

new

automatic HEMAGGLUTINATION

- HEMOLYTIC techniques

... introduce quantitation

with unique decantation principle that "puts a number" on end result. Traditional laborious hemagglutination-hemolytic techniques are so subjective that results may vary considerably from lab to lab. At best, answers are merely *qualitative*.

The AutoAnalyzer method not only standardizes and automates the procedure (in itself a considerable achievement), but it "puts a number" on the end result: expresses answers directly in % *agglutination* or % *hemolysis*.

The whole procedure is a simple, straightforward chemical method under precise control every step of the way... cell/anti-serum volume, reagent proportioning, mixing, time/temperature, etc. Equipment is rugged and simple, even down to the readout, which is colorimetric rather than cumbersome complicated electronic counting devices.

Beyond its use for routine blood typing and assay, the new method promises to open broad avenues of investigation in all fields where antigen-antibody reactions are measured by hemagglutination or hemolytic reactions.

TECHNICON®
AutoAnalyzer®

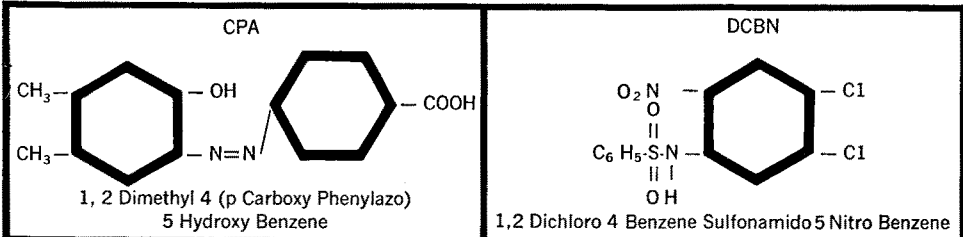
Technicon Bulletin H-1 gives details of the technique, with diagrams of instrumentation and flow, examples of the definite recording. Write us at the below address for a copy.

TECHNICON

INSTRUMENTS CORPORATION
Research Park • Chauncey, New York

enlarged view of agglutinates being separated by decantation from the analytic stream. Reaction-produced agglutinated cells travel along with the stream: being heavier they drop to the bottom. On arriving at the "T" junction, the heavy agglutinates are drawn off: unreacted cells move on to hemolysis and colorimetry. Where hemolysis is to be measured the cells are decanted off and the hemolyzed material read out.

ANTI-CANCER AGENTS



A mixture of 1, 2 Dimethyl 4 (p carboxy phenylazo) 5 Hydroxy Benzene (CPA) and 1, 2 Dichloro 4 Benzene Sulfonamido 5 Nitro Benzene (DCBN) when fed to mice of the SPFS strain bearing spontaneous mammary cancers, cured permanently about one third of the animals.

The investigators adjudged the permanency of the cure of the cancers when the neoplasm decreased in size, disappeared and remained undetectable for at least 5 months.⁽¹⁾

The maximal number of cures was obtained with 6 grams of CPA and 0.5 grams of DCBN per kilo of ration. This represents the first case of the cure of such cancers by any chemical agent.

These biochemicals were conceived on the basis of a demonstration that spontaneous cancer differed from normal host tissues in that they synthesized vitamin B₁₂.

Previously it was demonstrated that certain spontaneous mammary cancers of mice differed from normal mouse tissues in that cancer cells synthesized Vitamin B₁₂ ⁽²⁾ ⁽³⁾. This metabolic difference allowed the prediction and the realization of antimetabolites poisonous to the cancers that are harmless to the host mice ⁽⁴⁾ ⁽⁵⁾.

These new anti-cancer agents, (CPA) and (DCBN) are members of a series of antimetabolites which have been shown to inhibit biosynthesis of Vitamin B₁₂ in microorganisms. It was reported that these biochemicals demonstrated no detectable harmful effects on the host mice as the dosage used to bring about the desired results.

CPA and DCBN are available on 24-hour delivery basis anywhere in continental USA. Call 216-662-0212 or write Nutritional Biochemicals Corporation, 21010 Miles Avenue, Cleveland 28, Ohio.

All chemicals described are for chemical and investigational use only. They are not offered for clinical or drug use. The literature reference should not be interpreted as either an endorsement or disapproval of the biochemical by the cited investigator.

⁽¹⁾ D. W. Woolley and J. M. Stewart, *Biochem. Pharm.* 11, 1163, (1962).

⁽²⁾ D. W. Woolley, *Proc. Nat. Acad. Sci. Wash.* 39, 6, (1953).

⁽³⁾ D. W. Woolley, *Ibid.* 41, 1111, (1955).

⁽⁴⁾ D. W. Woolley, *Cancer Res.* 13, 327, (1953).

⁽⁵⁾ D. W. Woolley and G. Schaffner, *Ibid.* 14, 802, (1954).

CPA	DCBN
100 gram bottle, gram \$.95	100 gram bottle, gram \$1.25
50 gram bottle, gram \$1.03	50 gram bottle, gram \$1.35
10 gram bottle, gram \$1.10	10 gram bottle, gram \$1.45
5 gram bottle, gram \$1.20	5 gram bottle, gram \$1.60

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