never be accomplished in the way some of State Homoeopathic Councils have already started doing.

All these suggestions apply equally to the fresh graduates from the allopathic colleges; the only difference being that (1) their ideas have not yet got sufficient scope for being consolidated by practice and (2) they are in a position to spare more time for continuous education and training at the centre.

We appeal to all the members of the Central Council of Homoeopathy, the architects of Courses, Curricula and Syllabi of homoeopathic education, and supreme guides and controllers of such education in our country, to pay due attention to the suggestions given in this article and also to the highly prudent proposal on this matter submitted by Dr. M. L. Dhawale. As a matter of fact, in preparing this article many hints have been obtained from that proposal of Dr. Dhawale.

## 'THE COMOROSAN EFFECT' AND INFORMATION TRANSFER IN DILUTE SOLUTIONS

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# 'THE COMOROSAN EFFECT' AND INFORMATION TRANSFER IN DILUTE SOLUTIONS

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### INTRODUCTION

Since 1973, Bayr and Rawson working independently, have developed cybernetic principles and concepts towards an understanding of the problems of serial dilution and succussion.<sup>1, 2, 3</sup>

Such have been of a theoretical nature, and derive from studies of negative and positive entropy of solutions, which in turn lead to the notional idea of information transfer or exchange in solution.

Experimental corroboration of these theories has however, until recently, been awaited.

#### THE COMOROSAN EFFECT

Dr. B. Goodwin, Reader in Development Biology at the University of Sussex (U.K.) has reported on the research of Professor S. Comorosan,<sup>4, 5, 6, 7</sup> and is himself an author of an article on the 'Low Energy Electromagnetic Perturbation of an Enzyme Substrate."<sup>8</sup>

In a private communication to Dr. Mitchell, Goodwin suggests as follows: that there is a feature of the above-mentioned effect which suggests a basically similar biophysical explanation to that advanced by Barnard, Stephenson and Rawson, 9, 10, 11 namely the persistence of a state in the liquid phase which is initially produced in a crystal. Thus, the crystalline substrate is in some way excited by exposure to particular energy levels of visible light (green), and this then produces an 'excited' state in the solute-solvent preparation.

Goodwin continues that: there may be a similar explanation for the two phenomena, namely the 'Comorosan effect' and serial dilution and succussion. This is the existence of some 'excited', or *ordered* state, in the substrate-solvent preparation which can be 'observed' by an enzyme, and which is initiated by a solute irradiated in its crystalline form with weak but specific electromagnetic energy.

It would appear that the enzyme is responding to a structure in solution, which seems to be very specific, but which requires very little energy for its initiation.

This suggests a co-operative long-range ordering process such as stereospecific polymerisation suggested by Barnard and Stephenson, and discussed by Rawson—vide supra.

Goodwin concludes his remarks by the hope that further research into

such fields might be encouraged, for such would be subtle but highly biologically significant.

#### HOMOEOPATHIC RESEARCH

An almost Jungian state of synchronicity would appear to be operating over the last decade or so between the contemporary development of a tenable basis for the understanding of serial dilution and succussion, and the work of other scientists, who have probably never even heard of Homoeopathy. The foregoing is but one example, but to which may be added the work of Rashevsky<sup>12</sup> in the field of topological biology, Brillouin<sup>13</sup> in information theory and Kremyanskiy<sup>14</sup> in physico-cybernetic biology.

The simultaneous publication within one month of each other of the articles by Bayr and the writer in 1973, without prior knowledge of each other's work, but which interdigitates with a remarkable similarity, is one of the most hopeful signs that at long last research will illumine the target for so much of the critique against Homoeopathy—the vexatious question of what happens in the preparation of a homoeopathic remedy once the negative exponent of Avogardro's number has been exceeded.

With the seeming coalescence of several different streams of modern scientific thought, there arises the hope, at the very least, of unity appearing from the schisms of diversity which have plagued the development and integration of Homoeopathy for so long into taking its place alongside other modern medical disciplines.

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