

**Dr. Mohammad Shakil, M. Sc. (Math), M.S. (Stat), Ph.D. (Math)**

**Assistant Professor of Mathematics  
Department of Liberal Arts and Sciences  
MIAMI-DADE COLLEGE, Hialeah Campus  
1776 West 49th Street, Hialeah, Florida 33012**

Office: Room # 1413 - 8

Phone: (305) 237 – 8805

E-mail: mshakil@mdc.edu

**Faculty Webpage: <http://faculty.mdc.edu/mshakil/>**

**RESEARCH AND PUBLICATIONS ACCOMPLISHMENTS 2004 – 2006:**

- (i) "A Comparative Study of Some Numerical Methods for the Solutions of Fourth Order Boundary Value Problems in Ordinary Differential Equations," Acta Cienc. Indica, Vol. XXXI M, No. 1, 173 - 186, (2005), ISSN 0970-0455, (jointly with J. N. Singh).
- (ii) "ENTROPIES OF RECORD VALUES OBTAINED FROM THE NORMAL DISTRIBUTION, AND SOME OF THEIR PROPERTIES," Journal of Statistical Theory and Applications, Vol. 4, No. 4, (2005), U.S.A., ISSN 1538-7887.
- (iii) "Some Fixed Point Theorems in Banach Spaces," Journal Nonlinear Functional Analysis and Applications, Vol. 11, No. 2, 343 – 349, (2006), (jointly with Aqeel Ahmed).
- (iv) "ENTROPY AND INFORMATION PROPERTIES OF RECORD VALUES FROM A WEIBULL DISTRIBUTION," Journal of Statistical Theory and Applications, Vol. 5, No. 2, (2006), U.S.A., ISSN 1538-7887.
- (v) "PROPERTIES OF ENTROPIES OF RECORD VALUES IN RELIABILITY AND LIFE TESTING CONTEXT," Communications in Statistics – Theory & Methods, Vol. 35, Issue 6, (2006), Canada, (jointly with Hassan Zahedi).
- (vi) "SOME CRITERION FOR LEAST SQUARE REGRESSION PLANE," "VARAHMIHIR JOURNAL OF MATHEMATICAL SCIENCES," Vol. 5 (2), (2005), India, (jointly with B. M. Golam Kibria and J. N. Singh).
- (vii) "ON SOME INEQUALITIES FOR GAMMA AND PSI FUNCTIONS OF NATURAL NUMBERS, WITH HISTORICAL REMARKS AND APPLICATIONS," To appear in "VARAHMIHIR JOURNAL OF MATHEMATICAL SCIENCES," India, A Special issue in honor of Professor S. P. Singh (Canada), (jointly with J. N. Singh).

(viii) "The Importance of Mathematics," POLYGON, Volume 1, Issue 1, January, 2006, An electronic publication of the Liberal Arts and Sciences Department, Miami-Dade College, Hialeah Campus, Florida, USA.

(ix) "Computing Some Approximate Values of  $\pi$  (PI)," POLYGON, Volume 1, Issue 1, January, 2006, An electronic publication of the Liberal Arts and Sciences Department, Miami-Dade College, Hialeah Campus, Florida, USA.

(x) "DISTRIBUTION OF THE RATIO OF MAXWELL AND RICE RANDOM VARIABLES," Int. J. Contemp. Math. Sci., Vol. 1, 2006, no. 13, 623 – 637, Bulgaria, (jointly with B. M. Golam Kibria, and J. N. Singh).

(ix) "A DEFINITE INTEGRAL OCCURRING IN ENTROPY, INFORMATION, PROBABILITY AND RELIABILITY THEORIES - SOME HISTORICAL REMARKS, PROOF, AND APPLICATIONS," To appear in ACTA CIENCIA INDICA (Mathematics Section), India.

(xii) "ON THE PROBABILITY DISTRIBUTION OF THE RATIO OF MAXWELL AND RAYLEIGH RANDOM VARIABLES," (Communicated for Publication).

(xiii) "SOME K-L INFORMATION PROPERTIES FOR THE RECORD VALUE DISTRIBUTIONS ASSOCIATED WITH WEIBULL AND NORMAL DISTRIBUTIONS," (jointly with B. M. Golam Kibria).

(xiv) "Distributions of the product and ratio of Maxwell and Rayleigh random variables," (Communicated for Publication).

(xv) "Exact Distribution of the Ratio of Gamma and Rayleigh Random Variables," To appear in the Pakistan Journal of Statistics and Operations Research, (jointly with B. M. Golam Kibria).

(xvi) "On The Product Of Maxwell And Rice Random Variables," To appear in the Journal of Modern Applied Statistical Methods, May 2007 (Volume 6, No.1) issue, (jointly with B. M. Golam Kibria).

(xvii) "Classroom Assessment Techniques and Strategies – An Implementation in a Business Calculus Class," (Communicated for Publication).

#### **PAPERS READ/PRESENTED AT SEMINARS/CONFERENCES ETC.:**

1. "A Chronology of African-Americans in Mathematical Sciences," presented on the occasion of African American History Month Vignette, 23rd February, 2005, Miami-Dade College, Hialeah Campus, Florida, USA.

2. "CLASSROOM ASSESSMENT TECHNIQUES – AN IMPLEMENTATION IN A BUSINESS CALCULUS COURSE," Accepted for Presentation at the Third International Conference on The Teaching of Mathematics, June 30 – July 05, 2006, Istanbul, Turkey.

3. "A Variant of Primal-Dual Interior-Point Method for Linear Programming based on Kernel Functions," Accepted for Presentation at the American Mathematical Society

Cincinnati Meeting/Conference, University of Cincinnati, October 21 – 22, 2006, Cincinnati, Ohio, USA, (jointly with J. N. Singh).

**PROFESSIONAL ACTIVITIES:**

(A) Reviewed the following text-books (during 2005 – 2006)

- (i) A proposed Pre-calculus text by the publisher, Houghton Mifflin Company.
- (ii) "Advanced Statistics from an Elementary Point of View," by Michael J. Panik, Elsevier Inc.
- (iii) "Probability and Statistics with Integrated Software Routines," by Ronald Deep, Elsevier Inc.
- (iv) "For All Practical Purposes – Mathematics Literacy in Today's World," W. H. Freeman and Company
- (v) Brown's Calculus Text-Books, Prentice-Hall, Inc.
- (vi) Associate Editor, POLYGON, An electronic publication of the Liberal Arts and Sciences Department, Miami-Dade College, Hialeah Campus, Florida, USA.

(B) PROFESSIONAL MEMBERSHIPS

- (i) Fellow, Royal Statistical Society, U. K.
- (ii) Member, American Mathematical Society, U. S. A.
- (iii) Member, American Statistical Association, U. S. A.
- (iv) Member, International Linear Algebra Society, U. S.A.
- (v) Member, Maplesoft.com, U.S.A.
- (vi) Member, Research Group in Mathematical Inequalities and Applications, Australia
- (vii) Alumni, Florida International University Alumni Association, U. S. A.