1056-13-800   **Paul C Roberts*** (`roberts@math.utah.edu`), Dept of Mathematics, University of Utah, 155 S 1400 E, Rm 233, Salt Lake City, UT 84112-0090. *Constructing Algebras from Witt vectors.*

Among the rings of mixed characteristic, rings of Witt vectors over perfect rings of positive characteristic have particularly nice properties. Let R be an arbitrary ring of mixed characteristic p. While it may not be possible to find a nice map to a ring of Witt vectors, one can always find an R-algebra which is the quotient of a ring of Witt vectors modulo a non-zero-divisor. We describe methods for doing this and the perfect rings of positive characteristic that arise in this way. Finally, we discuss some connections with homological properties of the original ring R. (Received September 17, 2009)