Acknowledgment of priority

by

KURT K. NORRIS (Boulder, Colorado)

My paper Remarks on the number of factors of an odd perfect number appeared in Acta Arithmetica 6 (1961), pp. 365–374. There I proved several results of the following nature: if $N$ is an odd perfect number with smallest prime factor $p$, and if $\omega(N)$ denotes the number of distinct prime factors of $N$, then

$$\omega(N) \geq cp^{2}/\log p,$$

where $c$ is a positive absolute constant. Only recently did I learn that a similar estimate for $\omega(N)$ when $N$ is “$\lambda$-abundant” was obtained some years earlier by Hans Salie (Über abundante Zahlen, Math. Nachr. 9 (1953), pp. 217–220). When $\lambda = 2$, his result has the same strength as (1). The basic idea underlying Salie’s proof is the same as my own, although he does not carry it quite as far. In particular, he does not determine the constant $\omega$, nor does he get numerical results on $\omega(N)$ of the sort tabulated in my paper.

I regret that I did not previously observe and acknowledge Professor Salie’s contribution.