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Scott T. Chapman, Jim Coykendall, Felix Gotti* (felixgotti@ufl.edu) and **William W. Smith.** *Other-half-factoriality on monoids and domains.*

An atomic monoid M is called *other-half-factorial* or an *OHF* provided that for all $x \in M$ and any two factorizations z and z' of x the equality $|z| = |z'|$ implies that $z = z'$, where $|w|$ denotes the number of atoms in a given factorization w (counting repetitions). Note that other-half-factoriality is a notion that complements that of half-factoriality. Other-half-factoriality was first considered by Jim Coykendall and William W. Smith in 2011, where the authors established some properties of OHFs and then proved that any other-half-factorial domain is a UFD. We will provide further insight of OHFs and discuss, in the context of both monoids and domains, some properties weaker than being other-half-factorial. (Received March 02, 2020)