

now published, shows that the institute, which is largely supported by funds from the Department of Agriculture and Fisheries for Scotland and by the Agricultural Research Council (and by industrial concerns as well), is full of life. A scientific and experimental staff of more than a hundred works in seven research departments on topics ranging from the biochemistry of animal and plant tissues to nitrogen metabolism of rumen bacteria and the effects of iron compounds on the virulence of *E. coli*.

Investigations are in progress on the release mechanism of thyrocalcitonin which is the hormone released from the light cells of the thyroid gland when blood calcium levels are higher than normal. According to Dr A. D. Care, glucagon can also stimulate thyrocalcitonin release; thyroid perfusion experiments *in vivo* have demonstrated that cyclic 3'5'-AMP increases the stimulatory effects of hypercalcaemia and inhibitors of 3'5'-AMP diesterase also have this effect.

The metabolic role of zinc is of special interest. Dr J. Quarteman, who is one of the organizers of the European Symposium on Trace Elements Metabolism which is to take place in Aberdeen in July 1969, has summarized in the report the institute's recent work on zinc metabolism.

FISH BIOLOGY

Trouble in Greenland

AGAINST a background of international concern about the survival of the Atlantic salmon (*Nature*, 222, 316; 1969), the Fisheries Society of the British Isles began its spring meeting on April 25 with an account of some of the research in progress on the salmon fishery off the west coast of Greenland. Mr A. Swain (Ministry of Agriculture, London) said that a fishery did not develop in this area until 1961. To start with, all the salmon were taken in inshore waters by local fishermen using gill nets, but in 1965 an offshore fishery using drift nets and involving other countries began to operate. It is this development which is causing the most concern—the estimated total catch in 1968 was 1,200 metric tons. Greenland has only one salmon river of any note, and so most of the fish being caught by the offshore fishery must have come from elsewhere. The Canadian stocks are probably being affected most by the developing industry, but tagging has shown that fish from Iceland, England, Scotland, and Ireland are also involved. But nobody seems to know the precise effect of the fishery on home stocks—whether the salmon would have returned to their home waters if they had not been caught in the high seas. So far, the fishery does not seem to have had a marked effect on British stocks.

Annual visits have been made to Greenland since 1965, but it has not been easy to collect data. For one thing, only about a third of the fish caught by gill nets were in a fit state to be tagged. In 1968, long-line nets were tried out but even these were not completely successful because the baited hook sometimes stuck in the fish's guts. Modifications are being made for this year's research. Of the 1,326 fish tagged (mostly caught by gill nets) in the three years 1965–67, Mr Swain reported that thirty-five had been recaptured in local (Greenland) waters and nine in British waters. It will naturally take time to get anything like quantita-

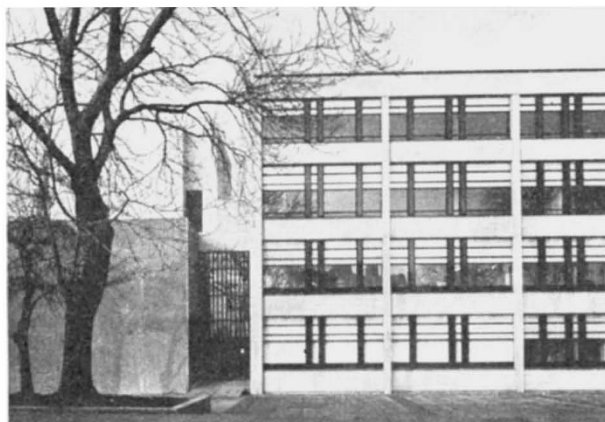
tive effects of the Greenland fishery on national stocks, and some authorities fear that by the time the statistics have been collected the fish may be on the verge of extinction.

Mr J. W. Smith (Ministry of Agriculture, Aberdeen) talked about parasites as a source of information on the biology of salmon and hake. Certain fish parasites can give clues to the origin of species and their migratory movements. The hake, *Merluccius merluccius*, fished off the British Isles seems to have a distinctive parasitic blood fluke which could be used as a biological tag.

Mr J. M. Hellowell (Freshwater Biological Association) has been studying the effects of coarse fish on salmonids, particularly salmon parr, in two salmon rivers (Lugg and Llynfi) in the Wye area. Of the thirteen coarse fish in these rivers, chub, dace, roach and grayling are the most common, but contrary to the views of some anglers Mr Hellowell found that these fish were not seriously competing with the salmonids for food. His conclusions confirm the results of other studies which have indicated that the diets of freshwater fish overlap only slightly. Although no fish has a completely specific diet, each species has particular preferences for certain food. Salmon parr may indeed be subjected to greater competition from the other parr and from trout in the river rather than from the coarse fish.

UNIVERSITY ARCHITECTURE

Chemical Engineering at Bradford



The chemical engineering building at the University of Bradford was opened on April 26. Designed by Building Design Partnership in association with the university's resident architect, it is the first completed section of the continuous linear academic building included in the Development Plan. Partitions, ceilings, services and their distribution systems in the new building can be moved and the plan rearranged.

PLANNING

London's Sprawl

from our Planning Correspondent

ANOTHER call for more decentralization of office employment in central London is made in a new broadsheet from PEP (Political and Economic Planning) (*London's New Towns*, PEP Broadsheet 510, 10s). The author, Ray Thomas, an economist on