

ERRATUM TO  
"REGULAR OVERRINGS OF REGULAR LOCAL RINGS"

BY

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Theorem 3.1 is incorrect for  $i > 1$ . It is not necessarily true, as stated in line (-6) on p. 293 of the proof, that  $(Q^2)' \cap R = (Q')^2 \cap R$ . The correct theorem is as follows.

**THEOREM.** *Let  $(R, M)$  be an  $n$ -dimensional regular local ring,  $n > 1$ . Let  $x, x_1, \dots, x_i$  be an  $R$ -sequence and  $T = R[x_1/x, \dots, x_i/x]$ . Then  $T$  is an  $n$ -dimensional regular domain if and only if one of the following holds:*

- (a) *the elements  $x, x_1, \dots, x_i$  form a subset of a minimal basis for  $M$ ,*
- (b) (1)  *$x \in M^2$  and the elements  $x_1, \dots, x_i$  form a subset of a minimal basis for  $M$ ,*

(2) *if  $P$  is the contraction in  $R$  of a rank  $n - 1$  maximal ideal of  $T$  containing  $x$  then either the elements  $x, x_1, \dots, x_i$  form a subset of a minimal basis for  $R_P$  in  $R_P$  or  $x_1, \dots, x_i$  form such a subset and  $x \in P^{(2)}$ .*

The proof is an easy modification of that in the paper. If  $T$  is regular and (a) does not hold, then  $x$  must be in  $M^2$  as was shown. This means that  $x_1, \dots, x_i$  form a subset of a minimal basis for  $M$ . Otherwise the generators of  $\ker \phi$  would be linearly dependent mod  $(M, t_1, \dots, t_i)^2$ . Conversely, if (b)(1) holds and  $T_N$  is not regular for some rank  $n$  maximal ideal  $N$  then, as was shown,  $x_i$  is in  $Q^2$ . This is a contradiction because it can be easily shown (as in Lemma 4.2) that  $x_i \notin Q^2$ .

The statement of Corollary 3.6 must be changed accordingly, but none of the main results of the paper (§4–§6) are affected.

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