

tizing a lead compound, it will have made an important contribution". Examples from the literature clearly indicate that hundreds of compounds have practically been investigated just for nothing and without any gain of information because of poor series design.

In order to demonstrate this point for the present example, ten test series (each comprising ten substituents) were constructed from such substituents which are close together in Figure 1 and, hence, very similar with respect to the parameter space considered. In this way a situation is simulated where the synthesis of analogues is mechanically performed always along the same route using similar precursors. As expected, the result was very poor with $\bar{D}_s = 0.150$ and $\bar{V}_s = 0.731$. The variance is so low and colinearities are so high that these test series are completely unacceptable. In order to avoid such results, a rational selection of test series is indispensable.

Although a good series design can indeed save hundreds of syntheses, it must be kept in mind that all series design methods have one critical point: a guess has to be made on the parameter space to be considered.¹⁰ Fortunately, the space spanned by π , σ , and MR will be sufficient in many cases. It is probably also not too serious if parameters are included which are, in fact, not important. If, however, just one property essential for a particular bio-

logical activity is not adequately represented, the result of the series design may be poor with respect to the variance of the biological response data. For parabolic relationships between biological activity and certain variables (e.g., π or $\log P$), quadratic terms of these variables must be included into the parameter space. That means that a test series optimal in a general sense does not exist, and for each particular case a new design problem may arise. Already existing QSAR can be very helpful here.

In addition to the computer work, it is, of course, necessary to adequately consider all other information available. If, for instance, drugs acting on the CNS are to be investigated, the ideal $\log P$ of about 2 for the penetration of the blood-brain barrier⁷ is a good starting point to vary lipophilicity.

If nothing is known, it may be useful to design, in a first step, a small preliminary series using the parameters mentioned above, from which a tentative QSAR is then evaluated. This QSAR can aid in the design of the final test series in two ways: (1) with the information obtained from it the parameter space can be modified or completed, if necessary; (2) the synthesis of inactive compounds can be avoided. Such a strategy has been applied, for instance, by the Wellcome group⁸ in a study on methoxychlor analogues.

Additions and Corrections

1980, Volume 23

Schneur Rachlin,* E. Bramm, I. Ahnfelt-Rønne, and E. Arrigoni-Martelli: Basic Antiinflammatory Compounds. *N,N',N''*-Trisubstituted Guanidines.

Page 14. In Scheme I, 2-Ath↓I should read 4-Amq↓IX in the reaction CII → 53-84; R¹-QNH₂↓III should read R²-QNH₂↓III in the reaction CI → 19-26; and CIII should read CIII^b.

Françoise Heymans, Laurence Le Thérizien, Jean-Jacques Godfroid,* and Pierre Bessin: Quantitative Structure-Activity Relationships for *N*-[(*N',N'*-Disubstituted-amino)acetyl]arylamines for Local Anesthetic Activity and Acute Toxicity.

Page 187. In Table III, the anesthetic doses (AD), mM/L, should read: for compound 3, 15.0; 4, 35.4; 5, 27.9; 6, 55.8 (instead of, respectively, 34.5, 27.9, 55.8, and 20.9).

Josef Fried,* D. K. Mitra, M. Nagarajan, and M. M. Mehrotra: 10,10-Difluoro-13-dehydroprostacyclin: A Chemically and Metabolically Stabilized Potent Prostacyclin.

Page 235. In line 20 of column 2 and reference 15, tri-*sec*-butylaluminum hydride should read tri-*sec*-butylborohydride (K Selectride).

Barbara S. Rauckman and Barbara Roth*: 2,4-Diamino-5-benzylpyrimidines and Analogues as Antibacterial Agents. 3. C-Benzoylation of Aminopyrimidines with Phenolic Mannich Bases. Synthesis of 1- and 3-Deaza Analogues of Trimethoprim.

Page 387. In Table II, the column heading which reads

$I_{50} \times 10^6$ M should actually read $I_{50} \times 10^8$ M. Also, under this column heading all ~ signs should be replaced with @ (i.e., 11% @ 42000, etc.).

Masayoshi Murata, Prakash Bhuta, James Owens, and Jiří Zemlička*: Inhibition of Ribosomal Peptidyltransferase with 2'(3')-*O*-Acetyl-2''(3'')-*O*-glycyl-1,2-di-(adenosin-*N*⁶-yl)ethane and -1,4-di(adenosin-*N*⁶-yl)butane. Effect of Alkyl Chain Length.

Page 781. In line 3 of the abstract, the word "pyrazoline" should be changed to "imidazoline".

Page 784. In Figure 3, all concentrations $\times 10^{-3}$ M inside the graph should be corrected to $\times 10^{-4}$ M.

Yasunobu Sato,* Yasuo Shimoji, Hiroshi Fujita, Hiroshi Nishino, Hiroshi Mizuno, Shinsaku Kobayashi, and Seiji Kumakura: Studies on Cardiovascular Agents. 6. Synthesis and Coronary Vasodilating and Antihypertensive Activities of 1,2,4-Triazolo[1,5-*a*]pyrimidines Fused to Heterocyclic Systems.

Page 932. In Table VI, the R⁵ group for compound 87 should be (CH₂)₃-c-N(CH₂CH₂)₂N(CH₂)₃-C₈H₈N₅, and C₈H₈N₅ should read as follows: 3-[4-[3-(7,8-dihydro-5-methyl-6*H*-pyrrolo[3,2-*e*][1,2,4]triazolo[1,5-*a*]pyrimidin-8-yl)propyl]-1-piperazinyl]propyl.

L. G. Abood: Annual Review of Neuroscience. Volume 3.

Page 1061. The title was incorrectly stated as "Annual Review of Neurochemistry". The correct title of the book should read "Annual Review of Neuroscience".