

Paperwork<sup>30</sup>

↳ ON  
CHEMURGY

HOLLY  
JEAN  
BUCK

Architecture<sup>12</sup> as<sup>2</sup> Measure<sup>7</sup>  
Ölçü<sup>4</sup> Olarak<sup>6</sup> Mimarlık<sup>8</sup>

WESTERN PERSONNEL SERVICE 7

cessfully for fuel production. Army rifle stocks are now being made out of wood waste. The synthetic fibre, Nylon, originated by the Du Pont Company is being utilized in the manufacture of parachutes. The conversion of free nitrogen into condensed form is still of use in the making of explosives. Solvent derived from low-grade fermented corn enters into the making of cordite.

*What Traits Should A Chemurgist Have?*



A student who sees its great possibilities and wishes to go into the chemurgic field, must prepare himself to meet the requirements of a chemistry laboratory worker. One not only must have a thorough grounding in chemistry for this work, but also must have certain character attributes.

The bulk of the work of a chemurgist is done in a laboratory. For this, he needs accuracy and patience. Stamina and ability to stand on his feet for long hours while experiments are in progress are important. Furthermore, he needs an active imagination. Imagination is required to visualize how the various studies of one's curriculum can be applied to the transformation of crops into products for industrial use, even as Dr. Carver was able to see in the humble peanut such diverse items as ice cream and salve.

For example, a certain area, such as an orchard region, may be in need of an insecticide. There is always the possibility that there exists in that very locality some waste growth out of which a suitable insecticide may be made. Such possibilities need to be investigated. If some industry has excess waste, the young chemurgist should be able to see in that waste the possibility of making a useful new product. The waste itself may be converted into a product which adds to that industry's profits.

The chemurgist also must be familiar with the agricultural products of the area in which he lives, or plans to work. For instance, in Michigan where a large acreage was planted to soy beans, the Ford laboratory is concerned with products which can be made from soy beans. In Mississippi where southern pine is grown for paper, one laboratory devotes itself to making substitute products, such as plywood, out of waste chips. In California, fruit surpluses are being used for making food which is sold to the large cattle industry in the State.

Photo: You might like Chemurgy as a Career: An Occupational Brief. Western Personnel Service, 1941.

Chemurgy was a discipline that aimed to make new things from agricultural products: milk into fiber, soybeans into radio dials, agricultural waste into fuel. Alas, chemurgy was a short-lived field, and few today have ever heard of it. This 1941 Work Projects Administration report of the U.S. Government, *You Might Like Chemurgy as a Career*, aimed to inform students about careers in this new field. It begins by describing how George Washington Carver "resolved the peanut into its component parts in order to learn in terms of molecules what composes a peanut," bringing prosperity for both peanut growers and society. Through Carver's work, peanuts became healing oils for paralytics, ice cream cones, and in fact, 285 usable products.

Yet the skills of this discipline did not solely involve breaking things down, recombining them, and making new products. As the Personnel Brief describes, chemurgy was a way of seeing, requiring a vast and creative imagination. It was a national project, but it also required regional attunement: the chemurgist needs to know the plants of his or her region. Thus, taking the measure of plants, for chemurgy, was not simply a matter of (capitalist) production. The chemurgists valued observation, the creativity of finding new uses for things, and put these together with applied science with a sense of both national and regional purpose. However, a Great War and the rapid rise of petroleum put this nascent field to sleep.

"Some uncertainty, however, in establishing oneself in this field must be taken into consideration. The man or woman who proposes to adopt chemurgy as a career should realize at the outset that it does not offer well-classified jobs as do the older established occupations. On the other hand, there is always a thrill in pioneering new developments and in blazing new trails."

## About the author

Holly Jean Buck is a geographer and environmental social scientist studying how emerging technologies can help address environmental challenges and build a regenerative society. She is an Assistant Professor of Environment and Sustainability at the University at Buffalo, New York, where she teaches environmental justice. Her recent book, *After Geoengineering: Climate Tragedy, Repair and Restoration* (London, New York: Verso, 2019), explores best-case scenarios for removing carbon dioxide from the atmosphere.