1120-47-211   **Douglas Farenick**, **Mitja Mastnak** and **Alexey Popov*** (`alexey.popov@uleth.ca`), C526 University Hall, 4401 University Drive, Lethbridge, Alberta T1K 3M4, Canada. *Isometries of the Toeplitz Matrix Algebra.*

We study the structure of isometries defined on the algebra $\mathcal{A}$ of upper-triangular Toeplitz matrices. We use a range of ideas in algebra, operator theory and linear algebra to show that every linear isometry T from $\mathcal{A}$ to $M_n(C)$ is of the form $T(A) = UAV$, where U and V are two unitary matrices. This implies, in particular, that every such an isometry is a complete isometry and that a unital linear isometry $\mathcal{A} \to M_n(C)$ is necessarily an algebra homomorphism. (Received February 22, 2016)