1116-VP-1756 **Mavis Pararai*** (pararaim@iup.edu), 210 S 10 th Street, Stright Hall Rm 233, Indiana, PA 15705, and **Broderick Olusegun Oluyede** and **Gayan Warahena Liyanage**. *An extended Lindley Poisson distribution with applications.*

The Extended Lindley Poisson (ELP) distribution which is an extension of the extended Lindley distribution [**?**] is introduced and its properties are explored. This new distribution represents a more flexible model for the lifetime data. Some statistical properties of the proposed distribution including the shapes of the density, hazard rate functions, moments, Bonferroni and Lorenz curves are explored. Entropy measures and the distribution of the order statistics are given. The maximum likelihood estimation technique is used to estimate the model parameters and a simulation study is conducted to investigate the performance of the maximum likelihood estimates. Finally, we present applications of the model with a real data set to illustrate the usefulness of the proposed distribution. (Received September 21, 2015)