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André I. Khuri

PERSONAL INFORMATION

Marital Status: Married, two children

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Position: Professor Emeritus of Statistics (since July 1, 2007).

EDUCATION

<u>Degree</u>	<u>Area</u>	<u>University</u>
B.S. (1963)	Mathematics	Damascus University, Damascus, Syria
Normal Diploma (1964)	Mathematics	Damascus University, Damascus, Syria
M.S. (1966)	Mathematics	American University of Beirut, Beirut, Lebanon
Ph.D. (1969)	Mathematics	University of Florida, Gainesville, FL
M.S. (1974)	Statistics	Virginia Tech, Blacksburg, VA
Ph.D. (1976)	Statistics	Virginia Tech, Blacksburg, VA

Titles of Ph.D. Dissertations:

1. Ph.D. (Mathematics): Applications of Papkovitch Functions to Three-Dimensional Thermoelastic Problems. (Advisor: C.B. Smith)
2. Ph.D. (Statistics): A Robustness Type Optimality Criterion for Experimental Design. (Advisor: R.H. Myers)

RESEARCH INTERESTS

Linear Models
Response Surface Methodology
Analysis of Variance
Unbalanced Random and Mixed Linear Models
Designs for Generalized Linear Models

PROFESSIONAL EXPERIENCE

University of Florida	Professor Emeritus of Statistics 7/2007 - Present.
University of Florida	Professor of Statistics 8/88 - 7/2007.
University of Florida	Associate Professor of Statistics 8/82 - 8/88
University of Florida	Assistant Professor of Statistics 9/76 - 8/82
Virginia Polytechnic Inst. and State University	Instructor of Statistics (half time) 9/74 - 7/76
Beirut University College Beirut, Lebanon	Assistant Professor of Mathematics 9/71 - 6/73
Lebanese University Beirut, Lebanon	Assistant Professor of Mathematics (half time) 9/72 - 6/73
Middle East Technical Univ. Ankara, Turkey	Assistant Professor of Mathematics 9/70 - 6/71
University of Florida	Instructor of Mathematics 9/69 - 6/70

HONORS AND AWARDS

1. Elected Fellow of the American Statistical Association (1992)
2. Elected Member of the International Statistical Institute (1989)
3. Ranked 27th among the top 100 most prolific statistics journal authors in the world (according to a 1990 survey by the National Science Foundation).

4. Received the Boyd Harshbarger Award for Excellence in Graduate Studies from the Department of Statistics at Virginia Tech in 1974.
5. Received the Teaching Improvement Program (T.I.P.) Award from the University of Florida in December, 1994.
6. Received the Bonus Pay Award for Outstanding Accomplishments in the College of Liberal Arts and Sciences, University of Florida, October, 1997.
7. Received the Faculty Professional Excellence Program (P.E.P.) Award for Outstanding Achievement from the University of Florida in December, 1998.
8. Received one of the Provost's Special Salary Increases for 1999-2000 from the University of Florida in September, 1999. This award is based on strong academic performance and considerations of true market equity.
9. Received the Salary Adjustment (STEP) Award in recognition of Outstanding Accomplishments and Work as a Professor from the University of Florida in June, 2001.
10. Biographical listings in:
 - Who's Who in the South and Southwest
 - Who's Who in America
 - Who's Who in Florida

PROFESSIONAL AFFILIATION

American Statistical Association
International Statistical Institute
American Association for the Advancement of Science

PUBLICATIONS

Books

1. Khuri, A.I. and Cornell, J.A. (1987). *Response Surfaces*. Dekker, New York, 405 pages.
2. Khuri, A.I. (1993). *Advanced Calculus with Applications in Statistics*. Wiley, New York, 466 pages.

3. Khuri, A.I. and Cornell, J.A. (1996). *Response Surfaces*, Second Edition. Dekker, New York, 510 pages.
4. Khuri, A.I., Mathew, T., and Sinha, B.K. (1998). *Statistical Tests for Mixed Linear Models*. Wiley, New York, 352 pages.
5. Khuri, A.I. (2003). *Advanced Calculus with Applications in Statistics*, Second Edition. Wiley, New York, 673 pages.
6. Khuri, A. I. (2006) (Editor). *Response Surface Methodology and Related Topics*. World Scientific, Singapore, 457 pages.
7. Khuri, A. I. (2009). *Linear Model Methodology*. Chapman & Hall/CRC, London, 562 pages.

Refereed Chapters in Books

1. Khuri, A.I. (1990). "The Analysis of Multiresponse Experiments: A Review." In: *Statistical Design and Analysis of Industrial Experiments*. Subir Ghosh, Editor. Dekker, New York, pp. 231-246.
2. Khuri, A.I. (1996). "Multiresponse Surface Methodology." In: *Handbook of Statistics, Design and Analysis of Experiments*, Volume 13. Subir Ghosh and C.R. Rao, Editors. Elsevier, Amsterdam, pp. 377-406.
3. Khuri, A.I. and Valeroso, E.S. (1999). "Optimization Methods in Multiresponse Surface Methodology." In: *Statistical Process Monitoring and Optimization*. Sung H. Park and G.G. Vining, Editors. Dekker, New York, pp. 411-433.
4. Khuri, A.I. (2003). "Current Modeling and Design Issues in Response Surface Methodology: GLMs and Models with Block Effects." In: *Handbook of Statistics, Statistics in Industry*, Volume 22. R. Khattree and C.R. Rao, Editors. Elsevier, Amsterdam, pp. 209-229.
5. Khuri, A. I. and Mukhopadhyay, S. (2006). "GLM Designs: The Dependence on Unknown Parameters Dilemma." In: *Response Surface Methodology and Related Topics*. André I. Khuri, Editor. World Scientific, Singapore, pp. 203-223.
6. Khuri, A. I. and Mukhopadhyay, S. (2010). "Response Surface Methodology." In: *Wiley Interdisciplinary Reviews - Computational Statistics*, Volume 2, Number 2. E. J. Wegman, Y. H. Said, and D. W. Scott, Editors. Wiley, Hoboken, New Jersey, pp. 128-149.

Articles in Refereed Statistical Journals

1. Hijab, W.A. and Khuri, A.I. (1971). "Concentrated Force in Quarter-Space With a Free or Fixed Half-Plane and Mixed Boundary Conditions on the Other One." *Journal Fur Die Reine Und Angewandte Mathematik*, 246, 189-201.
2. Khuri, A.I. (1975). "The Shrinking $2 \times c$ Table." Letter to the Editor, *Amer. Statist.*, 29, 68.
3. Khuri, A.I. (1976). "Application of Papkovitch Functions to Three-Dimensional Thermo Elastic Problems." *Journal Fur Die Reine Und Angewandte Mathematik*, 282, 68-79.
4. Hamdan, M.A., Pirie, W.R., and Khuri, A.I. (1976). "Unbiased Estimation of the Common Mean Based on Incomplete Bivariate Normal Samples." *Biometrische Zeitschrift*, 18, 245-249.
5. Khuri, A.I. (1976). "A Constrained Least-Squares Problem." *Commun. Statist.-Simula. Computa.*, B5, 82-84.
6. Good, I.J. and Khuri, A.I. (1976). "Forms For the Distribution of a Ratio in Terms of Characteristic Functions." *Commun. Statist.-Simula. Computa.*, B5, 209-211.
7. Khuri, A.I. and Cornell, J.A. (1977). "Secondary Design Considerations for Minimum Bias Estimation." *Commun. Statist.*, A6, 631-647.
8. Khuri, A.I. and Good, I.J. (1977). "The Distribution of Quadratic Forms in Non-Normal Variables and an Application to the Variance Ratio." *J. Roy. Statist. Soc.*, B39, 217-221.
9. Hamdan, M.A., Khuri, A.I., and Crews, S.L. (1978). "A Test for Equality of Means of Two Correlated Normal Variates With Missing Data on Both Responses." *Biometrische Zeitschrift*, 20, 667-674.
10. Khuri, A.I. (1978). "A Conservative Sample Size For the Comparison of Several Proportions." *Commun. Statist.*, A7, 1283-1293.
11. Cornell, J.A. and Khuri, A.I. (1979). "Obtaining Constant Prediction Variance on Concentric Triangles for Ternary Mixture Systems." *Technometrics*, 21, 147-157.
12. Myers, R.H. and Khuri, A.I. (1979). "A New Procedure for Steepest Ascent." *Commun. Statist.*, A8, 1359-1376.
13. Khuri, A.I. and Myers, R.H. (1979). "Modified Ridge Analysis." *Technometrics*, 21, 467-473.

14. Khuri, A.I. (1980). "Simultaneous Testing of Parameter Subsets in Less Than Full Rank Models." *Commun. Statist.*, A9, 617-627.
15. Khuri, A.I. and Conlon, M. (1981). "Simultaneous Optimization of Multiple Responses Represented by Polynomial Regression Functions." *Technometrics*, 23, 363-375.
16. Khuri, A.I. and Myers, R.H. (1981). "Design Related Robustness of Tests in Regression Models." *Commun. Statist.*, A10, 223-235.
17. Khuri, A.I. (1981). "Simultaneous Confidence Intervals For Functions of Variance Components in Random Models." *Journal of the Amer. Statist. Assoc.*, 76, 878-885.
18. Khuri, A.I., (1982). "Direct Products: A Powerful Tool For the Analysis of Balanced Data." *Commun. Statist.*, A11, 2903-2920.
19. Shelton, J.T., Khuri, A.I., and Cornell, J.A. (1983). "Selecting Check Points for Testing Lack of Fit in Response Surface Models." *Technometrics*, 25, 357-365.
20. Khuri, A.I. (1984). "A Note on D-Optimal Designs for Partially Nonlinear Regression Models." *Technometrics*, 26, 59-61.
21. Khuri, A.I. (1984). "Interval Estimation of Fixed Effects and of Functions of Variance Components in Balanced Mixed Models." *Sankhyā*, Series B, 46, 10-28.
22. Sahai, H., Khuri, A.I., and Kapadia, C.H. (1985). "A Second Bibliography on Variance Components." *Commun. Statist.*, A14, 63-115.
23. Khuri, A.I. and Sahai, H. (1985). "Variance Components Analysis: A Selective Literature Survey." *International Statistical Review*, 53, 279-300.
24. Khuri, A.I. (1985). "A Test for Lack of Fit of a Linear Multiresponse Model." *Technometrics*, 27, 213-218.
25. Khuri, A.I. (1986). "Exact Tests for the Comparison of Correlated Response Models with an Unknown Dispersion Matrix". *Technometrics*, 28, 347-357.
26. Khuri, A.I. (1987). "Measures of Imbalance for Unbalanced Models." *Biometrical Journal*, 29, 383-396.
27. Wijesinha, M.C. and Khuri, A.I. (1987). "Construction of Optimal Designs to Increase the Power of the Multiresponse Lack of Fit Test." *Journal of Statistical Planning and Inference*, 16, 179-192.

28. Wijesinha, M.C. and Khuri, A.I. (1987). "The Sequential Generation of Multire-sponse D-optimal Designs when the Variance-Covariance Matrix is not Known." *Commun. Statist. Simula. Computa.*, B16, 239-259.
29. Khuri, A.I. (1987). "An Exact Test for the Nesting Effect's Variance Component in an Unbalanced Random Two-Fold Nested Model." *Statistics and Probability Letters*, 5, 305-311.
30. Khuri, A.I. and Littell, R.C. (1987). "Exact Tests for the Main Effects Variance Components in an Unbalanced Random Two-Way Model." *Biometrics*, 43, 545-560.
31. Khuri, A.I. (1988). "A Measure of Rotatability for Response Surface Designs." *Technometrics*, 30, 95-104.
32. Myers, R.H., Khuri, A.I. and Carter, W.H. (1989). "Response Surface Method-ology: 1966-1988." *Technometrics*, 31, 137-157.
33. Khuri, A.I. (1989). "Testing a Covariance Matrix Structure in a Mixed Model with no Empty Cells." *Journal of Statistical Planning and Inference*, 22, 117-125.
34. Khuri, A.I. and Good, I.J. (1989). "The Parameterization of Orthogonal Ma-trices: A Review Mainly for Statisticians." *South African Statistical Journal*, 23, 231-250.
35. Khuri, A.I. (1990). "The Analysis of Multiresponse Experiments: A Review." In: *Statistical Design and Analysis of Industrial Experiments*, Subir Ghosh, Ed., New York: Marcel Dekker, pp. 231-246.
36. Khuri, A.I. (1990). "Exact Tests for Random Models with Unequal Cell Fre-quencies in the Last Stage." *Journal of Statistical Planning and Inference*, 24, 177-193.
37. Khuri, A.I. (1990). "Multiresponse Rotatability." *Journal of Statistical Plan-ning and Inference*, 25, 1-6.
38. Khuri, A.I. (1990). "The Effect of Response Scaling on the Detection of Linear Dependencies Among Multiresponse Data." *Metrika*, 37, 217-231.
39. Khuri, A.I. and Ghosh, M. (1990). "Minimal Sufficient Statistics for the Unbal-anced Two-Fold Nested Model". *Statistics and Probability Letters*, 10, 351-353.
40. Gallo, J. and Khuri, A.I. (1990). "Exact Tests for the Random and Fixed Effects in an Unbalanced Mixed Two-Way Cross-Classification Model". *Biometrics*, 46, 1087-1095.

41. Khuri, A.I. and Vining, G.G. (1991). "Conditions Required for the Mean Response to Fall Within Specified Bounds." *Journal of Statistical Planning and Inference*, 28, 125-136.
42. Wijesinha, M.C. and Khuri, A.I. (1991). "Robust Designs for First-Order Multiple Design Multivariate Models." *Commun. Statist.*, A20, 2987-2999.
43. Khuri, A.I. (1992). "Tests Concerning a Nested Mixed Model with Heteroscedastic Random Effects". *Journal of Statistical Planning and Inference*, 30, 33-44.
44. Khuri, A.I. (1992). "Diagnostic Results Concerning a Measure of Rotatability". *Journal of the Royal Statistical Society, Series B*, 54, 253-267.
45. Khuri, A.I. (1992). "Response Surface Models with Random Block Effects." *Technometrics*, 34, 26-37.
46. Myers, R.H., Khuri, A.I., and Vining, G.G. (1992). "Response Surface Alternatives to the Taguchi Robust Parameter Design Approach." *Amer. Statist.*, 46, 131-139.
47. Khuri, A.I. (1991). "Blocking with Rotatable Designs." *Calcutta Statistical Association Bulletin*, 41, 81-98 (this volume actually appeared in March, 1992).
48. Khuri, A.I. (1993). "A Note on Scheffé's Confidence Intervals." *Amer. Statist.*, 47, 176-178.
49. Khuri, A.I. (1994). "The Probability of a Negative Linear Combination of Independent Mean Squares." *Biometrical Journal*, 36, 899-910.
50. Khuri, A.I. (1994). "Effect of Blocking on the Estimation of a Response Surface." *Journal of Applied Statistics*, 21, 305-316.
51. Khuri, A.I. (1993). "Response Surface Methodology Within the Framework of GLM." *Journal of Combinatorics, Information, and System Sciences*. A special issue in honor of C.R. Rao, eds. D.V. Chopra and D. Anderson, 18, 193-202 (this volume appeared in January, 1995).
52. Khuri, A.I., Mathew, T., and Nel, D.G. (1994). "A Test to Determine Closeness of Multivariate Satterthwaite's Approximation." *Journal of Multivariate Analysis*, 51, 201-209.
53. Khuri, A.I. (1995). "A Measure to Evaluate the Closeness of Satterthwaite's Approximation." *Biometrical Journal*, 37, 547-563.
54. Khuri, A.I. (1995). "A Test to Detect Inadequacy of Satterthwaite's Approximation in Balanced Mixed Models." *Statistics*, 27, 45-54.

55. Khuri, A.I. (1996). "Multiresponse Surface Methodology." In: *Handbook of Statistics*, Volume 13, Subir Ghosh and C.R. Rao, Eds., Amsterdam: Elsevier Science B.V., pp. 377-406.
56. Khuri, A.I. (1996). "A Method for Determining the Effect of Imbalance." *Journal of Statistical Planning and Inference*, 55, 115-129.
57. Khuri, A.I. (1996). "Response Surface Models with Mixed Effects." *Journal of Quality Technology*, 28, 177-186.
58. Khuri, A.I., Kim, H.J., and Um, Y. (1996). "Quantile Plots of the Prediction Variance for Response Surface Designs." *Computational Statistics and Data Analysis*, 22, 395-407.
59. Kim, H.J., Um, Y., and Khuri, A.I. (1996). "Quantile Plots of the Average Slope Variance for Response Surface Designs." *Commun. Statist. Simula. Computa.*, B25, 995-1014.
60. Khuri, A.I. (1997). "Quantile Dispersion Graphs for Analysis of Variance Estimates of Variance Components." *Journal of Applied Statistics*, 24, 711-722.
61. Khuri, A.I. (1997). "Minimal Sufficient Statistics for a General Class of Mixed Models." *Statistics and Probability letters*, 35, 1-7.
62. Khuri, A.I. and Valeroso, E.S. (1998). "Multiresponse Surface Models with Block Effects." *Journal of Statistical Planning and Inference*, 73, 7-20.
63. Khuri, A.I. and Cornell, J.A. (1998). "Lack of Fit Revisited." *Journal of Combinatorics, Information, and System Sciences*. A special issue dedicated to Professor J.N. Srivastava, 23, 193-208.
64. Khuri, A.I. and Lee, J. (1998). "A Graphical Approach for Evaluating and Comparing Designs for Nonlinear Models." *Computational Statistics and Data Analysis*, 27, 433-443.
65. Khuri, A.I. (1998). "On Unweighted Sums of Squares in Unbalanced Analysis of Variance." *Journal of Statistical Planning and Inference*, 74, 135-147.
66. Khuri, A.I. (1999). "A Necessary Condition for a Quadratic Form to Have a Chi-Squared Distribution: An Accessible Proof." *International Journal of Mathematical Education in Science and Technology*, 30, 335-339.
67. Khuri, A.I. and Valeroso, E.S. (2000). "Optimization Methods in Multiresponse Surface Methodology." In: *Statistical Process Monitoring and Optimization*, Sung H. Park and G.G. Vining, Eds., New York: Marcel Dekker, pp. 411-433.

68. Khuri, A.I., Harrison, J.M., and Cornell, J.A. (1999). "Using Quantile Plots of the Prediction Variance for Comparing Designs for a Constrained Mixture Region: An Application Involving a Fertilizer Experiment." *Applied Statistics (J. Roy. Statist. Soc., Series C)*, 48, 521-532.
69. Valeroso, E.S. and Khuri, A.I. (1999). "Multiresponse Surface Models with Random Block Effects." *Journal of Statistical Planning and Inference*, 79, 157-173.
70. Lee, J. and Khuri, A.I. (1999). "Graphical Technique for Comparing Designs for Random Models." *Journal of Applied Statistics*, 26, 933-947.
71. Khuri, A.I. (2000). "Designs for Variance Components Estimation: Past and Present." *International Statistical Review*, 68, 311-322.
72. Lee, J. and Khuri, A.I. (2000). "Quantile Dispersion Graphs for the Comparison of Designs for a Random Two-Way Model." *Journal of Statistical Planning and Inference*, 91, 123-137.
73. Paul, S. and Khuri, A.I. (2000). "Modified Ridge Analyses Under Nonstandard Conditions." In a special issue of *Communications in Statistics, Theory and Methods*, 29, 2181-2200, on *Applied Regression Analysis*, Norman Draper and Phillip Prescott, Eds.
74. Khuri, A. I. (2001). "An Overview of the Use of Generalized Linear Models in Response Surface Methodology." *Nonlinear Analysis*, 47, 2023-2034.
75. Lee, J. and Khuri, A. I. (2001). "Modeling the Probability of a Negative ANOVA Estimate of a Variance Component." *Calcutta Statistical Association Bulletin*, 51, 31-45.
76. Khuri, A. I. (2001). "The Integrated Mean Squared Error Design Criterion for a Multiresponse Model." *Statistics and Applications*, 3, 1-8. (This was an invited paper in a special volume of the Journal to commemorate the 80th birthday of Professor M. N. Das.)
77. Khuri, A. I. and Casella, G. (2002). "The Existence of the First Negative Moment Revisited." *The American Statistician*, 56, 44-47.
78. Lee, J. and Khuri, A. I. (2002). "Comparison of Confidence Intervals on the Among-Group Variance Component for the Unbalanced One-Way Random Model." *Communications in Statistics: Simulation and Computation*, 31, 35-47.
79. Khuri, A. I. (2002). "Invariance of Prediction from a Mixture Model Under a Nonsingular Linear Transformation." *Journal of Propagations in Probability and Statistics*, 2, 145-148. (This paper was invited by the Editor-in-Chief of the Journal, Professor K. C. Chang.)

80. Khuri, A. I. (2002). "Graphical Evaluation of the Adequacy of the Method of Unweighted Means." *Journal of Applied Statistics*, 29, 1107-1119.
81. Robinson, K. S. and Khuri, A. I. (2003). "Quantile Dispersion Graphs for Evaluating and Comparing Designs for Logistic Regression Models." *Computational Statistics and Data Analysis*, 43, 47-62.
82. Khuri, A. I. (2003). "Current Modeling and Design Issues in Response Surface Methodology: GLMs and Models with Block Effects." In: *Handbook of Statistics, Statistics in Industry*, Volume 22, R. Khattree and C. R. Rao, Eds., Amsterdam: Elsevier Science B.V., pp. 209-229.
83. Khuri, M. A. and Khuri, A. I. (2003). "Corrections to a Well-Known Proposition Concerning the Two-Dimensional Density Function." *International Journal of Mathematical Education in Science and Technology*, 34, 787-792.
84. Khuri, A. I. (2004). "Applications of Dirac's Delta Function in Statistics." *International Journal of Mathematical Education in Science and Technology*, 35, 185-195.
85. Khuri, A. I. (2005). "An Alternative Proof for a Continuity Property of Positive Definite Matrices." *Journal of Probability and Statistical Science*, 3, 135-138.
86. Lee, J., Khuri, A. I., and Kim, K. W. (2005). "Modeling the Coverage Probability of a Confidence Interval on the Among-Group Variance Component in the Unbalanced Random One-Way Model." *Computational Statistics*, 20, 275-294.
87. Khuri, A. I. (2005). "Slack-Variable Models Versus Scheffé's Mixture Models." *Journal of Applied Statistics*, 32, 887-908.
88. Robinson, T. J., Wulff, S. S., Montgomery, D. C., and Khuri, A. I. (2006). "Robust Parameter Design Using Generalized Linear Mixed Models." *Journal of Quality Technology*, 38, 65-75.
89. Khuri, A. I. and Mukhopadhyay, S. (2006). "GLM Designs: The Dependence on Unknown Parameters Dilemma." In: *Response Surface Methodology and Related Topics*, André I. Khuri, Ed., Singapore: World Scientific, pp. 203-223.
90. Khuri, A. I. (2006). "Mixed Response Surface Models with Heterogeneous Within-Block Error Variances." *Technometrics*, 48, 206-218.
91. Khuri, A. I., Mukherjee, B., Sinha, B. K., and Ghosh, M. (2006). "Design Issues for Generalized Linear Models: A Review." *Statistical Science*, 21, 376-399.
92. Lee, J., Khuri, A. I., Kim, K. W., and Lee, S. (2007). "On the Size of the F-Test for the One-Way Random Model with Heterogeneous Error Variances." *Journal of Statistical Computation and Simulation*, 77, 443-455.

93. Mukhopadhyay, S. and Khuri, A. I. (2008). "Comparison of Designs for Multivariate Generalized Linear models," *Journal of Statistical Planning and Inference*, 138, 169-183 [this is the Memphis 2005 Design Conference Special Issue.]
94. Mukhopadhyay, S. and Khuri, A. I. (2007). "Bias in Multivariate Generalized Linear Models." *Calcutta Statistical Association Bulletin*, 59, 87-105.
95. Mukhopadhyay, S. and Khuri, A. I. (2008). "Optimization in a Multivariate Generalized Linear Model Situation." *Computational Statistics and Data Analysis*, 52, 4625-4634.
96. Jung, B. C., Khuri, A. I., and Lee, J. (2008). "Comparison of Designs for the Three-Fold Nested Random Model." *Journal of Applied Statistics*, 35, 701-715.
97. Saha, S. and Khuri, A. I. (2009). "Comparison of Designs for Response Surface Models with Random Block Effects," *Quality Technology and Quantitative Management*, 6, 219-234 [an invited paper in a special issue of the journal on response surface methodology].
98. Mukhopadhyay, S. and Khuri, A. I. (2008). "A New Graphical Approach for Comparing Response Surface Designs on the Basis of the Mean Squared Error of Prediction Criterion," *Statistics and Applications*, 6, 293-324 [an invited paper in a special issue of the journal in honor of Professor Aloke Dey].
99. Khuri, A. I. (2009). Discussion of "Response Surface Design Evaluation and Comparison," by C. M. Anderson-Cook, C. M. Borror, D. C. Montgomery, *Journal of Statistical Planning and Inference*, 139, 647-649.
100. Khuri, A. I. and Mukhopadhyay, S. (2010). "Response Surface Methodology." In: *Wiley Interdisciplinary Reviews - Computational Statistics*, Volume 2, Number 2, E. J. Wegman, Y. H. Said, and D. W. Scott, Eds., Hoboken, New Jersey: Wiley, pp. 128-149.
101. Khuri, A. I. (2011). "Designs for Generalized Linear Models." In: *International Encyclopedia of Statistical Science*, M. Lovric, Ed., Berlin, Springer-Verlag, Part 4, pp. 377-380.
102. Khuri, A. I. (2011). "Response Surface Methodology." In: *International Encyclopedia of Statistical Science*, M. Lovric, Ed., Berlin, Springer-Verlag, Part 18, pp. 1229-1231.

Articles in Refereed Nonstatistical Journals

1. Tseo, C.L., Deng, J.C., Cornell, J.A., Khuri, A.I., and Schmidt, R.H. (1983). "Effect of Washing Treatment on Quality of Minced Mullet Flesh." *Journal of Food Science*, 48, 163-167.

2. Ofir, C. and Khuri, A.I. (1986). "Multicollinearity in Marketing Models: Diagnostics and Remedial Measures." *International Journal of Research in Marketing*, 3, 181-205.
3. Fichtali, J., Van de Voort, F.R., and Khuri, A.I. (1990). "Multiresponse Optimization of Acid Casein Production." *Journal of Food Process Engineering*, 12, 247-258.
4. Bechtel, G.G., Ofir, C., and Khuri, A.I. (1995). "Replicated Paired Comparisons at the Individual level." *British Journal of Mathematical and Statistical Psychology*, 48, 115-127.
5. Bechtel, G.G. and Khuri, A.I. (1996). "Saturated Models for Repeated Measures." *British Journal of Mathematical and Statistical Psychology*, 49, 367-379.
6. Ma, C.X., Casella, G., Littell, R.C., Khuri, A.I., and Wu. R. (2003). "Exponential Mapping of Quantitative Trait Loci Governing Allometric Relationships in Organisms." *Journal of Mathematical Biology*, 47, 313-324.

Non-Refereed Publications

1. Khuri, A.I. (1997). "Quantile Dispersion Graphs for ANOVA Estimates of Variance Components." *Proceedings of the Conference in Honor of Shayle R. Searle*, Biometrics Unit, Cornell University, Ithaca, New York, pp. 161-168.
2. Khuri, A.I. and Valeroso, E.S. (1997). "Multiresponse Surface Models with Fixed or Random Block Effects." *Proceedings of the International Statistical Institute 51st Session* in Istanbul, Turkey, Book 2, pp. 75-78.
3. Khuri, A.I. (1999). "Discussion" of the paper "Response Surface Methodology-Current Status and Future Directions," by R.H. Myers. *Journal of Quality Technology*, 31, 58-60.
4. Khuri, A.I. (2001). "Comments" on the paper "Factor Screening and Response Surface Exploration," by S. W. Cheng and C. F. J. Wu. *Statistica Sinica*, 11, 587-589.
5. Khuri, A.I. (2002). "Reply to Comments by Jeff Terpstra." *The American Statistician*, 56, 254-255.
6. Khuri, A. I. and Lee, J. (2003). "Quantile Dispersion Graphs for Comparing Designs for Random ANOVA Models." In: *Proceedings of Graybill Conference on Linear, Nonlinear, and Generalized Linear Models*, 2001, Department of Statistics, Colorado State University, Ft. Collins, Colorado, pp. 227-240.

7. Khuri, A. I. (2006). "Mixed Response Surface Models with Heterogeneous Within-Block Error Variances," In: *Proceedings of the 3rd Sino- International Symposium on Probability, Statistics, and Quantitative Management*, June 10, 2006, Taipei, Taiwan, pp. 1-8.

Book Reviews

1. Christensen, Larry B. (1977). *Experimental Methodology*. Allyn and Bacon, Inc., Boston, MA, for *Journal of Quality Technology*, 12(2), 1980, 116-117.
2. Graybill, Franklin A. (1969). *Introduction to Matrices With Applications to Statistics*. Wadsworth Publishing Co., Belmont, CA, for Wadsworth Publishing Co.
3. Elandt-Johnson, R.C. and Johnson, N.L. (1980). *Survival Models and Data Analysis*. John Wiley and Sons, Inc., New York, for *Journal of Quality of Technology*, 13(4), 1981, 274-275.
4. McIntosh, Allen (1982). *Fitting Linear Models: An Application of Conjugate Gradient Algorithms*. Springer-Verlag, New York, for the *MATHEMATICAL REVIEWS*.
5. Montgomery, Douglas C. (1984). *Design and Analysis of Experiments*, Second Edition. John Wiley and Sons, Inc., New York, for John Wiley and Sons, Inc.
6. Odeh, R.E. and Davenport, J.M. (1986). *Selected Tables in Mathematical Statistics* (volume 10). American Mathematical Society, Providence, RI, for *Technometrics*, 29, 1987, 386.
7. Rao, C.R. and Kleffe, J. (1988). *Estimation of Variance Components and Applications*. North-Holland, Amsterdam, for *Journal of the American Statistical Association*, 84, 1989, 621-622.
8. Montgomery, Douglas C. (1990). *Design and Analysis of Experiments*, Third Edition. John Wiley and Sons, Inc., New York, for John Wiley and Sons, Inc.
9. Searle, S.R., Casella, G., and McCulloch, C.E. (1992). *Variance Components*. John Wiley and Sons, Inc., New York, for *Journal of the American Statistical Association*, 89, 1994, 357-358.
10. Burdick, R.K., and Graybill, F.A. (1992). *Confidence Intervals on Variance Components*. Marcel Dekker, Inc., New York, for the *MATHEMATICAL REVIEWS*, 94c, 1994, 1596.

11. Rekab, K., and Shaikh, M. (2005). *Statistical Design of Experiments with Engineering Applications*. Dekker/CRC Press, New York, for Dekker/CRC Press.
12. Guttman, I. (2010). *Linear Models: An Introduction*. For SIAM Classics in Applied Mathematics Series, Philadelphia, Pennsylvania (this book was initially published by Wiley in 1982).

PAPERS PRESENTED AT STATISTICAL MEETINGS

Contributed Papers

1. "A Modified Ridge Analysis." Paper presented at the *1977 Florida Chapter Meeting of ASA* at Florida International University, Miami, FL.
2. "A Ridge Regression Estimator for the Slope of a Response Surface." Paper presented at the *1977 Meeting of ASA* in Chicago, IL.
3. "A Conservative Sample Size for the Comparison of Several Proportions." Paper presented at the *1978 Florida Chapter Meeting of ASA* at St. Petersburg Junior College, Clearwater, FL.
4. "Simultaneous Optimization of a Multiresponse Function." Paper presented at the *1979 Annual Meeting of ASA* in Washington, D.C.
5. "Exact Tests Concerning the Random Effects' Variance Components in an Unbalanced Random Model." Paper presented at the *1986 Annual Meeting of ASA* in Chicago, IL., August 18-21.
6. "Exact Tests for the Main Effects' Variance Components in an Unbalanced Random Two Way Model." Paper presented at the *1987 Second International Tampere Conference in Statistics* at the University of Tampere, Tampere, Finland, June 1-4.
7. "A Measure to Evaluate the Accuracy of Satterthwaite's Approximation." Paper presented at the *1992 ASA Meeting* in Boston, MA, August 12.
8. "Quantile Plots of the Prediction Variance for Response Surface Designs." A Special Contributed paper presented at the *1996 ASA Meeting* in Chicago, IL, August 8.
9. "On Unweighted Sums of Squares in Unbalanced Analysis of Variance." Paper presented at the *1998 ASA Meeting* in Dallas, Texas, August 10.

Invited Papers

1. "Simultaneous Optimization of a Multiresponse Function With Applications to Mixture Experiments." Paper presented at the *1980 Spring Regional Meeting of ASA* in Charleston, South Carolina.
2. "Simultaneous Optimization of Multiple Responses Represented by Polynomial Regression Functions." Paper presented at the *Amer. Soc. for Quality Control 1981 Fall Technical Conference* in Gatlinburg, Tennessee, October 29-30.
3. "Basic Concepts in Response Surface Methodology." Paper presented at the *1981 Annual Meeting of the American Society of Agronomy* in Atlanta, Georgia, November 29 - December 4.
4. Served as discussant of the paper, "Multicollinearity in Regression: Diagnostics and Remedial Measures," by Douglas C. Montgomery at the *1982 SREB - ASA Summer Research Conference* in Pensacola, Florida, June 13-18.
5. "Response Surface Designs for Multiple Response Systems." Paper presented at the *1983 Gordon Research Conference* in New Hampton, New Hampshire, August 1-5.
6. "Interval Estimation of Fixed Effects in Balanced Mixed Models." Paper presented at the *1984 Annual Meeting of the American Statistical Association* in Philadelphia, Pennsylvania, August 13-16.
7. "Exact Tests for the Main Effects' Variance Components in an Unbalanced Random Two Way Model." Paper presented by my coauthor, Ramon C. Littell, at the *1986 Biometric Society Spring Meeting* in Atlanta, Georgia, March 16-19.
8. "Exact Tests for the Main Effects' Variance Components in an Unbalanced Random Two Way Model." Paper presented at the Imperial College of Science and Technology in London, England, May 27, 1987.
9. "Multivariate Techniques for the Analysis of Linear Multiresponse Models." Paper presented at the *1987 Annual Meeting of the American Statistical Association* in San Francisco, California, August 17-20.
10. "Response Surfaces: Designs and Analyses" (with J.A. Cornell). A tutorial presented at the *44th Annual American Society for Quality Control Applied Statistics Conference*, Atlantic City, New Jersey, December 5-7, 1988.
11. "Some Recent Developments in Response Surface Methodology." Paper presented at Oak Ridge National Laboratory, Oak Ridge, Tennessee, July 21, 1989.

12. "Exact Tests for Random Models with Unequal Cell Frequencies in the Last Stage." Paper presented at the *1989 Annual Meeting of the American Statistical Association* in Washington, DC, August 6-10.
13. "Determination of Conditions for the Mean Response to Fall Within Specified Bounds." Paper presented at the *1990 Annual Meeting of the American Statistical Association* in Anaheim, California, August 6-9.
14. "The Analysis of Multiresponse Experiments: An Overview." Paper presented at the *1991 Annual Meeting of the American Statistical Association* in Atlanta, Georgia, August 19-22.
15. "Construction of Designs with a Specified Degree of Imbalance." Paper presented at the Department of Mathematics and Statistics, University of Maryland, Baltimore County Campus, Baltimore, Maryland, April 29, 1994.
16. "A General Overview of Response Surface Methodology." I presented this paper as the Main Speaker at a Workshop on Response Surface Methodology and Mixture Experiments in Seoul, South Korea, on June 21, 1994. The Workshop was sponsored by the Industrial Statistics Group of the Korean Statistical Society and the Institute of Statistics, Seoul National University, Seoul, South Korea.
17. "Response Surface Models with Block Effects." I presented this paper as the Main Speaker at a Workshop on Response Surface Methodology and Mixture Experiments in Seoul, South Korea, on June 22, 1994. The Workshop was sponsored by the Industrial Statistics Group of the Korean Statistical Society and the Institute of Statistics, Seoul National University, Seoul, South Korea.
18. "Response Surface Models with Mixed Effects." Paper presented at the *1994 Annual Meeting of the American Statistical Association* in Toronto, Canada, August 16.
19. "Quantile Plots of the Prediction Variance for Response Surface Designs." Paper presented at the Department of Mathematical Sciences, Oakland University, Rochester, Michigan, April 10, 1995.
20. "Multiresponse Surface Models with Block Effects." Paper presented at the R.C. Bose Memorial Conference on Statistical Design and Related Combinatorics, Colorado State University, Fort Collins, Colorado, June 9, 1995.
21. "Response Surface Methods for Multiresponse Experiments." A tutorial presented at the 13th SEMATECH Statistical Methods Symposium (Multivariate Statistical Methods in the Semiconductor Industry), San Antonio, Texas, April 24, 1996.

22. "Quantile Dispersion Graphs for ANOVA Estimates of Variance Components." Paper presented at a Conference in honor of Shayle R. Searle, Cornell University, Ithaca, New York, August 10, 1996.
23. "Quantile Dispersion Graphs for ANOVA Estimates of Variance Components." Paper presented at the First Northern Illinois University Symposium on Statistical Science, DeKalb, IL, September 28, 1996.
24. "An Overview of Response Surface Methods for Multiresponse Experiments." I presented this paper at the Department of Mathematical Sciences, Montana State University, under the MONTS Speaker Program of Montana State University, Bozeman, MT, March 10, 1997.
25. "Dispersion Graphs for ANOVA Estimates of Variance Components." I presented this paper at the Department of Mathematical Sciences, Montana State University, under the MONTS Speaker Program of Montana State University, Bozeman, MT, March 11, 1997.
26. "Multiresponse Models with Block Effects." This paper was presented at the Summer Research Conference in Statistics, Gatlinburg, Tennessee, June 20, 1997.
27. "Multiresponse Surface Models with Fixed or Random Block Effects." This paper was presented at the 51st Session of the International Statistical Institute in Istanbul, Turkey, August 19, 1997.
28. "Multiresponse Surface Models with Block Effects", an invited paper presented at the Irsee Workshop on Model Fitting and Mixture Experiments in Irsee (near Munich), Germany, October 7, 1997.
29. "Multiresponse Surface Models with Block Effects", a seminar presented at the Department of Mathematical Sciences, Oakland University, Rochester, Michigan, October 21, 1997.
30. "Quantile Dispersion Graphs for ANOVA Estimates of Variance Components", a seminar presented at the Department of Statistics, University of Georgia, Athens, Georgia, November 6, 1997.
31. "Quantile Dispersion Graphs for ANOVA Estimates of Variance Components", a seminar presented at the School of Statistics, University of Minnesota, St. Paul, Minnesota, November 20, 1997.
32. "A Graphical Approach for Comparing Designs for Estimating Variance Components." Paper presented at the 1998 International Indian Statistical Association Meeting at McMaster University in Hamilton, Ontario, Canada, October 11, 1998.

33. "Recent Advances in Multiresponse Design and Analysis", an invited paper presented at the 1999 *Annual Meeting of the American Statistical Association* in Baltimore, Maryland, August 12, 1999.
34. "Modeling the Power of an F -Test for a Variance Component Under Heterogeneous Error Variances", an invited paper presented at the 50th Anniversary of the Department of Statistics at Virginia Tech, Blacksburg, Virginia, August 14, 1999.
35. "Modeling the Power Function for a Variance Component Under Heterogeneous Error Variances", paper presented at the Symposium on Selected Topics in Variance Components Analysis, University of Florida, Gainesville, Florida, January 22, 2000.
36. "Further Insights Concerning the Method of Unweighted Means," paper presented at a conference entitled "Statistics: Reflections on the Past and Visions for the Future", an International Conference in Honor of C.R. Rao, University of Texas at San Antonio, Texas, March 16, 2000.
37. "Quantile Dispersion Graphs for the Comparison of Designs for Logistic Regression Models", paper presented at the Summer Research Conference in Statistics, Williamsburg, Virginia, June 5, 2000.
38. "The Use of Generalized Linear Models in Response Surface Methodology", paper presented at the 3rd World Congress of Nonlinear Analysts, University of Catania, Sicily, Italy, July 24, 2000.
39. "Quantile Dispersion Graphs for Comparing Designs for Random ANOVA Models", an invited paper presented at a conference to honor Professor Frank Graybill at Colorado State University, Ft. Collins, Colorado, June 14, 2001.
40. "Comparison of Designs Using Quantile Dispersion Plots with Generalized Linear Models", an invited paper presented at the Annual Meeting of the *The American Statistical Association* in Atlanta, Georgia, August 6, 2001. The paper was presented at the session "Generalized Linear Models in Industry: Design and Analysis", which was organized by Professor Raymond H. Myers.
41. I served on a panel to discuss a video presentation by Professor George E. P. Box on the "50th Anniversary of Response Surface Methodology", at the 45th Annual Fall Technical Conference in Toronto, Canada, October 18-19, 2001.
42. "Quantile Dispersion Graphs for Evaluating and Comparing Designs for Logistic Regression Models." I was invited to present this paper at Academia Sinica in Taipei, Taiwan, June 24, 2002.

43. “A General Overview of Response Surface Methodology.” I was invited to present this paper at Fu Jen Catholic University in Taipei, Taiwan, June 24, 2002.
44. “A Graphical Procedure for Comparing Designs for Random Models.” I was invited to present this paper at the National Taipei University of Technology in Taipei, Taiwan, June 25, 2002.
45. “Comparison of Designs for GLMs and Variance Component Models Using Quantile Dispersion Graphs.” I was invited to present this paper at the National Tsing-Hua University in Hsinchu, Taiwan, June 26, 2002.
46. “Quantile Dispersion Graphs for Evaluating and Comparing Designs for Logistic Regression Models.” I was invited to present this paper at the Department of Statistics and Actuarial Science, University of Central Florida, Orlando, Florida, September 5, 2002.
47. “Response Surface Models with Mixed Effects and Heterogeneous Error Variances.” Invited paper presented at Justus Seely Memorial Conference on Linear Models, Oregon State University, Corvallis, Oregon, July 31, 2003.
48. “Recent Modeling, Analysis, and Design Issues in RSM: Models with Random Block Effects and GLMs.” I presented this paper as the *Keynote Speaker* at the Spring Meeting of the Louisiana Chapter of the American Statistical Association at the University of New Orleans, New Orleans, Louisiana, April 30, 2004.
49. “Mixed Response Surface Models with Heterogeneous Error Variances.” I was invited to present this paper at the Fifth Biennial International Conference on Statistics, Probability, and Related Areas, organized by the International Indian Statistical Association, Athens, Georgia, May 15, 2004.
50. “Quantile Dispersion Graphs for Comparing Designs for Multivariate Generalized Linear Models.” An invited paper presented at *International Conference on Design of Experiments: Theory and Applications* (with Siuli Mukhopadhyay) at the University of Memphis, Tennessee, May 14, 2005.
51. “Applications of Dirac’s Delta Function in Statistics.” An invited paper presented at the 2005 *Joint Statistical Meetings of the American Statistical Association* in Minneapolis, Minnesota, August 10, 2005.
52. “Mixed Response Surface Models with Heterogeneous Within-Block Error Variances.” I presented this talk as the Keynote Speaker at the 3rd *Sino-International symposium on Probability, Statistics, and Quantitative Management* in Taipei, Taiwan, June 10, 2006.

53. “Applications of Dirac’s Delta Function in Statistics.” An invited paper presented at Fu Jen Catholic University, Taipei, Taiwan, June 9, 2006.
54. “Recent Modeling, Analysis, and Design Issues in RSM: Models with Random Block Effects and GLMs.” An invited paper presented at the Department of Statistics, North Carolina State University in Raleigh, North Carolina, February 12, 2009.
55. “Multiresponse Surface Models with Block Effects.” An invited paper presented at the Department of Statistics, North Carolina State University in Raleigh, North Carolina, February 13, 2009.
56. Presented a series of eight lectures on “Mathematical Topics in Statistics” and “Topics in Linear Models”, during a period of two weeks, at the Department of Statistics, Virginia Tech in Blacksburg, Virginia, March 20-31, 2011.

PAPERS PRESENTED AT DEPARTMENTAL SEMINARS (University of Florida)

1. Modified Ridge Analysis (1976).
2. Obtaining Constant Prediction Variances on Concentric Triangles for Ternary Mixture Systems (1977).
3. Lack of Fit Revisited (1978).
4. Simultaneous Optimization of Multiresponse Functions (1979).
5. Confidence Intervals for Functions of Variance Components in Random Models (1980).
6. Direct Products: A Powerful Tool for the Analysis of Balanced Data (1982).
7. Designs for Nonlinear Models (1982).
8. A Test for Lack of Fit of a Linear Multiresponse Model (1984).
9. How to Measure and “Repair” Rotatability of a Response Surface Design (1985).
10. Exact Tests for Unbalanced Random Models (1986).
11. Exact Tests for the Comparison of Correlated Response Models with an Unknown Dispersion Matrix (1987).
12. Unbalanced Experiments: Designs and Analyses. Presented at the University of Florida School of Forestry (1987).

13. Response Surface Analysis of Experiments with Random Blocks (1988).
14. Exact Tests for Random Models with Unequal Cell Frequencies in the Last Stage (1989).
15. The Effect of Blocking on the Estimation of a Response Surface (1991).
16. Response Surface Models with Random Block Effects (1991).
17. A Measure to Evaluate the Accuracy of Satterthwaite's Approximation (1992).
18. Construction of Designs with a Specified Degree of Imbalance (1994).
19. Quantile Plots of the Prediction Variance for Response Surface Designs (1996).
20. A Graphical Technique for Assessing the Efficiency of Variance Components Estimates (September 19, 1996).
21. Unweighted Sums of Squares in Unbalanced ANOVA (March 5, 1998).
22. A Graphical Approach for Comparing Designs for Random ANOVA Models (June 11, 1998).
23. Modeling the Probability of a Negative ANOVA Estimate of a Variance Component. Paper presented to the Generalized Linear Models Research Group (October 20, 1998).
24. The Hazards of Coding in Linear Models (October 14, 1999).
25. Dirac's Delta Generalized Function (October 18, 2000).
26. Graphical Procedures for ANOVA (November 2, 2000).
27. Comparison of Designs for Generalized Linear Models Using Quantile Dispersion Graphs (October 11, 2001).
28. Response Surface Methods for Multiresponse Experiments (January 16, 2003).
29. Some Insights into Response Surface Methodology - A General Overview (Student Seminar Series, November 4, 2003).
30. Applications of Dirac's Delta Function in Statistics (November 17, 2005).
31. Multiresponse Surface Models with Block Effects (March 26, 2009).

EDITORIAL POSITIONS

Associate Editor, *Journal of Statistical Planning and Inference* (1995 - 2003)

Associate Editor, *Technometrics* (1983 - 1992).

Editorial Advisor, *Journal of Probability and Statistical Science* (2003 - Present).

Reviewer for the *Mathematical Reviews* (1980 - Present).

Co-edited (with Lyle D. Broemeling and Ramon C. Littell) a special issue, entitled “Analysis of the Unbalanced Mixed Model,” of *Communications in Statistics-Theory and Methods*, Volume 17, Number 4, 1988.

Edited a book entitled *Response Surface Methodology and Related Topics*, published by World Scientific, Singapore, 2006, 457 pages.

Reviewed Research Proposals for:
The National Science Foundation
The Army Research Office
Cornell Theory Center

Refereed many articles for:

American Statistician
American Institute of Industrial Engineering Transactions
Annals of Statistics
Annals of the Institute of Statistical Mathematics
Biometrics
Communications in Statistics
International Journal of Mathematical Education in Science and Technology
International Journal of Mathematics and Mathematical Sciences
Journal of the American Statistical Association
Computational Statistics and Data Analysis
Journal of Applied Statistics
Journal of Educational Statistics
Journal of Educational and Behavioral Statistics
Journal of Probability and Statistical Science
Journal of Quality Technology
Journal of the Royal Statistical Society (Series C)
Journal of Statistical Computation and Simulation
Journal of Statistical Planning and Inference

Pakistan Journal of Statistics
Proceedings of the 15th Conference on Mathematical
Sankhyā
Statistics, Olsztyn, Poland, 1988.
Statistics and Probability Letters
Statistica Sinica
Statistical Science
Technometrics
IIE Transactions

CONTRACTS AND GRANTS

1. Received a \$2,000 grant from the Board of Directors of the Division of Sponsored Research at the University of Florida to work on multivariate response and mixture problems (April 1978 - April 1979).
2. Received a Research Development Award in the amount of \$5,906 from the Division of Sponsored Research to work on investigating response surface techniques used in Agronomy (May 1982 - April 1983).
3. Received a grant No. N00014-86-K-0059 from the U.S. Office of Naval Research to work on problems concerning unbalanced mixed models and multiresponse experiments (with Ramon C. Littell). The grant covered a period of 3 years, October 1985 - September 1988. The funding for these three years was as follows: 1985-86 \$72,229.00, 1986-87 \$77,671.00, 1987-88 \$83,806.00. Total funding \$233,706.00
4. Received a grant No. N00014-87-G-0090 from the U.S. Office of Naval Research to organize a Conference on the Analysis of the Unbalanced Mixed Model, April 6-10, 1987, at the University of Florida. Fourteen leading experts in linear models were invited as speakers in addition to several invited guests. A total of \$29,558.50 was received to fund the Conference.
5. Received a Research Travel Grant from Oak Ridge Associated Universities for collaborative research in the use and application of response surface methodology. This grant is for two years, 3/1989 - 12/1991.
6. Received a \$13,125 Faculty Research Award from the Division of Sponsored Research (University of Florida) to investigate response surface techniques within the framework of generalized linear models (May 1993 - April 1994).
7. Received a grant No. 1R13CA/**64164-01 from the National Institute of Health to organize a conference entitled "Topics in Generalized Linear Models" at the

University of Florida, September 29 - October 1, 1994 (Malay Ghosh is Co-Principal Investigator). The total amount of the grant was \$8,000.00.

8. Received a grant No. MDA904-94-H-2037 from the U.S. Department of Defense (National Security Agency) to organize a conference entitled “Topics in Generalized Linear Models” at the University of Florida, September 29 - October 1, 1994 (Malay Ghosh is Co-Principal Investigator). The total amount of the grant was \$10,000.00.
9. Received a grant as a Co-P.I. from the National Institute of Health (with Frans Van Haaren from the UF Psychology Dept. as a P.I.). The title of the grant is “Gender Differences in Alcohol-Seeking Behavior.” The period of the grant was for two years, 1996-98, with a total cost of \$118,230.
10. Received \$1,500 from the University of Florida Office of Research, Technology and Graduate Education on May 4, 1999, to partially support 10 graduate students from other institutions to attend the “Symposium on Selected Topics in Variance Components Analysis”, which I organized at the University of Florida (with Dr. Malay Ghosh), January 21-22, 2000.
11. Received funding as a P. I. from the National Institute of Standards and Technology (NIST) to organize a conference on “Designs for Generalized Linear Models.” The conference was co-sponsored and hosted by the Statistical Engineering Division of the Information Technology Laboratory of NIST in Gaithersburg, Maryland, April 18-20, 2002.
12. Received \$8000.00 as a P.I. (with Dr. Ana Ivelisse Avilés as Co-P.I.) from the National Science Foundation for the proposal “Grants for Students and Junior Scientists to Attend the Conference on Designs for Generalized Linear Models” (DMS-0207059). The funding provided travel grants for 15 doctoral students and/or postdoctoral fellows/junior scientists to attend the conference at the National Institute of Standards and Technology, April 18-20, 2002.
13. Received \$10,000.00 as a P.I. (with Dr. George Casella as Co-P.I.) from the National Science Foundation to organize a workshop entitled “Winter Workshop on Frontiers of Theoretical Statistics” (DMS-0536938) at the University of Florida, January 13-14, 2006.

DOCTORAL STUDENTS

1. Conlon, Michael. Title of Dissertation: “Continuously Adaptive M-Estimation in the Linear Model.” Graduated in June 1982. Placement: The University of Florida, Gainesville, FL.

2. Shelton, John (with John A. Cornell). Title of dissertation: "Testing Lack of Fit in a Mixture Model." Graduated in June 1982. Placement: Hoechst Marion Roussel, Inc.
3. Bumrungrsup, Chinnaphong. Title of dissertation: "Parameter-Free Designs and Confidence Regions for Nonlinear Models." Graduated in August 1984. Placement: Thammasat University, Bangkok, Thailand.
4. Wijesinha, Manel. Title of dissertation: "Design of Experiments for Multiresponse Models." Graduated in August 1984. Placement: Pennsylvania State University, York, PA.
5. Gallo, Jose. Title of dissertation: "The Analysis of the Unbalanced Mixed Model." Graduated in August 1987. Placement: American Cyanamid Co., Pearl River, N.Y.
6. Capen, Robert. Title of dissertation: "Exact Testing Procedures for Unbalanced Random and Mixed Linear Models." Graduated in August, 1991. Placement: Baxter Diagnostics, Miami, FL.
7. Paul, Sofia. Title of dissertation: "Response Surface Methodology Under Generalized Linear Models." Graduated in December, 1996. Placement: Eli Lilly Corporate Center, Indianapolis, IN.
8. Valeroso, Elsie S. Title of dissertation: "Topics in Multiresponse Analysis and Optimization." Graduated in December, 1996. Placement: Department of Mathematical Sciences, Montana State University, Bozeman, MT.
9. Lee, Juneyoung. Title of dissertation: "Design Comparisons and Modeling Aspects for Unbalanced Random Models." Graduated in August, 1999. Placement: Department of Preventive Medicine, Korea University, Seoul, South Korea.
10. Robinson, Kevin. Title of dissertation: "Quantile Dispersion Graphs for Design Comparisons for Logistic Models and Other Modeling Issues." Graduated in August, 2000. Placement: Department of Mathematics, Millersville University, Pennsylvania.
11. Mukhopadhyay, Siuli. Title of dissertation: "Multiresponse, GLM, and Other Recent Approaches in Response Surface Methodology." Graduated in August, 2006. Placement: Department of Mathematics, Indian Institute of Technology Bombay, Mumbai, India.
12. Saha, Sourish. Title of dissertation: "Response Surface Designs for Mixed Linear Models." Graduated in August, 2007. Placement: Research Statistics Unit, GlaxoSmithKline, Collegeville, Pennsylvania.

POST-DOCTORAL FELLOWS

The following post-doctoral fellows did research work at the University of Florida with my collaboration:

1. Dr. Hyuk Joo Kim, Wonkwang University, Department of Statistics, South Korea (1994-1995).
2. Dr. Jeongbin Yoo, Seowon University, Department of Statistics, South Korea (1996-1997).
3. Dr. Dae-Heung Jang, Pukyong National University, Department of Statistics, South Korea (2000-2001).

DEPARTMENTAL COMMITTEES (University of Florida)

1. Comprehensive Exam Committee Member (1977-82)
2. Ph.D. Qualifying Exam Committee Member (1981-present)
3. Faculty Search Committee Member (1979-80, 1981-82, 1984-85, 1996-97).
4. Curriculum Committee Chairman (1980-1984)
5. Seminar Chairman (1977-78, 1980-83, 1985-86, 1993-1997)
6. Library Committee Chairman (1981-1993)
7. Department Self-Study Committee Member (1981-82)
8. Grants Committee Member (1981-82)
9. Master's Program for Industry Committee Member (1982-83)
10. Departmental Advisory Committee Chairman (1987-88)
11. Departmental Advisory Committee Member (1988-1993)
12. Graduate Students Selection Committee Member (1987)
13. Department of Statistics Chair Search Committee Member (1988-89)
14. Search Committee Member (1992-1993)
15. Graduate Coordinator (1988-1993)

16. Department of Statistics Research Committee Chair (1993)
17. Department of Statistics Research Committee Member (1994-1995)
18. Member of Search Committee for Assistant Professor (1997).
19. Chair, Search Committee for the Assistant Professor Position (1999-2000).
20. Chair, Search Committee for the Assistant Professor Position (2000-2001).
21. Member of the Curriculum Committee.
22. Chair, Committee to Revise the Course STA 4322 (Mathematical Statistics 2) (2004).
23. Chair, 2006 Winter Workshop Committee.
24. Member of the By-Laws Committee.

UNIVERSITY COMMITTEES (University of Florida)

1. Member of the University of Florida Senate (1992-1994)
2. Member of the Research and Development Award Committee for the Physical and Mathematical Sciences (1993-95).
3. Member of the Nominating Committee for the College of Liberal Arts and Sciences (1999-2001).
4. Member of CLAS Mathematical Science Committee (2004-2005).

OTHER PROFESSIONAL ACTIVITIES

1. Program Chairman for the Spring 1980 Florida Chapter Meeting of the American Statistical Association (ASA) in Gainesville, Florida.
2. Session Chairman for the Spring 1981 Florida Chapter Meeting of ASA in Winter Park, Florida.
3. SPES (Section on Physical and Engineering Sciences) Program Chairman for the ASA ENAR 1984 Spring Regional Meeting in Orlando, Florida, March 11-14. I organized and chaired the session on Response Surface Methodology and Helped in organizing the session on Mixed Linear Models (Ramon Littell was chairman of this session).

4. Chairman of “Results in the Design of Experiments” Contributed Paper Session at the *1984 Annual Meeting of the American Statistical Association* in Philadelphia, PA, August 13-16.
5. Organized a conference on the *Analysis of the Unbalanced Mixed Model* (funded by the U.S. Navy) at the University of Florida, Gainesville, FL, April 6-10, 1987.
6. Chairman of “Computing for Mixed Linear Model,” an Invited Paper Session at the *21st Symposium on the Interface: Computing Science and Statistics*, Orlando, FL, April 9-12, 1989.
7. Served as outside reviewer for several promotion and tenure committees.
8. Member of the American Statistical Association Committee on International Relations in Statistics (1989-1995).
9. Organized and chaired an invited paper session at the *1991 Annual Meeting of the American Statistical Association* in Atlanta, GA, on August 19, 1991. The title of the session is Response Surface Methods in Multiresponse Situations.
10. Chair of the American Statistical Association Committee on International Relations in Statistics (1992-1995).
11. Taught a short course on response surface methodology and analysis of mixed models in Orlando, FL (March 10-12, 1993; March 7-11, 1994; March 6-8, 1996) for the Department of Statistics at the University of Florida.
12. Organized and chaired an invited paper session at the *1993 Annual Meeting of the American Statistical Association* in San Francisco, CA, August 11, 1993. The title of the session is Recent Developments in Variance Components Analysis.
13. Organized a conference entitled *Topics in Generalized Linear Models* at the University of Florida, September 29 - October 1, 1994 (with Malay Ghosh as a Co-Chair).
14. Organized an invited paper session on *Multiresponse Problems at the 1997 Meeting of the Summer Research Conference (SRCOS/ASA)* in Gatlinburg, Tennessee, June 19-21.
15. Organized a conference entitled *Symposium on Selected Topics in Variance Components Analysis* (with Malay Ghosh) at the University of Florida, January 21-22, 2000. This conference was funded by the Department of Statistics and the Graduate School at the University of Florida.

16. Organized a conference on *Designs for Generalized Linear Models* at the National Institute of Standards and Technology (NIST) in Gaithersburg, Maryland, April 18-20, 2002. The conference was funded by NIST.
17. Organized an invited paper session on *Variance Components/ Mixed Modeling Problems* at the Fifth Biennial International Conference on Statistics, Probability, and Related Areas, University of Georgia, Athens, Georgia, May 14-16, 2004.
18. Organized and chaired an invited paper session on *Recent Topics in Response Surface Methodology* at the *International Conference on Design of Experiments: Theory and Applications*, University of Memphis, Memphis, Tennessee, May 14, 2005.
19. Chaired a special contributed paper session on *Response Surfaces and Related Issues* at the 2005 *Joint Statistical Meetings of the American Statistical Association* in Minneapolis, Minnesota, August 9, 2005. This session was organized by the *Section on Physical and Engineering Sciences, and the Section on Quality and Productivity*.
20. Organized an invited paper session on *The Interface Between Mathematics and Statistics* at the 2005 *Joint Statistical Meetings of the American Statistical Association* in Minneapolis, Minnesota, August 10, 2005. This session was sponsored by the *Institute of Mathematical Statistics*.
21. Organized a workshop entitled *Winter Workshop on Frontiers of Theoretical Statistics* at the University of Florida, January 13-14, 2006. The workshop was funded by the National Science Foundation.
22. Organized and chaired an invited paper session on *Response Surface Models with Random Effects* at the 2008 Quality and Productivity Research Conference at the University of Wisconsin in Madison, Wisconsin, June 6, 2008.
23. Visited the Department of Statistics at North Carolina State University in Raleigh, North Carolina, for two weeks in February 2009 (February 1 - 15). I presented two talks to the faculty and two talks to the students.
24. Visited the Department of Statistics at Virginia Tech in Blacksburg, Virginia, for two weeks in March 2011 (March 20-31). I presented a series of eight lectures to the faculty and graduate students.

COURSES TAUGHT

1. Introduction to Statistics

2. Engineering Statistics
3. Mathematical Statistics I and II
4. Statistical Methods for Research I and II
5. Sequential Analysis
6. Design and Analysis of Experiments
7. Advanced Design and Analysis of Unbalanced Data
8. Response Surface Methodology
9. Applied Statistics
10. Theory of Linear Models
11. Mathematical Analysis for Statisticians
12. Matrix Algebra
13. Linear Algebra
14. Abstract Algebra
15. Multidimensional Calculus
16. Real Analysis
17. Applied Mathematics
18. Ordinary Differential Equations
19. Vector Analysis
20. Complex Analysis
21. Advanced Calculus
22. Advanced Calculus for Statisticians
23. Advanced Topics in Linear Models.
24. Analysis of Unbalanced Linear Models.
25. Advanced Topics in Design and Analysis.
26. Presented several short courses on response surface methodology for the Department of Statistics Week of Short Courses, University of Florida.

MEMBERSHIP IN HONOR SOCIETIES

Phi Kappa Phi

A Knight in the Order of St. Ignatius of Antioch