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Mehmet Celik* (mehmet.celik@tamuc.edu), Texas A&M University - Commerce, Department of Mathematics, Commerce, TX 75429-3011, and **Yunus E. Zeytuncu**, University of Michigan - Dearborn. *Obstructions for Compactness of Hankel Operators: Compactness Multipliers.*

We establish a connection between compactness of Hankel operators and geometry of the underlying domain through compactness multipliers for the $\bar{\partial}$ -Neumann operator. In particular, we prove that any compactness multiplier induces a compact Hankel operator. We also generalize the notion of compactness multipliers to vector fields and matrices and then we use this generalization to generate compact Hankel operators. (Received August 26, 2017)