

Dr. Mahmoud Ibrahim Mohammad Bakr

- *Assistant Professor of Mathematical Statistics, College of Science, King Saud University, Kingdom of Saudi Arabia.*
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Personal Information

- *Nationality: Egyptian.*
- *Date of Birth: 15 December 1987.*
- *Marital Status: Married.*

Qualifications

- *Ph. D. degree (Mathematical Statistics): (1/10/2015- 20/9/2018) (On Reliability Properties of Some New Classes of Life Distributions).*
- *Master degree (Mathematical Statistics): (1/3/2012- 15/12/2014) (Study of some Properties of Ageing Notions in Reliability Theory).*
- *B.Sc. (Mathematics): Very good degree, [2010] Al-Azhar University.*

Jobs

- *Assistant Professor of Mathematical Statistics, College of Science, King Saud University, Kingdom of Saudi Arabia (2020- till now)*
- *Lecturer, Department of Basic Science, Giza Higher Institute for Engineering: (2018 - 2020).*

- *Assistant Lecturer, Department of Basic Science, Marg Higher Institute for Engineering and Modern Technology: (2015-2018).*
- *Demonstrator of Mathematics, Faculty of Engineering Science, Sinai University: 2014/2015.*
- *Demonstrator, Department of Basic Sciences, Thebes Higher Institute for Engineering: 2011/2014.*

Experiences

Computer programs: R & R Studio & Minitab & SPSS & Mathematica & Maple and scientific programs (Scientific workplace and Latex).

Teaching skills

- *Ten years or more experience in teaching some mathematical and statistical courses (Probability and Statistics – Biostatistics – Reliability Theory – Operations research – Time series – Decision theory – Calculus – Advanced calculus – Differential equations – Geometry – Algebra).*

Research interests

- *Reliability theory, Ageing Notions, Classes of life distribution, Non-Parametric and Parametric Hypothesis testing and Estimation Theory.*

Conferences

1. *THE INTERNATIONAL CONFERENCE AND EXHIBITION FOR SCIENCE (ICES2023), 06-08 Feb., 2023, RIYADH, Saudi Arabia.*
2. *Regional Workshop on Remotely Sensed Observation of Precipitation using Artificial Intelligence- October 2019, American University of Beirut- Lebanon- Beirut.*
3. *9th International Conference for Basic Sciences, March 2017, Al-Azhar Conference Center (aacc), Nasr City, Cairo.*
4. *4th International Conference in Mathematics and Information Science (ICMIS), January 2015, Zewail-city, Cairo, Egypt.*

5. **1st International Conference on New Horizons in Basic and Applied Science, 21-23 September 2013, Hurghada, Egypt.**

List of publications

Shashi Bhushan; Anoop Kumar; Shivam Shukla; **Bakr, M. E.**; Yusra A. Tashkandy; Md. Moyazzem Hossain (2023): *New logarithmic type imputation techniques in presence of measurement errors. Alexandria Engineering Journal.*

Bakr, M. E. (2023): *On Basic Life Testing Issues in Medical Research Using Univariate and Bivariate U-Statistic Hypotheses Testing. To appear "Quality and Reliability Engineering International"*

Bahady I. Mohammed; Yusra A. Tashkandy; Mohmoud M. Abd El-Raouf; Md. Moyazzem Hossain and **Mahmoud E. Bakr** (2023): *The Markov Bernoulli Lomax with Applications Censored and COVID-19 Drought Mortality Rate Data. Axioms.*

Abdelfateh Beghriche; Yusra A. Tashkandy; **Bakr, M. E.**; Zeghdoudi Halim; Ahmed Gemeay; Md Moyazzem Hossain and Abdisalam Hassan Muse (2023): *The Inverse XLindley Distribution: Properties and Application. IEEE Access.*

Mahmoud E. Bakr; Abdulhakim A. Al-Babtain (2023): *Non-Parametric Hypothesis Testing for Unknown Aged Class of Life Distribution Using Real Medical Data. Axioms.*

Alaa zaki; **Bakr, M. E.**; Arwa M. Alsahangiti; Saima Khan Khosa; Khaled Fathy (2023): *Acceleration of Wheel Factoring Techniques. Mathematics.*

Muhammad Zeshan Arshad; Muhammad Zafar Iqbal; festus were; Ramy Aldallal; Fathy H. Riad; **Bakr, M. E.**; Yusra A. Tashkandy; Eslam Hussam and Ahmed M. Gemeay (2023): *An alternative statistical model to analysis pearl millet (bajra) yield in province Punjab and Pakistan. "Complexity".*

Yusra Tashkandy; **Bakr, M. E.**; Ahmed Gemeay; Eslam Hussam; Abd El-Raouf, M. M.; Md Moyazzem Hossain (2023): *Modeling COVID-19 Real Data Set by a New Extension of Haq Distribution. Axioms.*

Bakr, M. E., Arwa M. Alsahangiti and Gadallah, A. M. (2023): *Modeling survival distributions for certain real-world applications using nonparametric hypothesis testing. "Journal of Statistics Applications & Probability".*

Bakr, M. E., Abdulhakim A. Al-Babtain and Saima Khan Khosa (2022): *Statistical Modeling of Some Cancerous Diseases Using the Laplace Transform Approach of Basic Life Testing Issues. Computational and Mathematical Methods in Medicine.*

Bakr, M. E.; Nagy, M. and Abdulhakim A. Al-Babtain (2022): *Statistical Modeling and Numerical Simulation of Some Cancer Based on Goodness of Fit. AIMS Mathematics.*

Mutua Kilai; Gichuhi A. Waititu; Wanjoya A. Kibira; Ramy Aldallal; Fathy H. Riad; Yusra A. Tashkandy and **Bakr, M. E.** (2022): *Information Approach for Change Point Analysis of EGGAPE distribution and Application to COVID-19 data. Mathematical Problems in Engineering.*

Yusra A. Tashkandy; Ehab M. Almetwally; Randa Ragab; Ahmed M. Gemeay; M. M. Abd El -Raouf; Saima Khan Khosa; Eslam Hussam and **Bakr, M. E.** (2022): **Statistical inferences for the extended inverse Weibull distribution under progressive type -II censored sample with applications.** *Alexandria Engineering Journal*.

Gadallah, A. M.; Mohammed, B. I.; Abdulhakim A. Al-Babtain; Saima Khan Khosa; Mutua Kilai; Yusu, M. and **Bakr, M. E.** (2022): **Modeling various Survival Distributions using A Non-Parametric Hypothesis Testing based on Laplace Transform Approach with some Real Applications.** *Computational and Mathematical Methods in Medicine*.

Bakr, M.E., Abdulhakim A. Al-Babtain, Zafar Mahmood, R.A.Aldallal, Saima Khan Khosa, M. M. Abd El-Raouf, Eslam Hussam and Ahmed M. Gemeay (2022): **Statistical Modelling for a New Family of Generalized Distributions with Real Data Applications.** *Mathematical Biosciences and Engineering*.

Nagy, M.; **Bakr, M. E.** and Adel Alrasheedi (2022): **Analysis with Applications of the Generalized Type-II Progressive Hybrid Censoring Sample from Burr XII Model.** *Mathematical Problem in Engineering*.

Bakr, M. E.; Yusra A. Tashkandy; ahmed M. Gemeay; Ehab M. Almetwally; Nicholas Makumi; Eslam Hussam; M. M. Abd El-Raouf and Saima Khan Khosa (2023): **Weighted-Rayleigh Distribution: Statistical Properties, Actuarial Measures, Regression Analysis, and Application.** *To appear "Journal of Mathematics"*.

Bakr, M. E.; Yusra A. Tashkandy and Gadallah A.M. (2023): **Non-Parametric Testing for HNBUE Class of Life Distributions Using Some Real Cancer Disease Data.** *To appear "Contrast Media & Molecular Imaging"*.

Mohamed, G. M. G.; Rashad M. E.; Mohamed A. W. M.; Abdulhakim A. Al-Babtain; **Bakr, M. E.** and Mustafa M. H. (2023): **Inference for Two Populations 3-Burr-XII in Presence of Joint Progressive Censoring,** *to appear "Complexity"*.

Bakr, M. E. (2023): **Non-Parametric Statistical Life Testing to Evaluate the Efficacy of Different Treatment.** *Submitted.*

Bakr, M. E. (2023): **Statistical Modeling and Numerical Simulation of Some Cancer Based on Goodness of Fit.** *Submitted.*

Bakr, M. E. (2023): **Using the Laplace Transform to Solve Basic Life Testing Issues -An Applications in Medical Science.** *Submitted.*

Mustafa, M. H. and **Bakr, M. E.** (2023): **Theoretical aspects for Bayesian prediction from 3-Burr-XII distribution and its applications in climatic data.** *Submitted.*

Bakr, M. E. (2023): **New Non-Parametric Testing for NBU (2) Class of Life Distribution with Applications.** *Submitted.*

Abu-Youssef, S. E.; Nahed, S. A. Ali and **Bakr, M. E.** (2021): **Used Better than Aged in mgf Ordering class of life distribution with Hypothesis testing.** *Journal of Statistics Applications & Probability Letters*.

Abu-Youssef, S. E.; Nahed, S. A. Ali and **Bakr, M. E.** (2020): **Non-Parametric Testing for Unknown age class of life distribution (UBAL).** *Journal of Testing and Evaluation*.

Abu-Youssef, S. E. and **Bakr, M. E.** (2018): **Laplace Transform Order for Unknown Age Class of Life Distribution with Some Applications.** *Journal of Statistics Applications & Probability*.

Abu-Youssef, S. E.; Hagag, M. Y. and **Bakr, M. E.** (2017): **Some Properties of Classes of Life Distributions at Specific Age.** *Al Azhar Bulletin of Science Vol. 9th., Conf.*

Abu-Youssef, S. E.; Mohammed, B. I. and **Bakr, M. E.** (2015): **Nonparametric Test for UBACT Class of Life Distribution Based on U-Statistic.** *Journal of Advances in Mathematic.*

Abu-Youssef, S. E.; Mohammed, B. I. and **Bakr, M. E.** (2014): **Nonparametric test for unknown age class of life distributions.** *International Journal of Reliability and Applications.*

Abu-Youssef, S. E. and **Bakr, M. E.** (2014): **A Goodness of Fit Approach to the unknown age (UBACT) Class of Life Distribution.** *International Journal of Computer Applications.*

Abu-Youssef, S. E. and **Bakr, M. E.** (2013): **Some properties of UBACT class of life distribution.** *Journal of Advanced Research in Applied Mathematics.*