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West by certain circles interested in the frustration of the relaxation of international tension and in the revival of the cold war, and in seeking pretexts to defame—by any means—the noble aims and sincerity of the Soviet foreign policy that has gained unanimous gratitude and popularity throughout the world.

The decision of the Nobel committee to confer the peace prize on Sakharov—a decision that fundamentally contradicts the spirit and the letter of the basic provisions relating to this prize—is unacceptable to genuine champions of peace. Soviet scientists believe that the award of the Nobel prize to Sakharov is unworthy and provocative, and is a blasphemy against the noble ideas—dear to all of us—of humanism, peace, justice, and friendship among the peoples of all countries.

[Signed by] G. B. Abdullaev, G. A. Avsyuk, A. P. Aleksandrov, V. A. Ambartsumyan, M. S. Asimov, A. A. Baev, N. G. Basov, N. V. Belov, N. A. Borisevich, A. E. Braunshtein, A. P. Vanichev, I. N. Vekua, E. P. Velikhov, A. P. Vinogradov, S. I. Vol'fkovich, S. V. Vonsovskii, B. M. Vul, Ya. S. Grosul, N. P. Dubinin, N. M. Zhavoronkov, Yu. A. Zhdanov, A. A. Imshenetskii, A. Yu. Ishlinskii, A. P. Kapitsa, K. K. Karakeev, M. V. Keldysh, F. V. Konstantinov, V. A. Kotelnikov, E. M. Kreps, A. M. Kunaev, G. V. Kurdyumov, A. L. Kuranov, M. A. Lavrent'ev, L. M. Leonov, A. A. Logunov, A. K. Malmeister, M. A. Markov, G. I. Marchuk, Yu. Yu. Matulis, N. V. Mel'nikov, I. I. Mints, E. N. Mishustin, A. N. Nesmeyanov, A. I. Oparin, B. E. Paton, B. N. Petrov, N. A. Pilyugin, B. B. Piotrovskii, P. N. Pospelov, A. M. Prokhorov, O. A. Reutov, A. M. Rumyantsev, K. M. Ryzhikov, B. A. Rybakov, A. S. Sadykov, N. N. Semenov, D. V. Skobel'tsyn, G. K. Skryabin, V. I. Smirnov, V. I. Spitsyn, V. D. Timakov, A. N. Tikhonov, A. A. Trofimuk, V. M. Tuchkevich, P. N. Fedoseev, N. P. Fedorenko, G. N. Flerov, A. V. Fokin, A. N. Frumkin, M. B. Khrapchenko, N. V. Tsitsin, V. A. Engel'gardt.

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Notes

1. The nine academicians whose signatures appeared under the 1973 *Pravda* letter, but not under the 1975 *Izvestiya* letter, are N. N. Bogolyubov, B. M. Kedrov, A. M. Obukhov, Yu. A. Ovchinnikov, L. I. Sedov, S. L. Sobolev, I. M. Frank, Yu. B. Khartson, and P. A. Cherenkov.

Wood Versus Fossil Fuel for Excess Carbon Dioxide

Erik P. Eckholm's recent estimate, reported by Constance Holden (News and Comment, 3 Oct., p. 36), that "one-third of the world's population depends on wood for cooking (and, to a lesser extent, heating)" has interesting ramifications for detailed interpretations of the carbon dioxide buildup in the atmosphere in the past century. It has been estimated that half of the wood harvested each year is burned.

Lundell (1) has reviewed the box models of the carbon cycle proposed by Craig (2), Bolin (3), and others. Lundell has also cal-

culated the boundary conditions for the shifting of exchange rates among the various carbon dioxide reservoirs. Wood-burning and deforestation have two additive effects. Wood-burning releases a large amount of carbon dioxide into the atmosphere, perhaps much more than has been previously estimated (for example, the estimate that 1.1 metric tons of wood are burned per capita per year in Thailand). Deforestation for lumber (and urbanization) has the additive effect of destroying the photosynthesizing organisms that transfer atmospheric carbon dioxide back into what we now propose as the "cellulose reservoir." The inflow and outflow into the cellulose reservoir during the last century is difficult to estimate, but a key and simple question is, Why hasn't photosynthesis prevented the 15 percent or so increase in atmospheric carbon dioxide in the last century? The current shortage of firewood suggests that part of the answer lies in a rapidly expanding human population burning cellulose much faster than it is being formed and held in living trees. Radiocarbon studies have documented the effects on the atmosphere of burning fossil fuel, but the wood-burning contribution to the atmospheric excess of carbon dioxide is more difficult to document because the cellulose reservoir has a radiocarbon/carbon ratio only a few percent different from that of the atmosphere.

It is possible that the biosphere could restore the cellulose reservoir in some decades, but only if the remaining parts of the reservoir (for example, the Amazon forest) are not depleted, if the population and per capita annual consumption are stabilized, and if, as Eckholm suggests, even more reforestation is undertaken.

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References

1. L. L. Lundell, thesis, Rice University (1973).
2. H. Craig, *Tellus* 9, 1 (1957).
3. B. Bolin, *Sci. Am.* 233, 124 (September 1970).

Sex Differentials in Academic Salaries

In Bayer and Astin's article (23 May, p. 796), the section dealing with salaries contains an error that vitiates a large part of their analysis. In August 1974 one of