

## BOOK REVIEW

D. MALIĆ, **Thermocybernetics (Laws and Methods), (Kibernetiska Termodinamika)**. Gradjevinska Knjiga, Beograd (1976). pp. 160.

THIS is an interesting and thought provoking book. The author gives an excellent comprehensive coverage of classical and modern thermodynamics, elegantly covering major results in the field. The value and contribution of this unusual book, however, by no means ends at that.

The book's main emphasis is on the second law, or more generally on the concept of entropy and negentropy. The author takes us through different fields: information theory, biological systems, spontaneously and artificially organized systems. He moves through them knowingly and confidently, underlying the connection between a level of relative order (organization) and entropy and negentropy.

Carefully and thoroughly he approaches the question whether those similarities are only formal in nature, without any underlying common physical structure, or, perhaps, we are dealing here with the same general principal equally applicable to physics, information theory and bio-system. The author is careful not to ignore the views of those who maintain that although the terms entropy and negentropy are used to apply changes in relative orders of various

kinds, the fact that one cannot always quantitatively relate a change of one kind to any other, represents a strong warning that one should avoid arriving at conclusions which are not warranted at this time. These views, as long as they might be interpreted as a position against an attempt toward a definitive synthesis and formulation of a common law, are not shared by the author.

Dr. Malić's position is that in this case we are dealing with the truly common concept of entropy and negentropy which applies equally to various fields. This approach (the thermocybernetics' approach) lead to formulation of a general postulate of organization and to the conclusion that the second law of thermodynamics represent only a special case of conservation of organization.

The book is intended to serve many purposes. It is an excellent reference book. It is also a book where a number of original ideas and conclusions are presented.

The style of the book contributes to a pleasurable reading, and Dr. Malić's bent toward philosophical interpretations makes the reading experience even more rewarding.

The book is written in Serbo-Croatian.

BORA MIKIĆ

Massachusetts Institute of Technology  
Cambridge, MA 01239, U.S.A.

## ERRATUM

F. P. Berger and K.-F. F.-L. Hau, Natural convection heat transfer from horizontal cylinders to air, water and silicone oils for Rayleigh numbers between  $3 \times 10^2$  and  $2 \times 10^7$ , *Int. J. Heat Mass Transfer* **20**, 1185–1194 (1977).

The second and fourth equations of the three translated abstracts should read

$$Nu = 2 + cRe^a Pr^{1/3}$$

and

$$a = 0,86 - \frac{10}{(4,7 + Pr)^3}.$$

In the sentence following the expression for  $a$  the lower limit of  $Pr$  should be 0,6. In the German translation the second sentence should read Bei voll ausgebildeter Stromung in glatten Rohren wurden Stoffubergangszahlen fur die Bereiche....

Equation (13) on p. 1192 should read

$$\frac{u^{*2}}{v} y \frac{\partial C}{\partial x} = D \frac{\partial^2 C}{\partial y^2}.$$