Erratum

Freeman J. Dyson – *Quaternion determinants*, Helv. Phys. Acta, *45*, 289 (1972)

The rings R considered in this paper are assumed to have two properties as stated on page 292, the commuting scalar property and the scalar product property. In fact the second property is not independent but is a trivial consequence of the first.

Proof: for any element q in R, the element $(q + q^\dagger)$ is a scalar. The commuting scalar property then implies

$$[q, r] = -[q^\dagger, r]$$

for every element r. But then also

$$[q^\dagger, r^\dagger] = -[q^\dagger, r] ,$$

and so

$$qr + r^\dagger q^\dagger = rq + q^\dagger r^\dagger ,$$

which is the scalar product property. The results stated in the paper, in particular Lemma 1 and Theorem 2, remain true with the scalar product property omitted from their hypotheses.

In connection with the open question I stated on page 301, Dr. Carl Faith has kindly called my attention to a paper *Rings with involution* by S. A. Amitsur, Israel Jour. Math. *6*, 99 (1968), which seems to imply that the answer to the question should be affirmative.