that these words are perfectly acceptable, more writers would employ them. This would make for greater simplicity and often for greater clarity in setting down laboratory directions.

So unfamiliar are alkalify, alkalinize and alkalize that many instructors have made a habit of correcting students of elementary chemistry who have used them. Yet "alkalize" has had recognized standing since 1749.

This year a greater number of students than average have sought to use "alkalize" in place of more round-about expressions of the same idea. Probably their practice was inspired by the advertisements of a certain laxative mixture, where the word is used rather loosely. But whatever the source of the stimulus, there is no reason why alkalize, alkalinize or alkalify should not have wider usage. Rather than reprove the students for using these words, we might well follow their example.

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SPECIAL CORRESPONDENCE

FOURTH ANNUAL TRI-STATE (ILLINOIS, IOWA, WISCONSIN) GEOLOGICAL FIELD CONFERENCE

GEOLOGISTS and students of geology in the three above-mentioned states participated in the annual tri-state field conference on October 31 and November 1. The conference was held this year in Calhoun and Jersey counties in central western Illinois. It was conducted by A. H. Sutton, University of Illinois, assisted by J. Marvin Weller, Illinois State Geological Survey.

The conference was attended by 117 persons, who traveled in 35 cars. Geologists from eleven universities, colleges and state surveys of the three states and representatives of six oil companies operating in Illinois were present. Invited guests of the conference included six persons from Washington University, St. Louis, Mo., one from Oklahoma A. and M. College and the manager of the Alton, Ill., *Telegraph*. The geology of the stops was described in a mimeographed log and a blue-print map, furnished each participant at the beginning of the conference. In addition each car was supplied with quadrangle topographic maps of the area visited.

The conference began at Hardin, Calhoun County, at 9 A.M. on Saturday. The first day's trip included eight stops in Calhoun County. The stratigraphic section studied during the day is summarized below: *Mississippian:* St. Louis, Spergen (Salem), Warsaw, Keokuk, Burlington, Sedalia (Fern Glen), Chouteau, Hannibal, Louisiana, Saverton. *Devonian:* Cedar Valley. *Silurian:* Joliet, Kankakee, Edgewood. *Ordovician:* Maquoketa, Kimmswick, Decorah, Plattin, Joachim, St. Peter.

Good exposures of all these formations were visited for examination and fossil collecting. Contacts between most adjacent formations were observed. The Cap-au-Gres faulted monocline was studied and discussed. G. E. Ekblaw, Illinois State Geological Survey, explained the origin of the terraces along Illinois River and gave a brief summary of the Pleistocene and recent history of the area. W. H. Twenhofel, University of Wisconsin, and J. E. Lamar, Illinois State Geological Survey, discussed problems of the St. Peter sandstone, comparing the formation in this area with that in the northern portion of the Mississippi Valley.

The annual dinner and general meeting was held at the Stratford Hotel in Alton, Ill., on Saturday night and was attended by 103 persons. No formal papers were presented, but geologic problems of the area were discussed. Dr. Ekblaw presented a more detailed summary of the geologic history than had been given earlier in the day.

On Sunday, November 1, the trip covered portions of Jersey County. Several of the stratigraphic units which had been examined the previous day were seen again, and the Cap-au-Gres structure was studied in more localities. The conference closed at noon on Sunday at an exposure of Pleistocene varved lake deposits which were made in a pond adjacent to the margin of the Illinoian Ice.

The conference will be held next year in Wisconsin under the leadership of Professor F. T. Thwaites, of the University of Wisconsin.

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SPECIAL ARTICLES

BUILT-UP FILMS OF PROTEINS AND THEIR PROPERTIES

MANY proteins can exist in water as large spherical molecules, but they can also spread on water surfaces, giving elastic solid monomolecular films having great two-dimensional compressibility. The present paper describes experiments made to determine whether the methods[1, 2] developed in this laboratory for studies

[1] I. Langmuir, *Jour. Franklin Inst.*, 218: 143, 1934.

[2] Katharine B. Blodgett, *Jour. Am. Chem. Soc.*, 57: 1007, 1935.