TABLE I

Composition of Commercial Fat Products

	Hydrogenated-winterized vegetable oil	Hydrogenated soybean oil
Direct analysis		
Gas-liquid chromatographic analysis, %		
Palmitate	10.0	9.7
Stearate	3.0	4.5
Monoenoate	45.6	63.0
Dienoate	39.4	22.8
Trienoate	2.0	0.0
Iodine value	180.5	87.8
Conjugated diene, %	0.6	0.4
Alkali conjugable diene, %	34.5	13.9
Lipoxidase conjugable, %	34.3	12.6
Isolated *trans*, %	15.1	36.8
Azelaic acid on cleavage, mole %	71.7	45.3
Analysis after fractionation, %		
Unsaturation at carbon 9		
cis-Monoenoate	25.4	19.6
trans-Monoenoate	1.7	5.4
cis,cis-Dienoate	30.0	12.8
Mono-*trans*-dienoate	.....	3.1
Unsaturation of all other carbons		
cis-Monoenoate	9.1	13.3
trans-Monoenoate	9.5	24.7
cis,cis-Dienoate	5.0	3.9
Mono-*trans*-dienoate	.....	3.0

whether the output of data may not be greater than the ability to calculate, record, collate, and report it. The answer to this question, epitomized by the mounting piles of strip chart recorder tracings in the laboratories, lies not in less automation but in more. Specifically the answer lies in instrumentation for digitization of data and in computers for processing calculations and reporting. Results of one of the computerized data processing procedures (17) is shown in Fig. 10, which reproduces a printed computer tape. The system includes interface equipment for the integration of areas under the peaks of GLC curves and for the digitization of this information in a form acceptable for computer input. Finally the digital computer prepares the report, giving both the analysis and the identifications as shown.

In concluding this discussion on the determination of fat composition, it may once more be observed that "Every advance in scientific knowledge is first an advance in technique." On the basis of the new methodology it appears that the composition of the fat consumed can now be specified in terms of the positions and geometric configurations of unsaturation in its individual component fatty acids and in terms of the fatty acid structure of its glycerides.

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                    GAS CHROMATOGRAPHIC ANALYSIS

RUN  C-1965          DATE  11/4 ,1965          SAMPLE CODE  SBO 31

PARTITION LIQUID  LAC-2R446          COLUMN LENGTH  6.0  FEET

ISOTHERMAL RUN-COLUMN TEMPERATURE  210 DEGREES C.

FLOWRATE    30.61 ML./MIN.(STP)   COLUMN CODE V-60-90

OPERATOR  G SPENSER              MAN HOURS  1.0    CHARGE NUMBER 980-0000

 PEAK    RELATIVE    CORRECTED
NUMBER  RETENTION     AREA                  IDENTITY
         VOLUME      PERCENT

   1       1.000        9.80        C(16)-00-ME
   2       1.598        2.70        C(18)-00-ME
   3       1.790       23.52        C(18)-00-ME (1=)
   4       1.950       55.75        C(18)-00-ME (2=)
   5       2.315        8.23        C(18)-00-ME (3=)

  RETENTION TIME OF PEAK NO.  1 IS    5.21 MINUTES
  RETENTION TIME OF AIR IS  .01 MINUTES
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FIG. 10. Reproduction of output for computer program (17).

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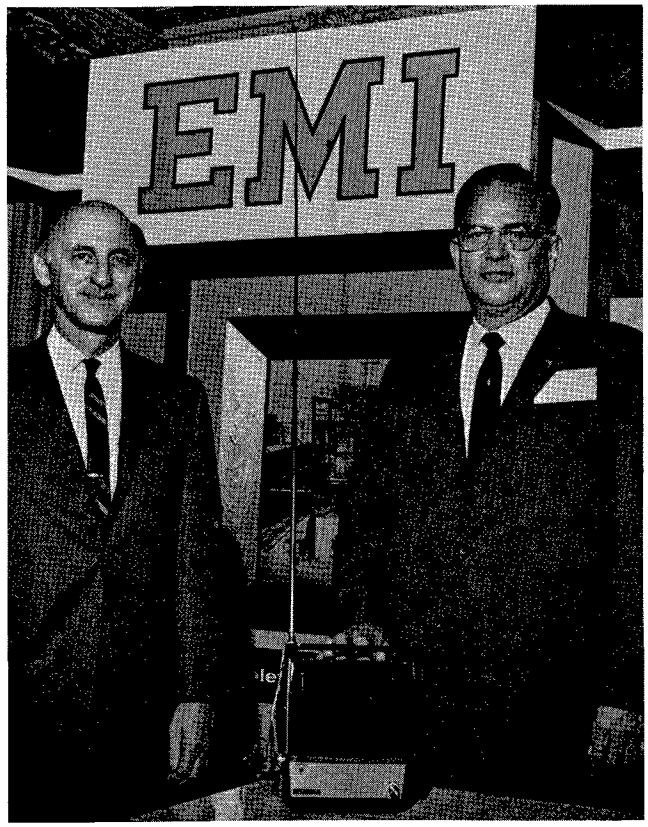
Committee Revises *Lipids* Guide to Authors

A revised Guide to Authors will be published in the March-April issue of *Lipids*.

Released by F. W. Quackenbush, chairman of the committee on the Guide, the revision clarifies matters of editorial style and mechanical requirements. It will be of increased assistance to authors in the preparation of manuscripts.

Members of the committee who served with Dr. Quackenbush are R. M. Burton, R. T. Holman and J. F. Mead. Many other Society members contributed valuable suggestions for making the Guide more efficient.

Classic Contest Is a Winner At AOCS Fall Meeting



How many soybeans in the jar? EMI's contest had everybody guessing at the AOCS Chicago meeting. G. G. Wilson (right) came up with the best answer, however, and won the handsome TV set shown in the photo. The presentation was made by E. J. Loew (left) of EMI—Engineering Management, Inc., Park Ridge, Ill.