

## AN INEQUALITY FOR A POSITIVE REAL FUNCTION

JEONG SHEOK UME

*Abstract.* In this paper, using a suitable mapping, we show that the result of H. Alzer can be extended and open problem is proposed.

*Mathematics subject classification (2000):* 26D20.

*Key words and phrases:* inequality, strictly increasing.

### REFERENCES

- [1] H. ALZER, *On an Inequality of H. Minc and L. Sathre*, J. Math. Anal. Appl. **179** (1993), 396–402.
- [2] N. ELEZOVIĆ AND J. PECARIĆ, *On Alzer's inequality*, J. Math. Anal. Appl. **223** (1998), 366–369.
- [3] J. S. MARTINS, *Arithmetic and geometric means an applications to Lorentz sequence spaces*, Math. Nachr. **139** (1988), 281–288.
- [4] H. MINC AND L. SATHRE, *Some inequalities involving  $(n!)^{\frac{1}{r}}$* , Proc. Edinburgh Math. Soc. **14** (1964–1965), 41–46.
- [5] J. SÁNDOR, *On an inequality of Alzer*, J. Math. Anal. Appl. **192** (1995), 1034–1035.
- [6] J. S. UME, *An elementary proof of H. Alzer's inequality*, Math. Japonica **44** (1996), 521–522.