

ly dismiss the entire work as rubbish. Yet, once the irritation over the many dogmatic proclamations of the marxist doctrine are overcome, the book provides ample food for thought.

Fuchs-Kittowski proposes as a solution to the problem of determinism a certain brand of soft determinism. He rejects both the hard determinism of classical mechanism, and indeterminism. This is indeed in line with the official Marxist doctrine. Yet, the author also tries to provide arguments on the basis of cybernetics and of modern physics. He tries to open up the concept of causal necessity by showing that science must admit the existence of 'objective possibilities' (a concept for which he finds the scientific model in the principle of uncertainty). On the other hand, he tries to avoid falling into a teleological interpretation of causality by substituting teleonomy for teleology. In this regard, he feels the threat of being compared with evolutionary finalists (such as Teilhard de Chardin) whose position he obviously must reject.

Unfortunately, in spite of the brave efforts made by the author to find some neutral (i.e. non-Marxist) ground for his solution to the problem, the ultimate explanation goes back to the classical Marxist doctrine that matter is dialectical in nature, which is supposed to explain the opposition between function and structure, and between necessity and accident. Although

here is not the place to discuss this general position, the author's book deserves enough credit to at least briefly make three points concerning his position. The first is that the worn-out opposition between materialism and idealism is more a hindrance than a ground for explaining philosophical problems. There is indeed a common ground between the two, which Fuchs-Kittowski himself points to when he states about the automaton that it "only executes operations (objectified... human activity), it has no objective motives, it does not know what it executes; ... what it realizes, has no meaning for him - it has no consciousness" (p. 458). The question is not to proclaim the supremacy of matter or of spirit, but to explain that there is meaning. Secondly, although cybernetics provides a useful model to study the complex structure of living matter, it should not be forgotten that the terminology of this new branch of science is heavily indebted to the human experience, a fact which invites anthropomorphism on a large scale. Thirdly, it is a similar projection of the human experience, viz. the experience that knowledge can advance only at the cost of making mistakes, i.e. that truth demands untruth, which led to attributing this property to matter, on which level it loses all meaning. Such projections in the long run unfortunately explain little or nothing.

G. Debrock, Nijmegen

## Announcements



### XIV. International Congress of Genetics Moscow, August 21-30, 1978

The Congress is organized by the Academy of Sciences of the USSR and the N.I. Vavilov Society for Genetics and Selection. The Congress is held under the auspices of the International Genetics Federation (IGF).

Details of the program have become known.

The Plenary Session will have the following topics:

- Genetics and Human Welfare
- N.I. Vavilov Heritage in Modern Genetics
- Problems of Molecular Genetics and Gene Structure in Higher Eukaryotes

The Plenary Symposium will treat the subjects:

- Current Problems in Genetic Bases of Selection
- Genetics and the Problems of the Biosphere

The Symposia have the following themes:

- Genetic Control of Transcription
- Genetic Control of Translation
- Genetic Recombination
- Molecular Mechanisms of Mutagenesis
- Genetics of Repair
- Genetics of Plasmids
- Gene Engineering
- Chromosome Structure and Function
- Extrachromosomal Inheritance
- Genetics of Isoenzymes
- Developmental Genetics (Animals)

- Developmental Genetics (Plants)
- Genetic Control of Mitosis and Meiosis
- Genetics of Somatic Cells
- Genetics and Cytogenetics of Malignant Growth
- Problems in Evolutionary and Populations Genetics
- Human Genetics
- Behaviour Genetics
- Genetics of Endocrine Functions
- Immunogenetics
- Genetics of Plant Resistance to Diseases
- Genetics of Photosynthesis
- Genetic Bases of Animal Breeding
- Genetic Bases of Plant Breeding
- Genetics of Industrial Microorganisms

The Presidium of the 14th International Congress of Genetics will consist of: N.V. Tsitsin (USSR), president; and the vice-presidents: H. Böhme (DDR), A.R. Cordeuro (Brazil), J.F. Crow (USA), C. Daskalov (Bulgaria), N.P. Dubinin (USSR), J. Lejeune (France), A. Lundquist (Sweden), G. Sermoni (Italy), M.S. Swaminathan (India), Y. Tazima (Japan), M.D. White (Australia).

D.K. Belyaev (USSR) will function as Secretary General, with the secretaries L.I. Korochkin, R.V. Petrov and M.E. Vartanian (all USSR). The Second Announcement leaflet can be asked for at the Organizing Committee: N.I. Vavilov Society for Genetics and Selection, 11 Fersman Street, Entrance 4, 117312 Moscow, USSR. Tel.: 135-40-61; 135-71-24