stroboscopic means of a fluorescent lamp containing such phosphors and operating on AC will show two colors; first, the combined color of the phosphor and the discharge and second, the color of the phosphor alone. In all low-voltage fluorescent lamps, the color of the discharge is the typical blue color of the low-pressure mercury discharge, and it passes through the fluorescent coating and bulb wall without serious absorption. Consequently, to obtain the time-integrated value of 6500° K color temperature in the daylight fluorescent lamp, instantaneous or stroboscopic determinations will reveal, over each half cycle of the AC supply, a brief time interval which is much bluer (while the discharge is operating) and another brief time interval which is much redder (from phosphorescence while the arc is extinguished).

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THE LENGTH OF DEVELOPMENT OF THE GREATER WAX MOTH

THE larvae of the greater wax moth (*Galleria mellonella*) normally feed on the wax combs of the honeybee. It has been found, however, that wax is not a necessary constituent of their diet, since they were reared on foods free of wax.[1] In the laboratories of the entomology division of the University of Minnesota, 35 generations of healthy wax moths have been reared on a special food used for rearing of various kinds of insects.[2] The temperature of the chamber was maintained at 32° C. and the relative humidity at 75 per cent. The average duration of the development (from the time the larva hatched to the time moth emerged) was equal to 29.3 ± 1.5 days (standard deviation = 3.1 days and coefficient of variation 10.7 per cent.).

The time of development given in the literature is considerably longer. Metalnikow[3] gives 42–49 days; Paddock[4] 90–120 days; Andrews[5] 42–53 days; Chase[6] 33–54 days; Borchert[7] 62–64 days; Smith[8] 56–63 days. Since the duration of development depends on temperature,[3,5] this difference is probably due partially to the fact that the larvae were reared under different temperatures and humidity. It must be remembered, however, that when wax moth larvae are reared in large numbers in one container, they considerably increase the temperature of their surroundings.[9] Therefore one may assume that the quality of food eaten by the larvae influenced the most the length of their development.

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1 *Ann. Entom. Soc. Amer.*, 29 (4): 581–588, 1936.
2 *Jour. Econ. Entom.*, 29 (5): 1026, 1936.
3 *Arch. Zool. Exp. and Generale*, 4th Series, 8: 489–588, 1908.
4 *Texas Agr. Exp. Sta. Bul.*, No. 231, 1918.
5 *Trans. Wisc. Acad. Sci.*, 20: 255–261, 1921.
6 *Trans. Wisc. Acad. Sci.*, 20: 263–267, 1921.
7 *Zool. Jahre. Abt. Anat.*, 57: 105–115, 1933.
8 *The American Naturalist*, 70: 67–68, 1936.

THE PEACE RESOLUTION OF SCIENTIFIC WORKERS

IN SCIENCE of May 17 (p. 478) Dr. Peyton Rous points to one isolated sentence in that resolution, "The American Scientists can best fulfill their share of this responsibility (contributions to human progress) if the United States remains at peace," and raises the question whether this is not "a conclusion based on premises yet in the making." The resolution should, obviously, be considered as a whole. Every brief statement of such complex processes as the relations of war and peace to the physical and intellectual progress of man achieved through scientific research is necessarily incomplete, partly due to the "tyranny of words." But if we assume that our colleagues who prepared and signed that resolution were and are as honest and objective as they usually are in their scientific publications, the difficulties encountered by Dr. Rous with the above sentence seem to disappear. The premises back of that sentence are not in the making. They are a matter of history. For to me, at least, the sentence does not mean that under no circumstances must our country go to war. It does mean that if and when we go to war we also in substance establish a moratorium on the method, the spirit, and the essential fruits of scientific research. I think this is a fair approximation to historic facts, particularly in the case of modern warfare.

When the resolution was transmitted to the President of the United States, it was explicitly pointed out that the statement represented the considered judgment of those who had attached their signatures. We did not pretend to speak for all American scientists. That degree of accuracy and modesty on our part Dr. Rous might have taken for granted.

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DR. ROUS'S note in the May 17th issue of SCIENCE raises some questions concerning the A.A.S.W. peace statement (SCIENCE, May 3). To remove possible misunderstanding, may I point out that the statement, in seeking to emphasize the ultimate futility of war, recommends support "of all reasonable programs" which will preserve peace for the United States, but does not imply "peace at any price."

There can, I think, be little dispute that scientists, as scientists, are bound to support whatever measures are in the long run best adapted to the preservation of freedom of thought and speech. In my own opinion, recent events indicate to American scientists and to Americans generally that such measures now include

immediate steps for our own defense. Scientists, as scientists, can nevertheless properly urge that decisions on this and related questions shall be taken only in the light of cool rationality and a realistic assessment of long-run consequences.

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QUOTATIONS

THE NEW YORK SESSION OF THE AMERICAN MEDICAL ASSOCIATION

IN 1917 the American Medical Association met in New York City, where in 1940 it will assemble again for its ninety-first annual session. In those days all the talk was of the war and of participation by the United States. The House of Delegates bade official farewell to Dr. Alexander Lambert, about to leave for France. The medical profession was concerned with plans for its own service. Before the war ended, some fifty thousand doctors had been intimately associated with medical military affairs. Chief among the topics before the House of Delegates was a report on social insurance—actually compulsory sickness insurance. The war ended much of that discussion; but the years passed, the crash came, the banks closed, unemployment and destitution increased, the problem of the aged was thrown into politics, the Social Security Law was developed, and again compulsory sickness insurance held the center of the stage. Notwithstanding the World War and the social problems of 1917, the scientific sections of the American Medical Association held their meetings, the Scientific Exhibit displayed some fifty contributions and over six thousand doctors registered their attendance.

Now in 1940 a new war has engulfed nearly all the world; the United States has not become involved, although much of the rest of the world seems trembling on the brink of involvement. For preparedness, base hospitals are being organized throughout the nation; but it seems unlikely that military matters will come before the House of Delegates. True, the situation in Europe is reflected in the problem of the medical refugees, but years of experience have already indicated some significant factors involved in this question.

For almost a quarter of a century the medical profession has been maintaining high standards of medical care, opposing successfully all attempts to regiment, degrade or deteriorate its services. There is no reason to believe that the House of Delegates will abandon its repeatedly declared points of view or that it will recede one iota in its ideals. Indeed, all its tendencies have been toward strengthening the mechanisms by which its principles are maintained.

As medicine comes into the 1940 session the time before adjournment of the Congress seems but brief. Such legislation in the medical field as the Congress may enact will no doubt bear the reflection of the platform of the American Medical Association. Succeeding months will see our two great political parties assembling to select their candidates and to announce their platforms. The medical profession will observe with interest the extent to which those pronouncements reflect the fundamental features which the majority of physicians are convinced must be observed if medicine is to go forward in a democratic government.

In numbers, in scientific contributions, in exhibits, in new technics for graduate education, the 1940 session will far surpass that of 1917. During the last two years the increases in membership and in fellowship have been rapid both in rate and in numbers. The Scientific Exhibit, which in 1917 was held on the balcony of the Hotel Astor, will this year demand more than an entire floor of the Grand Central Palace. And the meeting itself will ramify through a half dozen of the great hotels. Thus in the greatest city of the world, now holding the most remarkable World's Fair that has ever been constructed, will assemble what has come to be the largest and most important medical convention. The superlatives may seem grandiloquent, but only those who participate will realize how weakly they describe the greatness of the occasion.—*Journal of the American Medical Association.*

SCIENTIFIC BOOKS

ORTHOGONAL POLYNOMIALS

Orthogonal polynomials. By GABOR SZEGÖ. ix + 401 pp. Colloquium Publications, vol. 23, American Mathematical Society, New York, 1939. $6.00.

TWENTY-FIVE years ago a theory of orthogonal polynomials would have been made up of apparently heterogeneous elements, more or less forcibly dragged together from their natural context of general function theory, differential equations, integral equations, continued fractions, mathematical physics or statistics, and ranging in mathematical development from the highest degree of analytical perfection to the most naive formalism. Now a depth of critical understanding which scarcely went beyond the fundamental cases of Fourier and Legendre series has come to prevail with unifying authority over a wider range of generalization than had been even tentatively surveyed, and the diverse fields into which the applications extend derive clarification from a common body of coordinated knowledge.

[9] *Naturwissenschaften*, 14: 995–997, 1926.