

electronic media. It is both pointless and counter-productive to attempt case-by-case or reactive rebuttal; for, that burdens *our* time and effort, which this breed of lazy foreign author finds easy to rely on. If we do *not* rebut, their circulated conclusion is: 'Since there was no reaction, what I have said may be deemed to be the truth/facts.'

What then should be our policy? We are convinced that the only productive policy is even greater *openness* and wide dissemination at our cost of money and time, both within the country and abroad, of all except the most sensitive *technical* information. Reliable counter-proliferation with authentic public information widely pre-disseminated is the only workable antidote to the left-arm techno-googly bowled round our wicket by bowlers home-trained on the world's most treacherous academic and quasi-academic pitches.

And don't bother with this book.

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Interface Between Chemistry and Biochemistry. P. Jollès and H. Jörnvall, eds. Birkhauser Verlag AG, Klasterberg 23, P.O. Box 133, CH-4010, Basel, Switzerland. 1995. 298 pp. Price: US \$ 124.

Molecular knowledge of biological process today is heavily dependent on interface between different fields. Pierre Jollès and Hans Jörnvall have attempted to highlight the importance of the interface between chemistry and biology in addressing a variety of chemical and biological problems in the book *Interface between Chemistry and Biochemistry*.

The book has articles which cover the biochemistry and chemistry of a wide spectrum of biologically active molecules. The topics are broadly classified into five sections. They are (1)

chemistry at interfaces and transport, (2) chemistry and biochemistry with emphasis on enzyme activity, (3) analysis of proteins and nucleic acids, (4) synthesis of (bio) active compounds and (5) metalloproteins. Section 1 has articles on the chemistry and biochemistry of triglyceride lipases, structures of hydrophobic surfactant-associated proteins, enzyme function in organic solvents and signal peptides which sort proteins to the endoplasmic reticulum pathway. The article on lipase structures is restricted to the structurally-related mammalian enzymes and the interface aspect does not clearly come out. The article on surfactant-associated proteins is largely confined to their structure determination. The discussion on protein sorting signals appears out of place. The only article in this section that does some justice to the title of the book is the one on enzyme function in organic solvents. The advantages associated with the use of enzymes in organic solvents, the forms of enzymes used in predominantly organic medium and some important applications are clearly presented and should be very useful to those looking for such details in this area. The article would have been much more readable with a few illustrations, especially in the section where mechanisms are discussed. The articles in section 2 do justice to what the editors set out to achieve by bringing out the book. The basic principles underlying the mechanism of action of catalytic antibodies, catalytic RNA and non-biological counterparts of enzyme catalysed reaction are clearly outlined in two articles. The third article in this section is devoted to structural characterization of antigenic peptides on the cell surface of major histocompatibility complex (MHC). The emphasis has been on analysis of subpicomolar quantities of MHC-bound peptides. In section 3, there is fairly extensive coverage of chemical techniques employed for structural analysis of proteins, peptides and photodamage of nucleic acids by UV. The articles in sections 4 and 5 provide useful insights into synthesis of glycopeptides, utility of peptides in probing neuropeptide receptor of protein-protein and protein-nucleic acid interactions and Zn biochemistry.

With a few exceptions, most of the

articles convey what the editors had intended to. The book will be particularly useful to chemists who would like to venture into research problems in the area of enzymes, nucleic acids or sugars.

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Fish Nutrition in Aquaculture. Series 1. Sena S. De Silva and Trevor A. Anderson. Chapman & Hall, 2-6 Boundary Row, London SE1 8HN, UK. 1995. 319 pp. Price: US\$ 37.50. (Hard-bound).

The Aquaculture Series by Chapman & Hall aims to present timely volumes reviewing important aspects of aquaculture. Title 1 concerning *Fish Nutrition in Aquaculture* is a most welcome book. Firstly, the global aquaculture industry is worth about 30 billion US dollars and is growing at the rate of about 10%. Clearly aquaculture has emerged as an important industry during the last decade and is practised in more than 150 countries in the world. Aquaculture, once considered an environmentally sound practice, is now regarded to be a potential polluter. Environmental restrictions are being increasingly imposed on aquacultural activities all over the world. Therefore it has become a necessity, especially for those in developing Asian countries to know more about it.

Secondly, feed and feeding are crucial elements in any animal husbandry; regarded as the highest recurrent cost in aquaculture operation, the feed cost ranges from 30 to 60%, depending on the species, culture system and intensity of operation. Fish are known to draw metabolic energy mostly from protein and lipid, rather than carbohydrate and lipid; not surprisingly the optimum protein : energy ratio is around 1 : 2 for fish but it is 1 : 10 for ruminants. Therefore the optimal dietary protein requirement for fish is 0.5 to 3 times