

petroleum, coal, natural gas and water power will last in the United States, have been issued by Science Service, Washington, D.C. There is a possibility of a shortage of domestic petroleum so early as 1940, and by 1945 the shortage may be serious. There is no cause for alarm in the figures reported, but wasteful methods of drilling and using are deplored. The question of coal conservation is considered immediate and urgent. The life of the coal resources at the recent maximum demand is about 2,000 years. With the probable increased demand of the future, the life may be measured in hundreds of years only. For natural gas the known domestic reserves are seventeen to twenty times the annual consumption. For water power, only a small percentage of the total potential hydro-electric power has yet been developed; but in making estimates, many other factors have to be considered in connexion with navigation, recreation, wild life, soil conservation, etc. One of the reports suggests the possibility of replacing all the 'manufactured gas', usually made from coal, with the by-product gas of petroleum refineries. The second most important gas resource of America is the nearly 200,000 million cubic feet of gas which has been stripped of all the condensable constituents that can be used in motor fuel. In the generation and distribution of electric power, engineers have effected notable economies in fuel consumption and the use of materials. This is a conservation step in the right direction, but many engineers think that more careful engineering is required in the mining of coal to reduce waste. Power is also used for purposes that constitute only a waste of what the engineers have so economically produced.

#### *Enzymologia*

It is with mixed feelings that we extend a welcome to yet another scientific journal. *Enzymologia* is edited by Dr. Carl Oppenheimer, assisted by an international group of distinguished collaborators, and bears the imprint of Dr. W. Junk, of The Hague, on its cover as publisher. It is to be an international monthly journal for the publication of researches relating to the enzymes. Two parts appeared, in July and August, containing twenty papers in English, French and German, and it is stated that two further parts are in the press. The subscription price for the volume of about 400 pages in six parts is 15 Dutch florins. We write "mixed feelings" because all of us, including the libraries which are the chief subscribers to the periodical literature nowadays, agree there are already too many journals both to read and to purchase. The advantages to the specialist in having his reading mainly provided for him in one journal are considerable, but against this must be set the inevitable curtailment of his general reading, tending to produce a narrow outlook. Notwithstanding these remarks, it is clear that a welcome awaits a journal devoted to progress in enzyme chemistry, the more especially since this is a field which is due for intense cultivation, leading to marked progress during the next few years. *Enzymologia* in no way conflicts with the now

popular "Ergebnisse der Enzym-Forschung", which is an annual summary. The issue of the new journal from The Hague is one more example, if such indeed were needed, of the progress of biological chemistry in Holland; the first issue begins appropriately with a contribution from a distinguished Dutchman, Prof. A. J. Kluyver of Delft.

#### Conversazione of the Quekett Microscopical Club

By kind permission of the Royal Society, the Quekett Microscopical Club is holding its annual conversazione in the rooms of the Royal Society at Burlington House at 7 p.m. on Tuesday, October 13. Not only will there be a large number of exhibits staged by members of the Club, but also the Committee responsible for the organization of the conversazione has been fortunate in enlisting the sympathy and co-operation of other well-known scientific workers and microscopical clubs. The Royal Society is exhibiting original communications from Van Leeuwenhoek and drawings by Hooke. In addition, exhibits have been received from the Natural History Society of Cape Town, from the Microscopical Society of Victoria, Australia, from microscopists in France, the United States and various microscopical societies in Great Britain. A series of cinematographic exhibits on microscopical, pond and other life, also of the development of the bird ovum, will be given at intervals during the evening by Messrs. Kodak, Ltd. Cards of admission can be obtained on application to Mr. W. S. Warton, 35 Doneraile Street, London, S.W.6.

#### The Osborne Reynolds Ridge

SINCE the letters on the subject appeared in NATURE, the Reynolds line has been seen by readers both on fresh-water and sea-water. Some of those who have seen it, however, missed the note in the News and Views columns of the July 4 issue (p. 20), giving references extending back to a paper by Prof. Osborne Reynolds. Mr. K. G. Denbigh, of Draidland, Norton Road, Norton-on-Tees, Durham, has sent an account of his observations. He saw the line at the fort of Carrawburgh, where a spring rises in a circular pool about five feet deep and eight feet in diameter. It formed a loop, roughly circular and about twelve inches across, surrounding the spot where the water rising from the bottom broke the surface. Apart from this small area where the water was perfectly clear, the pool was, no doubt, covered with a film; he refers to pollen grains and other small vegetable matter floating on it. As Reynolds explains in his paper, the line is only stationary if the rate of spreading of the film over the clean surface of the water is balanced by the outward motion of the water. Mr. Denbigh found that the loop was sensitive to wind, contracting to a point when disturbed and expanding again when the wind died down. He also noticed and sketched the distortion of reflections of reeds where they appeared to cross the line. He watched the line for nearly an hour, until a few soap shavings thrown into the water proved to be an overdose for this sensitive phenomenon.