral	**Temperature Gradient In Weld Zones During Friction Stir Process Using Finite Element Method** Armansyah, I.P. Almanar, M. Saiful Bahari Shaari, M. Shamil Jaffarullah Universiti Teknologi Mara Malaysia
171 Oral	**Construction of a Radial Centrifuge Pump for Agricultural Applications** Elmo Thiago Lins Cöuras Ford, Valentina Alessandra Carvalho do Vale

Reduced Differential Transform Methods for Solving the Fractional Diffusion Equations

Authors : Yildiray Keskin, Omer Acan, Murat Akkus

Abstract : In this paper, the solution of fractional diffusion equations is presented by means of the reduced differential transform method. Fractional partial differential equations have special importance in engineering and sciences. Application of reduced differential transform method to this problem shows the rapid convergence of the sequence constructed by this method to the exact solution. The numerical results show that the approach is easy to implement and accurate when applied to fractional diffusion equations. The method introduces a promising tool for solving many fractional partial differential equations.