

that the present order of things is transitory. As Eddington puts it, "the stars are in their first innings." If things go on as they are, in less than a hundred billion years the spiral nebulae will have receded out of sight, the radioactive atoms will have run down, all but the fainter stars will be going-out—and the universe will be thoroughly uninteresting.

Of course by that time—or perhaps later—the expansion of the universe may give place to a contraction, which continues till everything—including the radiation now in remote depths—has been crowded together again in small compass; and the universe may start afresh.

Whether this may be so or not we have no knowledge; but it is surprising to me how strong an aesthetic hold this conception has on many people. (I say deliberately aesthetic and not religious, for religion has

never concerned itself much about the fate of material things.)

With this wide-spread desire to believe in some cyclical restoration of activity at however great intervals, I admit frankly that I am not in sympathy. I agree with Eddington, "I am an evolutionist, not a multiplicationist. It seems so tiresome to be doing the same things over and over again." But it is in other words that I would leave the expression of this attitude with you—Rupert Brooke's:

There are waters blown by changing winds to laughter  
And lit by the rich skies, all day. And after  
Frost, with a gesture, stays the waves that dance  
And wandering loveliness. He leaves a white  
Unbroken glory, a gathered radiance,  
A width, a shining peace, under the night.

## SCIENTIFIC EVENTS

### THE NEW CHEMICAL LABORATORY BUILDING OF THE UNIVERSITY OF PENNSYLVANIA

PLANS to begin construction during the bicentennial year of the University of Pennsylvania of the first of three units of the new Chemical Laboratory Building have been announced.

Dr. Paul P. Cret, professor emeritus of design, architect and alumnus, has been authorized to draw complete specifications for the first unit and plans for the two additional units to be added as funds become available. For construction and endowment of the entire building the sum of \$2,000,000 is required.

The present John Harrison Laboratory of the university was established by gifts from the late Provost Charles Custis Harrison and his brothers as a memorial to their grandfather, who founded in Philadelphia, in 1792, the first permanent chemical plant in this country. The laboratory was first occupied in the fall of 1894, the department of chemistry having previously been quartered in College Hall.

In 1894 the registration of students in the department of chemistry was 57. Now there are 450 students. This number represents an increase during the past seven years of more than a hundred per cent.

Including students enrolled in other schools or departments and not majoring in chemistry, there are now more than 3,000 in the courses in chemistry and chemical engineering.

The building is one of many advances made possible by the more than 15,000 alumni and friends who have given to the Bicentennial Fund the sum of more than \$4,300,000. There will be presented to the university on September 20 a Bicentennial Honor Roll containing the names of all alumni, alumnae, students,

friends, firms and corporations, foundations and other organizations contributing to the fund up to that time. It will be placed with other memorabilia of the times in a sealed packet, to be preserved unopened until the year 2040, which will be the three-hundredth anniversary of the university.

### THE VIRGINIA JUNIOR ACADEMY OF SCIENCE

ACCORDING to Dr. E. C. L. Miller, secretary-treasurer of the Virginia Academy of Science, there are now fifty-three organized science clubs in the secondary schools of the state of Virginia, sponsored by teachers in the various schools. Some forty-five more are in the formation period. Steps have been taken to organize these clubs into a Junior Academy of Science. At a meeting on June 5 two committees were appointed for this purpose; the members of the first committee to function as officers of the Junior Academy for the rest of this year, the second committee to function as an advisory committee from the senior academy, with final organization plans to be made at the Richmond meeting of the academy next spring.

Members of these committees are:

#### VIRGINIA JUNIOR ACADEMY OF SCIENCE

H. J. Davis, *chairman*, Pocahontas.  
W. W. Nofsinger, *vice-chairman*, Jefferson Senior High School, Roanoke.  
Miss J. Frances Allen, *secretary*, Alfred Belle Apartments, Pulaski.  
J. T. Christopher, George Washington High School, Danville.  
C. G. Gibbs, Floyd High School, Floyd.  
Miss E. Gillespie, Maury High School, Norfolk.  
Wm. T. Hall, Clarksville High School, Clarksville.