CORRESPONDENCE

LABORATORY ADMINISTRATION

To the Editor

DEAR SIR:

It is gratifying to chemistry students to hear of some real organization taking place in the administration of laboratory procedure as described by Professor E. F. Degering in the June issue.* I should like to ask Mr. Degering if a student has an accident and cannot complete his experiment in the assigned period or if a student is exceptionally slow, if he is allowed another period. If not, upon what basis is the student marked for that day?

In regard to Miss Patten's question on page 413 of the July Journal.† I prevent students from stealing records by keeping the laboratory manuals always in the laboratory. At the end of each semester I collect and keep all the completed experiments until the student goes to college or leaves the city.

Sincerely yours,
C. P. TITUS

GLADSTONE PUBLIC SCHOOLS
GLADSTONE, MICHIGAN

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To the Editor

DEAR SIR:

The inquiry of Mr. Titus relative to the completion of a given assignment is indeed a pertinent one, and presents a topic that might invoke considerable discussion. With respect to this topic of required laboratory work, instructors are doubtless divided into three groups; those that stress quantity above quality, those that equally stress quantity and quality, and those that stress quality above quantity. It so happens that our laboratory practice in organic chemistry places us in the last group.

But if the quality of the work is to take precedence over the quantity of the work, then the day's assignment should be arranged accordingly. The laboratory experiments should be written as nearly as possible in newspaper style so that the exercise may be considered complete at the close of any given section of the experiment. Where this is not feasible because of the use of standard laboratory manuals, the day's assignment can be arranged so as to accomplish the same result. That is, the more essential portions of the exercise may be taken up at the beginning of the laboratory period, and the less essential sections placed at the close of the day's assignment. If such practice is followed, the more essential parts of the exercises will be worked by both the fast and slow students, whereas the less important procedures will be performed only by the fast workers. Some very industrious students are naturally slow and should be encouraged to work faster, but should not be encouraged to sacrifice *quality* for *quantity*. Nor do we believe that such a student should be penalized for his failure to complete a given assignment. However, if the student is a *time-killer*, the instructor faces quite a different situation. In such cases we feel justified in insisting upon both quality and quantity of work. Hence with specific reference to the incompleted work and the excused absences of *diligent* students, it has been our practice in the organic laboratory to permit a student to continue with the class (except in a series of continuous experiments or other unusual cases), and the omitted work is not considered in making up the student's grade.

With reference to the notebook inquiry of Miss Patten (J. CHEM. EDUC., p. 413, July, 1933), our former practice was similar to that suggested by Mr. Titus. For the past year or two, however, we have used a system which is described by a quotation from the author's article in the June issue of THIS JOURNAL "A posted reading assignment covers the general topics of the laboratory experiments, but the *student does not know the specific experiments that will be required until he reports at the beginning of the laboratory period.*" If the student knows only the general but not the specific assignment when he comes to the laboratory, there is little opportunity or desire to obtain the requisite information from previous records of other students provided the content of the course varies sufficiently from year to year. This is especially true if the blank-page notebook is used, and the instructor watches the progress of the student's record during the laboratory period. We are inclined to believe that the closer the laboratory contact between the instructor and the student, the less the likelihood of the practice of doctoring reports or copying data. Another practice which we follow, although condemned by some, is to give a few "catch experiments" during the year, from which we gain a very definite perspective of the integrity of the individual students.

At the close of the laboratory period "the instructor or assistant then collects the student's preparation, glances over his record, periodically grades the experiment at the same time, calls his attention to any apparent errors or misinterpretations, and sees that the desk is clean and orderly and that no desk equipment is missing. If everything is satisfactory, *the experiment is checked and initialed*, and the assignment for the day is complete." Hence with a *blank* page in his notebook at the beginning of the laboratory period, and a *completed* page at the close of the period (the student has no need for other paper in the laboratory), there is little opportunity or incentive for the student, under proper supervision, to plagiarize.

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Sincerely yours,
E. F. DEGERING

* "Undergraduate organic laboratory chemistry," pp. 350–3.
† "Symposium on laboratory notebooks, records, and reports. 5. Discussion."