berculosis, a major problem for the Soviets, is almost identical to ours. In contrast, tuberculosis surgery is not as adequate.

Infant and maternal mortality rates were found to have been sharply reduced during the past 5 years as the result of a nearly universal adoption of "natural childbirth" techniques. After a 1-month period of "psychoprophylactic orientation," 85 percent of Soviet mothers deliver without anesthesia.

Soviet psychiatrists reject Freud and do not use psychoanalysis. Instead they employ a "reflectory conditioning" program that consists primarily of a drugged sleep from which the patient is only gradually released. This procedure clearly reflects the work of Pavlov.

The Schafers were told of an impressive blood-transfusion program in which whole blood is preserved for as long as 100 days. In addition, they were shown bars made from dense red blood cell aggregates; these bars are used as intramedullary pegs in acute fractures of long bones and as onlay grafts for nonunions. The Schafers also saw an efficient burn dressing in the form of a pliable perforated film made from bovine serum.

Particularly impressive were the infirmaries at Soviet industrial plants. One Moscow factory provides 75 beds for workers who have been incapacitated and who probably would not have been able to return to work in this country. By living in the factory's "preventorium," the patients are able to put in a half-day's work.

The Schafers report that everywhere they were received in a very friendly and hospitable fashion. Soviet physicians repeatedly emphasized their desire to establish contact with their American colleagues. In a conversation at the conclusion of the visit, Deputy Minister of Health Kochergin summarized this attitude when he said that Soviet officials would respond "instantaneously and favorably" to conversations with the United States relating to the exchange of medical delegations, postgraduate students, original scientific medical manuscripts, published medical periodicals, and personal medical correspondence.

Marine Borer Chemists and Biologists

At this year's AAAS meeting in Atlanta, on Friday, 30 Dec., at 1:30 P.M., in Committee Room 1 of the Municipal Auditorium, there will be an organizational meeting of a proposed Society of Marine Borer Chemists and Biologists. All interested persons are invited to attend.

Since the inception of the AAAS, a great many scientific societies have been founded at annual meetings of the association. The Society of Systematic Zoology, organized at the annual meeting of the AAAS in Chicago, 1947, and the Socicty for the Advancement of General Systems Theory, organized at the Berkeley meeting, 1954—both of which are meeting with the AAAS this year—are but two instances—R.L.T.

News Briefs

■ The Swedish deep-sea expedition on the *Albatross* in 1947–48 studied meteoritic enclosures in deep sea sediments. The small magnetic spheres generally considered to be of meteoritic origin that are found in such sediments have now been investigated in much greater detail than before by H. Pettersson, who has reported his findings in *Naturwissenschaften* [**42**, 387 (1955)].

Heretofore these spheres, which are about 0.2 millimeter in diameter, had been thought to exist only in the amount of about 1 milligram per kilogram of sediment. However, by use of a strong electromagnetic extractor, it has been found that the occurrence of these iron spheres in the sediment of the Pacific Ocean is about 20 to 40 times greater than was previously reported.

Furthermore, it has been thought that the spheres exist only in the uppermost 2 to 4 centimeters of sediment, but Pettersson has found them at depths of at least 3 meters, which corresponds to a sedimentation time of 1.5 to 3 million years. Therefore a considerable number of meteorites fell on the earth during the Tertiary period.

Plans are now being made to compare the frequency of distribution of these magnetic spheres in sediments that have been taken from various parts of the ocean. Such a study will provide statistics on the frequency of meteorite falls during the past millions of years and also will contribute to knowledge of the geochronology of the ocean floor.

■ The developing shortage of scientists and engineers is meeting with increasing attention from all groups of scientists and educators. In the *American Scientist* [**43**, 385 (July 1955)] another strong voice is added to the chorus of warning. Joseph W. Barker, president of the Research Corporation of New York, and the new president of Sigma Xi, points out that "while the situation now is critical, a continuation of this trend for another 10 years could prove disastrous to the future welfare and defense of our country."

The crux of the problem, as many committees have realized, lies in the secondary schools. The salaries of high-school science teachers are so badly out of line with the salaries commanded by college graduates who have majored in the sciences, mathematics, or engineering and who go into industrial positions that virtually all of last June's graduates in these fields were preempted by industry.

Despite this, there was a shortage of 4000 even to replace the losses in industry resulting from death or retirement. Obviously, with the present demand, government and college positions cannot be filled, to say nothing of the need for teachers that will arise as the effect of the increased wartime birth rate makes itself felt at the college level. The crest of the growing population is just now entering the high schools, and the demand for science teachers, among others, will be most serious just when the supply is practically zero.

Sigma Xi is inaugurating a prize competition (first prize, $1000; second prize, $500; third prize, $100) to be awarded to those chapters, branches, or clubs whose plan for alleviating this situation is judged most promising. Some valuable suggestions may result.

Meanwhile, let us point out that since public education in the United States is a local responsibility, no effective remedy can be expected except on the local scene. School boards, town and city officials, and ultimately the individual taxpayer, must be alerted to the crisis and apprised of its national significance. Scientists must take time to assume this local responsibility of educating their own communities.—B.G.

■ A diagnostic test for rheumatoid arthritis is now available to the country's physicians through the Grace–New Haven Hospital in New Haven, Conn. This was announced on 9 Nov. by Ronald W. Lamont-Havers, associate medical director of the Arthritis and Rheumatism Foundation at 23 W. 45 St., New York.

Rheumatoid arthritis can be treated in 70 percent of the cases effectively enough to prevent pain and crippling if it is detected early. One diagnostic problem has been that the condition is difficult to differentiate from more benign forms of arthritis. Also, the disease is difficult to detect at all in the very early stages when therapy is most effective.

The new test is an outgrowth of an observation first made in 1947 at Columbia–Presbyterian Hospital, New York. At that time it was noted that the serum of blood from victims of rheumatoid arthritis causes solutions of sensitized sheep blood cells to clump together in a distinctive way. The reason for this effect of the rheumatoid arthritis serum is still