

# CORRESPONDENCE

## CO<sub>2</sub> Pollution of the Sea

SIR.—A recent communication (*Nature*, 245, 20; 1973) suggested that a slight increase in partial pressure of CO<sub>2</sub> would shift the HCO<sub>3</sub> equilibrium system far enough to prevent secretion of shells in marine corals and molluscs.

The lower carboniferous shells were secreted when the partial pressure of CO<sub>2</sub> was more than 300 times current levels (before the carbon of the coal measures was produced by species which themselves required high partial pressures of CO<sub>2</sub> to grow so luxuriantly).

The two statements are incompatible although the chemistry seems equally valid in both cases. However, I have never seen a systematic approach to palaeoatmospheric analysis and have long wondered at the ability of species to proliferate in spite of using an oxygen combustion system, in an atmosphere rich in CO<sub>2</sub>, with primitive respiratory systems and inefficient internal oxygen transport arrangements. Popular assumptions about the primitive atmosphere may be wrong, otherwise ethologists have problems they have neglected.

Yours faithfully,

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## Are Conferences Necessary?

SIR.—As a means of communication of scientific data and theory, are conferences worth the money and effort being spent on them? Many think not, but

before such established and prestigious activity can be changed it is scientifically proper that experiments should be done.

Recently an attempt was made to break the established pattern by having a meeting based on the following concepts: (1) that satisfactory communication can only be achieved if the participants are limited to those actively engaged in relevant experimental work and who can sit around one, albeit large conference table; (2) that this close interaction between participants be maintained away from the conference table; (3) that participants should arrive knowing in detail the topics to be discussed; (4) that experiments to resolve some of the controversial problems described in the papers should be made at the meeting; (5) that these experimental procedures should be able to be changed on-line at the suggestion of the participants.

The subject of the conference was "Event Related Slow Potentials of the Brain" and was concerned with the changes of the electroencephalogram associated with external stimuli and with voluntary and involuntary motor movements ranging from speech to spinal reflexes. Forty-five invitations were sent to active workers in the field. It was estimated that about 200 people would have attended an unrestricted conference. The meeting was held in a relatively inaccessible college in which most of the participants were accommodated. Most of the forty papers were precirculated and only discussion was allowed at the meeting. One and a half days were devoted to experiments performed in the research laboratory of this Institute and relayed by closed cir-

cuit television. There was no mixing or editing of pictures from the four cameras as in normal television procedure; all cameras were on all the time and thus gave considerably more information than if the audience were in the laboratory. A television camera and microphone in the auditorium permitted participants to communicate with the demonstrators.

The demonstrations were separated into five sessions representing five aspects of the congress theme. They were presented by selected groups of participants with the help of the Institute staff. A total of 12 h television transmission was achieved.

There was good interaction between experimenters and audience and on occasions the experiments were modified to clear a particular point in dispute. These were experiments in the true sense of the word—procedures adopted on chance of their succeeding. All participants were enthusiastic about these experiments.

This format for conferences appears to be of considerable value in the presentation of data and organisers of meetings are urged to reconsider their objectives and methods and to carry out the necessary experiments.

Yours faithfully,

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3rd International Congress on Event  
Related Slow Potentials of the Brain,  
and*

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# Obituary

## A. G. Sharov

THE prominent insect palaeontologist Dr Alexander Grigorievitch Sharov died suddenly in Moscow on July 10, 1973.

Dr Sharov was born in 1922 in the village of Lukino, Moscow Region. While still a schoolboy he developed an interest in entomology, collecting insects and observing their habits and behaviour. After finishing school in 1939, he entered the Biological Faculty of Moscow University and specialised in entomology. While an undergraduate he took part in expeditions to the Far

East, Transcaucasia and Central Asia, where he collected material and made many interesting observations on the local faunas.

In 1943 Sharov was enlisted in the army and his military service lasted until the end of the war. He returned to Moscow University in 1945 and completed work for his diploma. In his student days, as in his later scientific work, Sharov was interested in the problems of insect ontogeny and evolution. His postgraduate studies began in the Institute of Evolutionary Morphology in Moscow, under the guidance of such prominent scientists as Pro-

fessors D. M. Phedotov and M. S. Ghilarov. In 1950 he was awarded a doctorate for his thesis on the 'proto-metabolous' development of the *Thysanura* and its bearing on insect phylogeny.

During the next few years Sharov's interests turned to fossil insects, and in 1955 he moved to the Palaeontological Institute of the Academy of Sciences of the USSR. There he worked until his death on the palaeontology, phylogeny and evolution of insects. He took part in many expeditions, collecting much remarkable fossil insect material. One of his most important discoveries was